

## MICROCREDENTIALS FOR SAFETY COMPETENCE 4.2: PROTECTING PERSONAL DATA AND PRIVACY

**DSW**  
DIGITAL SKILLS WALLET



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## Micro credentials for competence 4.2: PROTECTING PERSONAL DATA AND PRIVACY



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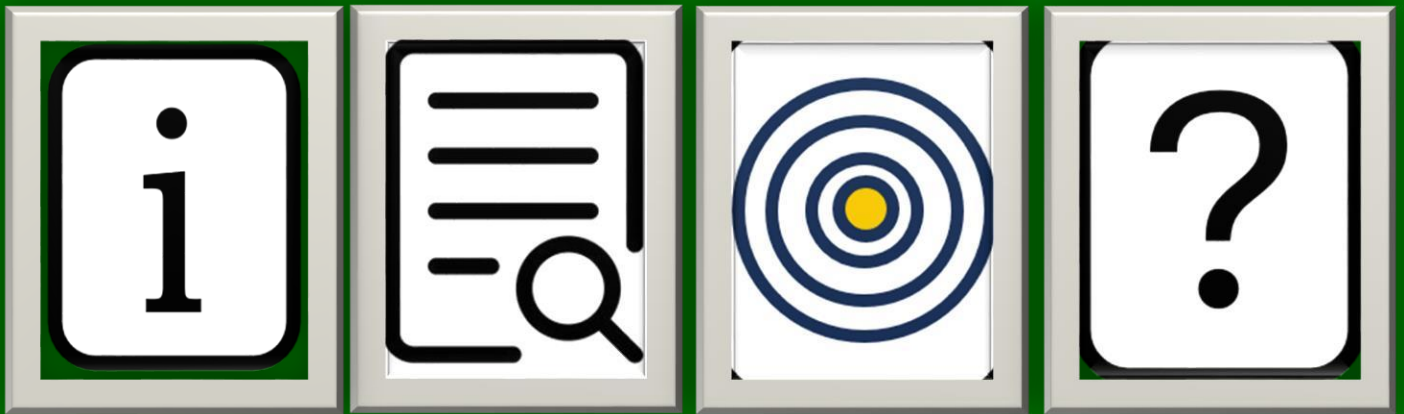
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# FOUNDATION LEVEL

(Level 1 and Level 2)





## Comprehensive Understanding of Digital Safety and Security of Transactions (MC 4.2.A.1)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Comprehensive Understanding of Digital Safety and Security of Transactions Code: MC 4.2.A.1
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	FOUNDATION
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.1 and 4.2.2):

- Recognize the importance of secure electronic identification for safer sharing of personal data in transactions.
- Identify the elements typically explained in the "privacy policy" of apps or services.

## Description

As the digital world expands, the importance of digital safety and security measures escalates, particularly in the sharing and management of personal data. This Micro Credential validates a deep understanding of secure electronic identification's crucial role and the comprehensive understanding of privacy policies employed by various apps and services. Knowledge and awareness are the first steps to ensuring safer online transactions and a secure digital environment.

The first major aspect of digital safety is secure electronic identification. This forms a digital 'proof' of identity that serves as a reliable validation tool for online transactions. The essence of this process is to ensure the security of the shared data, guaranteeing its exchange with the intended recipient. It plays a particularly important role in transactions involving personal, sensitive, or confidential data. These transactions range from financial dealings to healthcare data exchanges and professional communications. Therefore, the use of secure electronic identification is a significant aspect of the broader digital economy, and it shapes user confidence in digital transactions. Furthermore, secure electronic identification forms the foundation for privacy policies that protect user data and uphold rights. Privacy policies are central to maintaining trust in the digital world, ensuring that users' data is treated with care, respect, and legal compliance. They are legal documents that detail how apps or services gather, store, protect, and share personal data. A robust understanding of these privacy policies leads to informed decisions about app or service usage and assists in maintaining digital autonomy.

Among the components of a privacy policy, understanding the types of data collected by an app or service is crucial. This could include personal information, device specifics, or user behavior data. Users who comprehend this element can ensure that they are comfortable with the types of information being collected. They can also assess whether this collection aligns with the intended use of the app or service, thus reducing the chances of unwanted data exposure.

Equally important is understanding why the data is being collected, i.e., the purpose of data collection. This could include reasons such as improving user experience, delivering personalized content, or providing services. Understanding these reasons aids in assessing whether the data collection serves users' best interests or if it's primarily for the service provider's benefit. Another crucial aspect is the data processing and sharing practices. This component elaborates on the journey of the collected data, detailing how it is processed, stored, and potentially shared with third parties. It also includes information about international data transfers and cross-border processing. Knowledge about these practices empowers users to assess potential risks and make informed choices about sharing personal data.

Consent is a cornerstone of data protection regulations. It is, therefore, vital to understand how consent for data collection and processing is obtained by the app or service. This might be through explicit methods such as checkboxes or implicit methods like continued app usage. Users who understand these processes can better control their consent, enhancing their power over personal data.

User rights are an integral part of data protection and privacy policies. This typically includes the right to access, correct, delete, or restrict the processing of personal information. Knowing these rights enables users to exercise control over their data, which can lead to more confidence in the digital sphere.

Another critical aspect of a privacy policy is its description of security measures taken to protect user data from unauthorized access or misuse. A clear understanding of these measures can help users assess the robustness of the service or app's security framework and its adequacy for their specific needs. Understanding data retention periods, which specify the length of time the service or app retains user data before it is deleted or anonymized, is also crucial. Different users may have different comfort levels with the duration their data is held, making this a significant factor in choosing digital services or apps.

If the app or service collaborates with third parties, the privacy policy should detail the nature of such collaborations. Users should be aware of these partnerships, as they often involve additional data sharing and processing. In cases where the app or service is directed towards or collects data from children, adherence to children's privacy laws becomes a vital element of the privacy policy. Knowledge of this compliance can help users make more informed decisions regarding such apps or services.

Lastly, understanding how changes or updates to the privacy policy are communicated to the users and knowing how to reach out to the service or app for data privacy inquiries or concerns is fundamental.

This Micro Credential endorses an individual's advanced understanding of digital safety and security in data transactions. It recognizes their knowledge of secure electronic identification and their ability to identify and understand elements commonly explained in privacy policies. The recipient of this Micro Credential is thus well-equipped to safeguard their personal data, navigate the digital world confidently, and contribute to a more secure digital environment.

## Questions

1. What is secure electronic identification and why is it crucial in personal data transactions?
2. How does secure electronic identification contribute to user confidence in digital transactions?
3. Why is a comprehensive understanding of privacy policies essential in the context of digital safety and security?
4. What are some typical types of data that might be collected by apps or services as part of their privacy policy?
5. Why is understanding the purpose of data collection important for users of digital apps or services?
6. What does the component of data processing and sharing practices in a privacy policy typically include? Why is this important for users to understand?
7. How might an app or service typically obtain a user's consent for data collection and processing? Why is understanding this crucial for users?
8. What are some of the user rights typically highlighted in a privacy policy? Why are these significant for users to know and understand?
9. What is the importance of understanding security measures described in a privacy policy?
10. Why is knowledge about data retention periods important for users, and how might it influence their decisions about using certain digital services or apps?
11. How does understanding third-party collaborations and policy update notifications contribute to a user's informed decision-making regarding app or service usage?

## Proficient Knowledge in Personal Data Safety and Risk Assessment (MC 4.2.A.2)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Proficient Knowledge in Personal Data Safety and Risk Assessment Code: MC 4.2.A.2
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
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Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	FOUNDATION
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.3 and 4.2.4):

- Identify the various types of personal data that could be at risk (e.g., name, email, address, phone number, EU Health Insurance number).
- Figure out the benefits and risks before allowing third parties to process personal data.

## Description

Navigating the digital landscape has become a norm in the modern world. Every click, like, and share contributes to an individual's digital footprint, thereby amplifying the significance of personal data safety. The delineation of various types of personal data at risk, especially on social media platforms, and evaluating the benefits and risks of third-party data processing are critical skills in the realm of data privacy and security. This Micro Credential validates an individual's proficiency in understanding these crucial aspects and their capability to make informed decisions that foster a safer digital environment.

Personal data constitutes a broad spectrum of information that can identify or relate to an individual. This encompasses generic identifiers such as names, email addresses, home addresses, and phone numbers. More sensitive data may include EU Health Insurance numbers, birthdates, financial information, and employment details. With the rise of social media platforms, even personal interests, activities, and behavioral data have become a part of this mix. Each piece of data, when shared or stored digitally, is susceptible to potential security risks and threats.

The importance of personal data safety becomes particularly evident on social media platforms. These platforms serve as a stage where users can express themselves, interact with others, and access a plethora of services. However, in doing so, users often reveal an abundance of personal data. A simple 'like' on a post can indicate an individual's preferences, while a 'check-in' can expose location data. The sharing of birthdays, family details, or even photos can unintentionally disclose sensitive information, making users vulnerable to privacy invasions or even identity theft.

Understanding the types of personal data at risk on social media platforms and the potential repercussions of their exposure is the first line of defense in digital safety. For instance, while revealing an email address might lead to unsolicited communications, exposure of financial information could result in more severe consequences such as financial fraud. Knowledge of these risks emphasizes the need for judicious sharing and careful management of personal data on social media platforms.

However, the responsibility of personal data safety extends beyond the individual. It also lies with organizations and services handling such data. Hence, the importance of privacy policies, secure data handling practices, and secure electronic identification is magnified. Knowledge about these measures allows users to ensure that their personal data is being treated with the necessary caution and respect.

The modern digital ecosystem often involves third-party data processing, where data is shared with external entities for various purposes, including improving service quality, personalizing user experiences, or conducting data analytics. While these partnerships can enhance the capabilities of digital services and offer improved experiences, they also entail risks that users must be aware of.

The potential for data breaches increases with every additional entity handling the data. Each external partnership presents another potential point of vulnerability where data security could be compromised. Additionally, third-party processing often results in a degree of loss of control over personal data. Given these considerations, the ability to assess the benefits and risks before permitting third-party data processing is a critical skill in maintaining personal data safety.

This evaluation involves understanding the third party's data handling practices, privacy policies, and security

measures. It requires awareness of the specific data being shared, the manner of its use, and the protection methods in place.

Familiarity with user rights, including the right to access, correct, delete, or restrict personal data processing, is also essential.

Often, third-party data processing involves cross-border data transfers, introducing the additional complexity of varying data protection regulations across regions.

Therefore, a clear understanding of these aspects is crucial to making informed decisions regarding third-party data processing and ensuring the safety of personal data.

In conclusion, this Micro Credential acknowledges an individual's adeptness in personal data safety and risk assessment. It signifies their ability to identify various types of personal data at risk, especially on social media platforms, and their proficiency in assessing the benefits and risks before authorizing third-party data processing. Equipped with this knowledge, the holder of this Micro Credential can actively manage their personal data, navigate the digital world with confidence, and contribute to fostering a safer digital environment.

## Questions

1. What are the various types of personal data that can be at risk on social media platforms?
2. What potential privacy and security risks can arise from sharing sensitive personal information publicly on social media platforms?
3. What can be the potential repercussions if more sensitive data like EU Health Insurance numbers or financial data is exposed on social media?
4. How can third-party data processing enhance the capabilities of digital services?
5. What are some of the risks associated with third-party data processing?
6. Why is it important to evaluate the benefits and risks before allowing third-party data processing?
7. How does third-party data processing potentially increase the vulnerability to data breaches?
8. What does loss of control over personal data mean in the context of third-party data processing?
9. How does understanding the third party's data handling practices, privacy policies, and security measures aid in assessing the benefits and risks of third-party data processing?
10. What are user rights in terms of personal data processing, and how do they play a role in third-party data processing?
11. How do cross-border data transfers add complexity to third-party data processing?
12. How can an individual ensure their personal data safety while interacting on social media platforms?
13. What are some of the measures that organizations and services can take to ensure the safety of personal data, especially when involving third-party data processing?

## Mastery in Antivirus Application and Personal Privacy Setting Customization (MC 4.2.A.3)

### Basic Information

Identification of the learner	Any Citizen
Title of the micro-credential	Mastery in Antivirus Application and Personal Privacy Setting Customization Code: MC 4.2.A.3
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
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Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	FOUNDATION
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.5 and 4.2.6):

- Discuss the role of antivirus software in protecting against malware, and practice running regular antivirus scans on your devices.
- Personalize the privacy settings on your social media accounts to limit the information that is publicly visible.

## Description

In the constantly evolving digital era, maintaining safety and security is not only about safeguarding the physical aspects of our lives, but also about protecting our virtual existence. The presence of antivirus software on devices and personalizing privacy settings on social media accounts have become integral components of comprehensive cybersecurity strategies. The Micro Credential in Mastery in Antivirus Application and Personal Privacy Setting Customization attests to an individual's proficiency in leveraging these tools to secure their digital spaces.

Antivirus software plays a crucial role in the protection of digital devices against various forms of malicious software, also known as malware. This software works by scanning, identifying, and eliminating threats that may compromise the integrity, functionality, and security of the device. Viruses, worms, ransomware, spyware, adware, and Trojans are common types of malware that can cause significant damage to digital devices, ranging from data corruption and theft to total device failure.

The individual must understand that running regular antivirus scans on their devices is a fundamental aspect of digital security. Regular scans help ensure that the most recent threats are identified and dealt with promptly, which is particularly important given the continuous emergence of new types of malware. Scheduled scans, alongside real-time protection features offered by many antivirus programs, create a layered defense system that can thwart a wide variety of malware attacks, thereby protecting the individual's data, privacy, and the overall health of their devices.

Beyond the utilization of antivirus software, the ability to customize the privacy settings on social media accounts is another crucial competency that contributes to an individual's digital security. Social media platforms are common targets for cybercriminals due to the vast amount of personal data they hold. As such, privacy settings on these platforms must be handled with great care to limit the information that is publicly visible and thus potentially accessible to malicious actors.

Personalizing privacy settings on social media platforms involves understanding and adjusting a range of controls that dictate the visibility and accessibility of the user's personal information, posts, location data, and connections. The individual must be aware that these settings often default to share information widely, so they must proactively manage these settings to restrict the dissemination of personal information. Limiting the audience of posts, reviewing the tags from friends, managing location settings, and controlling the visibility of the friends list are some of the actions that can significantly enhance privacy on social media platforms.



Therefore, the Micro Credential in Mastery in Antivirus Application and Personal Privacy Setting Customization symbolizes an individual's understanding and application of crucial cybersecurity practices. This includes the effective usage of antivirus software to protect against malware and the personalization of privacy settings on social media to limit the public visibility of personal information.

Acquiring these skills equips individuals to better navigate the digital world, promoting their security and privacy in a landscape that is often fraught with cybersecurity threats.

### Questions

1. What role does antivirus software play in the protection of digital devices?
2. Identify and describe some common types of malware that antivirus software can protect against.
3. Why is it necessary to run regular antivirus scans on your devices?
4. Explain the concept of real-time protection in antivirus programs and how it contributes to a layered defense system.
5. How does the personalization of privacy settings on social media platforms contribute to an individual's digital security?
6. What types of information can become publicly visible if social media privacy settings are not properly managed?
7. Describe some measures that can be taken to enhance privacy on social media platforms.
8. Why is it important to limit the audience of posts on social media platforms?
9. How does managing location settings on social media contribute to user privacy?
10. Explain the potential risks associated with not controlling the visibility of the friends list on social media platforms.

## Expertise in Password Management and Smartphone Security Features Usage (MC 4.2.A.4)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Expertise in Password Management and Smartphone Security Features Usage Code: MC 4.2.A.4
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	FOUNDATION
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.7 and 4.2.8):

- Test the strength of your passwords using password manager tools.
- Show how to use built-in security features of your smartphone, such as screen lock, to protect your personal data.

## Description

The rapidly increasing rate of digitalization has necessitated comprehensive security measures to ensure the safety of personal data. With the progression of technology, securing personal data is no longer limited to external physical factors but extends to internal virtual factors as well. The Micro Credential in Expertise in Password Management and Smartphone Security Features Usage validates an individual's skills in managing passwords using password manager tools and using the built-in security features of smartphones to safeguard personal data.

Password strength is a key determinant of the security of an individual's online accounts and, by extension, their personal data. Weak passwords can be easily cracked by cybercriminals, rendering an individual's accounts and personal data vulnerable to unauthorized access and misuse. Hence, it is essential for individuals to test the strength of their passwords, a task that can be facilitated using password manager tools.

Password manager tools perform several functions that enhance password security. They generate complex and unique passwords for each account, store these passwords securely, and automatically fill them in during login, thus minimizing the risk of unauthorized access. Most password managers also feature a password strength test, allowing the individual to check the robustness of their passwords against potential cyber-attacks. Understanding and utilizing these tools is an essential skill in the current digital environment, where the safety of personal data hinges greatly on the strength of passwords.

On a parallel note, the individual should be adept at using the built-in security features of their smartphones to protect their personal data. In an era where smartphones are a repository of vast amounts of personal data, failing to secure them adequately can result in significant privacy breaches. Built-in security features, such as screen lock mechanisms, offer a first line of defense against unauthorized access.

Screen lock mechanisms encompass various forms of authentication, including PINs, patterns, passwords, facial recognition, and fingerprints. An individual must understand the benefits and limitations of each type of authentication method to select the one that best suits their needs and offers maximum protection. For instance, while facial recognition and fingerprint scanners offer high levels of security and convenience, they may not work optimally in all conditions. Conversely, PINs, patterns, and passwords are universally functional but may be vulnerable if they are weak or easily guessable.

In conclusion, the Micro Credential in Expertise in Password Management and Smartphone Security Features Usage attests to an individual's knowledge and application of essential security practices. This includes the use of password manager tools to enhance password security and the effective usage of smartphone built-in security features to safeguard personal data. Possessing these skills enhances the individual's ability to navigate the

digital world securely and confidently. The recognition of potential vulnerabilities and the implementation of robust protective measures are crucial for maintaining personal data security in the digital age.

### Questions

1. What is the role of password strength in securing an individual's online accounts and personal data?
2. How do password manager tools contribute to enhancing password security?
3. What are some key functions of password manager tools?
4. Explain how a password strength test in password manager tools operates.
5. Why is it important to utilize the built-in security features of smartphones for personal data protection?
6. How does a screen lock mechanism serve as a line of defense against unauthorized access to smartphones?
7. Identify and describe various types of authentication methods available in smartphone screen lock mechanisms.
8. Discuss the advantages and limitations of using facial recognition as an authentication method for smartphone screen lock.
9. How do PINs, patterns, and passwords contribute to smartphone security, and what are their potential vulnerabilities?
10. How does using unique and complex passwords for each account enhance the security of personal data?
11. What are the risks associated with using weak or easily guessable PINs, patterns, and passwords for smartphone screen lock authentication?

## Proficiency in Password Maintenance and Understanding Public Wi-Fi Network Security (MC 4.2.A.5)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Proficiency in Password Maintenance and Understanding Public Wi-Fi Network Security Code: MC 4.2.A.5
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	FOUNDATION
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.9 and 4.2.10):

- Modify periodically your password in order to avoid possible data breaches.
- Infer the dangers of using unsecured public Wi-Fi networks for transactions involving personal data.

## Description

As digital platforms continue to integrate into every facet of modern life, the emphasis on maintaining cyber security has grown considerably. The Micro Credential in Proficiency in Password Maintenance and Understanding Public Wi-Fi Network Security recognizes an individual's ability to navigate and comprehend two critical aspects of personal digital safety: the importance of periodically modifying passwords and understanding the risks associated with unsecured public Wi-Fi networks.

The integrity of one's digital identity and the security of personal data are closely tied to the strength and maintenance of their passwords. Passwords act as the first line of defense against unauthorized access to personal accounts and information. Therefore, it's not only important to create robust, hard-to-guess passwords, but it's also crucial to modify them periodically. Regular password changes can prevent long-term unauthorized access, even if the password was previously compromised without the individual's knowledge. Therefore, the ability to manage and change passwords at regular intervals is a key factor in reducing the risk of potential data breaches.

In addition to password maintenance, the Micro Credential highlights an individual's understanding of the dangers inherent in using unsecured public Wi-Fi networks.

Public Wi-Fi networks, especially those without secure login protocols, pose significant security risks. Unsecured networks are prime targets for cybercriminals who can easily intercept data being transmitted over the network. This becomes particularly concerning when these networks are used for transactions involving personal data or sensitive information.

An individual must infer the various risks associated with such networks, which include, but are not limited to, 'Man-in-the-Middle' attacks, snooping and sniffing, malware distribution, and even the threat of malicious hotspots masquerading as legitimate networks. Understanding these dangers underscores the importance of avoiding such networks when dealing with personal, sensitive data, or opting for protective measures such as Virtual Private Networks (VPNs) to encrypt their data transmissions.

In conclusion, the Micro Credential in Proficiency in Password Maintenance and Understanding Public Wi-Fi Network Security validates an individual's skills and understanding of vital aspects of personal data security. Regularly changing passwords significantly reduces the risk of data breaches, while recognizing the dangers of using unsecured public Wi-Fi networks underscores the need for vigilance and precaution in data security. This knowledge and the ability to apply it effectively equip individuals with the necessary skills to navigate the digital landscape securely, protecting their personal information from potential cyber threats.

## Questions

1. How does regularly changing passwords contribute to personal data security?
2. What are the potential risks if an individual fails to modify their passwords periodically?
3. Why are unsecured public Wi-Fi networks considered a threat to personal data security?
4. Can you explain some of the specific risks associated with using unsecured public Wi-Fi networks for transactions involving personal data?



5. What is a 'Man-in-the-Middle' attack and how does it relate to the use of unsecured public Wi-Fi networks?
6. Describe the concept of "snooping and sniffing" in the context of unsecured Wi-Fi networks.
7. How does malware distribution occur in the context of public Wi-Fi networks?
8. What is a malicious hotspot and how does it pose a threat to data security?
9. How can protective measures like Virtual Private Networks (VPNs) mitigate the risks associated with using public Wi-Fi networks?

## Mastery in Digital Content Etiquette and Personal Data Security (MC 4.2.A.6)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Mastery in Digital Content Etiquette and Personal Data Security Code: MC 4.2.A.6
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	FOUNDATION
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review



## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.11 and 4.2.12):

- Differentiate appropriate and inappropriate digital content for sharing on social media accounts.
- Discuss the importance of protecting personal data while using digital platforms.

## Description

The Mastery in Digital Content Etiquette and Personal Data Security is a Micro Credential that acknowledges an individual's broad comprehension of suitable online conduct and the critical nature of personal data safety in the digital universe. As the world moves towards comprehensive digitalization, understanding how to engage with digital platforms, particularly social media, and maintaining vigilance over personal data protection, have become imperative in both personal and professional spheres.

One integral component of this mastery involves the capacity to distinguish between suitable and unsuitable content for dissemination on social media platforms. With the ubiquity of social media, individuals regularly share personal anecdotes, viewpoints, and various forms of information online. While this fosters a sense of global community and encourages dialogue, it simultaneously introduces the need for prudence in deciding what content to share.

What constitutes suitable or unsuitable content can greatly depend on several factors including the individual's social and professional circles, the social media platform in question, cultural customs, and societal norms. Factors that often demarcate the boundary between suitable and unsuitable content include the sensitivity of the information, the potential to cause harm or distress, and the comfort level of the individual or the audience. Hence, individuals must evaluate the nature of the content and assess its suitability before sharing.

Furthermore, individuals must be aware of the potential consequences that can arise from sharing certain types of content. These could include damage to personal reputation, job loss, violation of privacy, and even legal repercussions in certain situations. This highlights the importance of applying critical thinking and caution when deciding what digital content to share on social media platforms.

Another core element of the Micro Credential emphasizes the critical importance of safeguarding personal data while interacting with digital platforms. Maintaining the security of personal data is a cornerstone of preserving personal privacy and preventing potential threats such as identity fraud, financial scams, and unauthorized intrusion into personal accounts. Various forms of personal information, from financial specifics to identification data, are transmitted and stored on an array of digital platforms, rendering them susceptible to cyber intrusions.

Understanding the potential ramifications of data breaches and knowing how to guard against such events is a crucial skill. This encompasses employing strong password techniques, regularly updating security software, being cautious about dubious emails or links, and exercising discretion about the information shared on social media platforms. Awareness and implementation of these practices significantly enhance the protection of personal data and foster a safer digital experience.

In summation, the Mastery in Digital Content Etiquette and Personal Data Security is a Micro Credential that validates an individual's ability and understanding in distinguishing suitable digital content for sharing and safeguarding personal data. It testifies to the individual's ability to manage their digital presence responsibly

and to prioritize data safety. This understanding and proficiency are essential in upholding a respectful and secure digital environment. The capability to manage digital content appropriately and protect personal data is not just an indication of digital competency but also demonstrates respect for the digital rights and privacy of oneself and others. It plays a pivotal role in shaping a safer, more responsible, and respectful digital community.

### Questions

1. Can you explain why it is critical to differentiate between suitable and unsuitable content for sharing on social media?
2. How might the context, such as cultural customs and societal norms, influence what is considered appropriate content to share on social media platforms?
3. What are some potential consequences of sharing inappropriate or sensitive information on social media platforms?
4. Why is it important to safeguard personal data while using digital platforms?
5. Can you describe some potential threats that arise from inadequate protection of personal data on digital platforms?
6. What steps can individuals take to protect their personal data on digital platforms?
7. How does regularly updating security software contribute to personal data protection?
8. Why is it crucial to exercise discretion when sharing information on social media platforms?
9. In your opinion, how does an individual's ability to manage digital content appropriately and protect personal data contribute to the overall digital community?

## Expertise in Digital Privacy Management and Secure E-commerce Practices (MC 4.2.A.7)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Expertise in Digital Privacy Management and Secure E-commerce Practices Code: MC 4.2.A.7
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	FOUNDATION
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.13 and 4.2.14):

- Validate suitable measures to protect personal data before sharing it on digital platforms.
- Point out online transactions after taking appropriate safety and security measures.

## Description

The Expertise in Digital Privacy Management and Secure E-commerce Practices is a Micro Credential that represents an extensive understanding and practical implementation of measures to protect personal data on digital platforms and the execution of safe online transactions. In today's world, where digital interactions are rapidly replacing traditional modes, mastering digital safety has emerged as a critical requirement. Safeguarding sensitive and personal data is a key determinant of digital trust, ensuring smooth and secure personal and professional interactions in the virtual world.

The Micro Credential underscores two significant learning outcomes. The first one pertains to the rigorous strategies required for protecting personal data before its circulation on digital platforms. Personal data is an umbrella term, including not only basic identification details such as names and contact information but also highly sensitive data like financial records, healthcare information, and more. In the absence of robust security measures, such information can become a lucrative target for cybercriminals, resulting in unauthorized data breaches, identity theft, and misuse of personal data.

For this reason, adopting strict safety measures for personal data protection is essential. These include the generation and use of complex and unique passwords that are difficult to hack, enabling two-factor or multi-factor authentication for providing an extra layer of security, and maintaining a high level of caution about the quantum and type of information shared in public digital domains. This calls for an understanding of the perils associated with oversharing and the importance of discretion in public digital forums.

Additionally, it's of paramount importance to perform regular audits and adjustments of privacy settings on various digital platforms. Privacy settings act as the first line of defense in safeguarding personal data from unauthorized access and should be administered carefully and strategically. For enhanced protection, especially while accessing public Wi-Fi networks, the use of virtual private networks (VPNs) is recommended. VPNs ensure a secure, encrypted channel for data transmission, making it significantly more difficult for unauthorized entities to intercept and access the data. These collective measures significantly bolster the defense mechanism against cyber threats, thereby ensuring a safer online navigation experience and strengthening personal privacy.

The second core learning outcome of the Micro Credential is about conducting secure online transactions by employing suitable safety and security protocols. With the proliferation of digital platforms, a plethora of transactions ranging from e-commerce and bill payments to online banking and portfolio management have moved online. Consequently, ensuring the security of these transactions has become a critical concern.

In order to conduct online transactions securely, it's important to use only websites characterized by an HTTPS prefix, which indicates the encrypted nature of data transmission between the user's browser and the website. Regular audits of banking transactions are also advised to facilitate the early detection and resolution of any unauthorized transactions. Implementing two-factor or multi-factor authentication for online transactions provides an additional layer of security by necessitating more than one method of verifying the user's identity.

Furthermore, sharing sensitive data over unsecured networks should be avoided as they often serve as an easy target for cyberattacks. By adopting these safety measures, the risk of fraud or unauthorized access can be significantly reduced, ensuring a secure and seamless online transactional experience.

In conclusion, the Micro Credential in Expertise in Digital Privacy Management and Secure E-commerce Practices validates an individual's in-depth understanding and practical skills in adopting stringent measures for personal data protection and conducting secure online transactions. These skills are not only crucial for personal digital safety but also contribute to creating a safer and more secure digital ecosystem for all. The ability to navigate digital platforms securely, protect personal data, and conduct secure online transactions demonstrates a high level of digital literacy and responsibility in today's digital age.

### Questions

1. What is the importance of unique and complex passwords in the context of digital privacy management?
2. How does two-factor or multi-factor authentication enhance the security of personal data on digital platforms?
3. What should be the key considerations while sharing information on public digital platforms?
4. Why is it crucial to regularly audit and adjust privacy settings on various digital platforms?
5. How does a virtual private network (VPN) improve security, especially when accessing public Wi-Fi networks?
6. Why is it important to conduct online transactions only on websites characterized by an HTTPS prefix?
7. How does regularly monitoring bank statements contribute to secure online transactions?
8. What are the risks associated with sharing sensitive data over unsecured networks, and how can these risks be mitigated?
9. How do the principles of digital privacy management and secure e-commerce practices contribute to a safer digital ecosystem?

## Secure Data Exchange and Online Transaction Practices (MC 4.2.A.8)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Secure Data Exchange and Online Transaction Practices Code: MC 4.2.A.8
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	FOUNDATION
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.15 and 4.2.16):

- Discuss the importance of avoiding unsafe websites when handling card information.
- Determine measures to verify the trustworthiness of individuals before sharing sensitive data with them.

## Description

The Secure Data Exchange and Online Transaction Practices Micro Credential recognizes a comprehensive understanding and application of methods to protect personal and financial data during online transactions, along with strategies to ascertain the trustworthiness of individuals before sharing sensitive information with them. The credential certifies the ability to navigate the digital landscape safely, making well-informed decisions that ensure data protection and enhance the user's overall online experience.

One of the pivotal learning outcomes revolves around the significance of avoiding unsafe websites when processing card information. This element is an essential component of the online transaction process, holding critical importance considering the increasing instances of cybercrimes and data breaches globally. Whenever an individual processes card information on an online platform, the data becomes susceptible to being intercepted or hacked if the site lacks proper security protocols.

Unsafe websites often have weak or no security measures, making them potential gateways for cybercriminals to gain unauthorized access to sensitive data. Transacting on such websites can expose card information to these entities, leading to detrimental consequences such as financial fraud, identity theft, and significant economic losses.

The individual must be proficient in identifying such unsafe websites, usually characterized by a lack of HTTPS in their URL, absence of a padlock symbol indicating a secure connection, or warnings from web browsers about the site's security. By consciously choosing to provide card information only on secure and trusted platforms, individuals can considerably lower the risk of potential cyber threats. These platforms have robust encryption protocols in place, ensuring that even if data is intercepted, it remains unreadable and therefore useless to hackers.

The second key learning outcome concerns the establishment of measures to verify the trustworthiness of individuals before sharing sensitive data with them. With increasing data exchanges in the digital sphere, ensuring that the recipients of sensitive data are trustworthy becomes crucial to preventing unauthorized access or misuse of data.

Verification can be a multi-step process. Initially, one may request official identification documents or credentials to confirm the individual's identity. Direct communication with the person can also be beneficial in understanding their intent and establishing a certain degree of trust. However, these steps alone may not suffice, especially in scenarios involving data exchange over digital platforms.

Here, employing secure communication channels for data exchange can add a layer of security. These channels employ encryption to ensure that the data, if intercepted, cannot be read without the correct decryption key. Additionally, when sharing data with organizations, reviewing their privacy policies and security measures can

give an insight into how the data will be handled, stored, and shared. Before proceeding with data sharing, obtaining explicit consent from the individual is a critical step. This ensures that the recipient is aware of the data they are receiving, the purpose of the data, and their responsibility in protecting it.

Employing these measures can help ensure data protection and significantly reduce the risk of potential data breaches or unauthorized access.

In conclusion, the Secure Data Exchange and Online Transaction Practices Micro Credential validates an individual's advanced understanding and practical skills in navigating the digital world securely. From recognizing unsafe websites and secure data sharing practices to understanding the importance of verifying trustworthiness before data exchange, this credential represents a commitment to digital safety and responsibility, an indispensable aspect in the age of growing digital interactions.

This expertise not only helps in securing personal data but also contributes significantly to enhancing overall digital trust and creating a safer online environment for all users.

### Questions

1. Why is it important to avoid unsafe websites when processing card information, and what are the potential risks of not doing so?
2. What characteristics might indicate that a website is unsafe for processing card information?
3. How can secure and trusted platforms safeguard your card information during online transactions?
4. Why is verifying the trustworthiness of individuals crucial before sharing sensitive data with them?
5. What steps can be taken to verify an individual's trustworthiness before sharing sensitive data?
6. How can secure communication channels enhance the safety of data exchange?
7. Why is it essential to review the privacy policies and security measures of organizations before sharing data with them?
8. What is the role of explicit consent in the process of data sharing, and why is it important?
9. How does understanding and practicing secure data exchange and online transaction practices contribute to overall digital safety and trust?



## Understanding Web Browsers and User Data Protection (MC 4.2.A.9)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Understanding Web Browsers and User Data Protection Code: MC 4.2.A.9
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.17 and 4.2.18):

- Clarify what is a cookie and how it can affect your sensible data.
- Clarify the concept of 'incognito mode' or 'private browsing' in web browsers and how to use it.

## Description

The Understanding Web Browsers and User Data Protection Micro Credential certifies a comprehensive knowledge and capability to navigate internet browsing tools and strategies that ensure protection of sensitive user data. The focus is on mastering key concepts, such as understanding web cookies and the implications of using private browsing or 'incognito mode'.

The first core learning outcome centers on the concept of a 'cookie'. Cookies, or HTTP cookies, are small files that are stored on a user's computer when they visit a website. These files are used by the website to remember information about the visit, such as user preferences, login information, or items in a shopping cart. By saving this information, websites can provide a personalized user experience and make subsequent visits more efficient. However, while these cookies contribute significantly to user convenience, they can also pose potential risks to user privacy and the security of sensitive data.

Cookies can broadly be classified into two types: session cookies and persistent cookies. Session cookies, or transient cookies, are temporary and are deleted once the user closes their browser. They are used primarily for tasks such as maintaining a shopping cart or remembering a user's actions within a browsing session. On the other hand, persistent cookies remain on the user's computer even after they have closed their browser. These cookies are used to remember user preferences and behavior over a long period, and they are the ones more commonly associated with privacy concerns.

Third-party cookies, a subset of persistent cookies, are particularly noteworthy in discussions around data privacy. Unlike first-party cookies, which are set by the website a user is visiting, third-party cookies are set by domains other than the one being visited. These cookies are often used for online advertising and can track a user's browsing habits across multiple websites. This ability to track user behavior has raised significant concerns about privacy and data security.

With this in mind, understanding how to manage and control cookie settings is crucial. Most web browsers provide options to block third-party cookies, delete all cookies, or alert the user when a cookie is being set. By actively managing these settings, users can protect their sensitive data and maintain their online privacy.

The second learning outcome delves into the concept of 'incognito mode' or 'private browsing'. This is a feature available in most web browsers that allows a user to browse the internet without the browser storing information such as browsing history, search history, or cookies. When a user opens a new incognito window or private browsing session, the browser creates a separate temporary session that is isolated from the main browsing session and user data.

However, while private browsing can prevent other users of the same device from seeing your browsing activity, it does not make you invisible on the internet.

Websites visited, internet service providers, and network administrators can still potentially track browsing activities. This is important to remember because many people mistakenly believe that private browsing provides complete anonymity and protection online.

Overall, the Understanding Web Browsers and User Data Protection Micro Credential encapsulates the intricacies of managing user data while navigating the digital landscape. From understanding the role of cookies to knowing how and when to use private browsing, the credential signifies a commitment to digital safety and privacy. This knowledge is integral to fostering a secure and trustworthy digital environment, allowing users to engage with online platforms confidently and responsibly.

### Questions

1. What is a cookie in the context of web browsing, and how does it function?
2. What is the difference between session cookies and persistent cookies? Provide examples of their use.
3. Explain the concept of third-party cookies and why they are associated with privacy concerns.
4. How can users manage and control cookie settings in their web browsers to protect their sensitive data?
5. What is 'incognito mode' or 'private browsing', and how does it differ from regular browsing?
6. How does 'incognito mode' or 'private browsing' help protect user privacy?
7. What are the limitations of 'incognito mode' or 'private browsing' in terms of protecting user privacy?
8. How does 'incognito mode' or 'private browsing' affect the storage and use of cookies?
9. Discuss why the understanding of cookies and 'incognito mode' is essential for data privacy and security.
10. How can understanding and managing cookies contribute to a personalized user experience?
11. Explain how the use of 'incognito mode' or 'private browsing' affects user data retention.

## Digital Safety and Privacy Literacy (MC 4.2.A.10)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Digital Safety and Privacy Literacy Code: MC 4.2.A.10
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.19 and 4.2.20):

- Being able to test the knowledge about privacy policies of the websites frequently visited.
- Recommend best practices for online safety to friends and family.

## Description

In the contemporary world, with the expansive penetration of digital technology into everyday life, understanding the intricacies of digital privacy and safety has emerged as a necessity rather than a luxury. This micro-credential is designed to empower individuals with the knowledge and skills necessary to navigate the complex digital landscape with confidence, ensuring that their online interactions are guided by the principles of privacy and security.

The first of the two learning outcomes under this micro-credential emphasizes on the ability to comprehend and critically evaluate the privacy policies of frequently visited websites. Privacy policies, in essence, serve as a legal contract between the operator of a website and its users or visitors, delineating various parameters such as the types of data collected, the purpose of collection, how the data is stored, utilized, and potentially shared. These policies, however, are often overlooked or not completely understood by the users, resulting in inadvertent sharing of personal information and potential violations of privacy.

To mitigate such situations, the learners under this micro-credential will delve into the study of various privacy policies, recognize their critical components, and learn how to interpret their implications in real-world scenarios. This understanding forms the basis of informed decision-making about interactions with websites and effective management of one's digital footprint. This outcome will provide learners with the ability to critically evaluate these policies, testing their knowledge against an array of different real-world scenarios, thereby ensuring they can not only protect their personal data but also respect the digital privacy rights of others.

The second learning outcome under this micro-credential concentrates on advocating for digital safety, a critical requirement in the current digital era. As part of the larger online community, it is essential to extend the responsibility of digital safety beyond oneself, imparting this crucial knowledge to others. By understanding and implementing best practices for online safety, individuals can guide friends and family in fostering a safe and secure online presence.

These best practices encompass advice on creating robust passwords, recognizing and avoiding phishing scams, securing home networks, using encrypted communication channels, and curtailing the amount of personal information shared online. To effectively share these practices, learners must thoroughly understand the reasoning behind each recommendation and its contribution to enhancing overall online safety. By doing so, they not only protect themselves but also play a crucial role in cultivating a safer online environment for everyone.

Taken together, these learning outcomes aim to significantly bolster digital safety and privacy literacy, enabling individuals to protect themselves and contribute positively to the safety of others in the digital world. This micro-credential provides a comprehensive understanding of privacy policies and the best practices for online safety,

equipping learners to apply this knowledge in a practical, meaningful, and influential way. The digital landscape might be complex, but with the skills and knowledge gained through this micro-credential, navigating it safely and confidently becomes a feasible task.

## Questions

1. What is the role of a privacy policy on a website?
2. How can privacy policies of websites influence your interaction with them?
3. What are some potential implications of not understanding a website's privacy policy?
4. Why is it important to share knowledge of online safety practices with friends and family?
5. What are the critical components to look for in a website's privacy policy?
6. How can understanding a website's privacy policy contribute to managing your digital footprint?
7. Give an example of a best practice for online safety that you would recommend to a friend or family member.
8. How do robust passwords contribute to online safety, and how would you advise someone to create one?
9. What steps would you suggest to someone to help them secure their home network?
10. Describe a scenario where the lack of understanding a website's privacy policy could lead to a violation of privacy.
11. What measures can individuals take to curtail the amount of personal information they share online?
12. What is a phishing scam, and how can individuals recognize and avoid them?
13. How can encrypted communication channels enhance online safety, and when should they be used?

# INTERMEDIATE LEVEL

(Level 3 and Level 4)



## Cybersecurity Consciousness and Privacy Protection (MC 4.2.B.1)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Cybersecurity Consciousness and Privacy Protection Code: MC 4.2.B.1
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review



## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.21 and 4.2.22)

- Recommend best practices for online safety to friends and family.
- Identify appropriate actions to take when personal data is misused on social media platforms.

## Description

In the sprawling terrain of today's digital universe, the significance of possessing comprehensive knowledge of online safety and data protection has never been greater. The Cybersecurity Consciousness and Privacy Protection Micro Credential is meticulously designed to equip individuals with this indispensable knowledge.

The program intricately covers two pivotal areas of online safety and data misuse strategies on social media platforms, aiming to create informed and alert digital citizens.

The first crucial learning area of the Cybersecurity Consciousness and Privacy Protection Micro Credential involves cultivating a nuanced ability to guide friends and family on best practices for online safety. Amidst the escalating number of digital threats, encompassing cyber-attacks, online scams, and cyber harassment, it is vital that users become versed in protective measures. The micro credential aims to nurture the skills needed to analyze the safety and security features of diverse digital platforms, recognize potential dangers, and suggest mitigative solutions to reduce vulnerabilities. Equipped with these skills, learners can shield themselves from digital threats and act as active members for online safety in their communities. This aspect of the program reinforces the importance of collective action in fostering a secure digital environment.

The second crucial learning component of the Cybersecurity Consciousness and Privacy Protection Micro Credential is strategically managing and responding to personal data misuse on social media platforms. The exponential rise of social media has ushered in a multitude of privacy and security concerns. Misuse of personal data, ranging from identity theft to unauthorized data sharing, and even commercial exploitation, is unfortunately commonplace. Therefore, it is imperative that individuals can discern when their personal data has been compromised and can take appropriate countermeasures. This micro credential supports learners in honing the necessary skills to effectively manage their online personas, regulate their digital footprints, recognize signs of personal data misuse, and take appropriate remedial actions such as reporting violations, blocking unauthorized access, and safeguarding personal data.

An additional learning aspect woven into this micro credential is the introduction to the ethical and legal facets of digital safety and security. This introduction will help learners comprehend the complex web of laws and regulations that govern the realm of digital safety and security, enabling them to leverage these to protect their online identities and personal data. Understanding the legalities of digital interactions aids in promoting responsible and informed digital citizenship.

By integrating these two core learning objectives, the Cybersecurity Consciousness and Privacy Protection Micro Credential presents a detailed and all-encompassing perspective on digital safety and data protection. The goal is to endow learners with the necessary tools and knowledge to ensure their own protection in the digital sphere and to disseminate this wisdom within their community. As a result, those who complete this program will be adept at handling the diverse challenges and opportunities of the digital world, navigating the online landscape securely and confidently.

In conclusion, the Cybersecurity Consciousness and Privacy Protection Micro Credential serves as a vital tool for anyone seeking to maneuver through the digital world safely and confidently. By fostering a deep understanding of these crucial areas, learners will not only ensure their own digital safety but also contribute significantly to shaping a safer digital environment for all. Through its comprehensive and detailed approach, this program addresses the pressing need for digital safety education in our increasingly connected world.

### Questions

1. What are some of the key digital threats mentioned in the Cybersecurity Consciousness and Privacy Protection Micro Credential, and what is the importance of recognizing these threats?
2. What skills does the Micro Credential aim to develop to help individuals assess the safety and security of various digital platforms?
3. How can individuals equipped with the knowledge from this Micro Credential contribute to fostering a secure digital environment in their communities?
4. What are some potential forms of personal data misuse on social media platforms as mentioned in the Micro Credential, and why is it important to recognize them?
5. What are the recommended actions that individuals can take when they identify misuse of their personal data on social media?
6. In what ways does the Micro Credential support learners to manage their online personas effectively?
7. How does the Micro Credential instruct individuals to regulate their digital footprints?
8. How does understanding the ethical and legal facets of digital safety and security contribute to informed digital citizenship, according to the Micro Credential?
9. How can individuals leverage laws and regulations that govern digital safety and security to protect their online identities and personal data?
10. In what ways does the Micro Credential prepare learners to handle the diverse challenges and opportunities of the digital world?
11. How does the Cybersecurity Consciousness and Privacy Protection Micro Credential contribute to shaping a safer digital environment for all, according to the program's goals?

## Digital Citizenship and Online Security Proficiency (MC 4.2.B.2)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Digital Citizenship and Online Security Proficiency Code: MC 4.2.B.2
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.23, 4.2.24 and 4.2.25):

- Use electronic identification for services provided by public authorities and the business sector.
- Prioritize data protection while using social media for professional or educational purposes.
- Recognize online scams and develop a healthy scepticism towards unsolicited offers online.

## Description

In the World we're living in, we observe an increasingly dependence on digital tools and platforms, the need for individuals to become well-versed in online safety and security practices has become paramount. The Digital Citizenship and Online Security Proficiency Micro Credential aims to empower learners with the requisite knowledge and skills to safely and responsibly navigate the digital world. This comprehensive micro credential addresses three core areas - electronic identification (e-ID) use, data protection during professional or educational social media use, and recognition and scepticism of online scams.

The first learning outcome in this micro credential is understanding and effectively utilizing electronic identification for services offered by public authorities and business sectors. The proliferation of online services across a range of areas, from banking to education, necessitates the need for secure identification methods.

Electronic identification provides a secure and efficient way to verify an individual's identity online, eliminating the need for physical identification methods. However, the use of e-IDs also brings unique challenges in terms of ensuring privacy and data security. Through this micro credential, learners will gain an in-depth understanding of e-ID systems, including the principles of their operation, their benefits, and potential security risks. The program also delves into best practices for using e-IDs, such as how to keep e-ID data secure and what to do in case of potential identity theft or data breaches.

What is e-ID?

Electronic identification, often referred to as e-ID, is a digital solution for proof of identity. It is becoming increasingly important in a world where transactions and interactions are more and more often conducted online.

E-IDs are digital counterparts of physical identity cards and documents. They authenticate the user's identity, allowing for secure online transactions and interactions. The usage of e-IDs extends across various sectors, encompassing services provided by public authorities and business entities alike.

In the public sector, electronic identification can streamline and secure processes such as tax filing, application for benefits, voting, and other civic activities.

Governments worldwide are implementing e-ID systems to ensure the digital identities of their citizens, thereby facilitating the efficient delivery of public services.

In the business sector, the use of electronic identification is pervasive across multiple areas. For instance, in the banking and finance industry, e-ID is used for identity verification to prevent fraud during transactions, account creation, and access to financial services. In the e-commerce sector, e-ID can assist in ensuring the secure transaction of goods and services, protecting both consumers and businesses from fraud. In healthcare,

electronic identification can be used to securely access personal health records, schedule appointments, and conduct telehealth consultations.

Despite the widespread use and apparent benefits, electronic identification also brings its share of challenges. Foremost among these are privacy and data security concerns. E-IDs, if not properly protected, can be susceptible to unauthorized access, hacking, or even identity theft. Therefore, users need to understand the mechanisms of e-ID systems, secure storage, and management of their e-ID credentials, and the procedures to follow in case of suspected compromise.

The Digital Citizenship and Online Security Mastery Micro Credential recognizes the importance of e-ID in the modern digital world. It aims to provide learners with an in-depth understanding of the principles of e-ID operation, its benefits, potential security risks, and best practices for using e-IDs securely. Learners are educated on the nuances of maintaining the security of their electronic identification data and the steps to take if they suspect their data has been compromised.

By investing time in understanding electronic identification and its related security aspects, individuals can harness the potential of digital services while ensuring their identities are safeguarded. The Micro Credential ensures learners are equipped with the knowledge and tools to navigate this complex yet essential area of the digital world.

The second learning outcome is to understand and prioritize data protection while using social media for professional or educational purposes. With the increased use of social media platforms for work and education, the security of personal and professional data has never been more crucial. This micro credential educates learners on the potential risks associated with professional or educational social media use, such as unintentional data leaks or misuse of data by third parties. It also provides comprehensive training on privacy settings, secure data sharing practices, and managing digital footprints. Furthermore, learners will gain a deep understanding of relevant data protection laws and regulations, such as the General Data Protection Regulation (GDPR), enabling them to understand their rights and responsibilities when it comes to data protection.

The second learning outcome of the Digital Citizenship and Online Security Proficiency micro credential revolves around comprehending and prioritizing data protection while using social media for professional or educational purposes. This focus is of paramount importance in an age where social media platforms are integral to many aspects of life, including work and education.

Social media platforms, while providing opportunities for connectivity, information sharing, and collaboration, can also present substantial privacy risks. These risks are especially pronounced when these platforms are used for professional or educational purposes. For example, individuals might share sensitive information related to their workplace or educational institution, unknowingly exposing themselves to data leaks or breaches.

Understanding these potential risks is a crucial aspect of this learning outcome. Learners will be educated about common data security threats associated with professional or educational social media use, such as unauthorized access to accounts, unintentional data leaks, and misuse of data by third parties.

Furthermore, learners are taught the importance of data protection on social media and are introduced to effective strategies to safeguard their information. This includes learning about the privacy settings on different platforms, knowing what information to share and what to keep private, and understanding the implications of their digital footprints. Learners are also encouraged to develop the habit of regularly checking and updating their privacy settings in line with their comfort levels and requirements.

Additionally, this learning outcome introduces learners to the legal aspects of data protection. This could involve studying regulations such as the General Data Protection Regulation (GDPR) and understanding how these regulations protect their rights online. Such knowledge is invaluable in the professional or educational setting, where compliance with data protection laws is often mandatory.

Moreover, the program provides insights into best practices for securely sharing data and engaging with others professionally on these platforms. This covers aspects like secure communication, safe sharing of files and documents, and recognizing and avoiding potentially harmful links or attachments.

Understanding and prioritizing data protection while using social media for professional or educational purposes is a complex, yet vital, skill in today's digital age. By mastering this learning outcome, individuals can confidently and safely utilize social media for their professional and educational advancement while ensuring their personal data remains secure.

The third learning outcome focuses on recognizing online scams and developing a healthy scepticism towards unsolicited offers online. In the digital age, scams have become increasingly sophisticated, making it essential for individuals to remain vigilant and sceptical of potential threats. This micro credential provides an overview of common types of online scams, such as phishing, malware, and identity theft. It also provides practical strategies for identifying scams, including recognizing suspicious emails, links, and websites, and verifying the authenticity of unsolicited offers. The program also provides guidance on what to do if one falls victim to a scam, including reporting mechanisms and steps to mitigate damage.

The third learning outcome of the Digital Citizenship and Online Security Proficiency Micro Credential focuses on recognizing online scams and cultivating a healthy scepticism towards unsolicited offers online. This understanding is crucial in today's digital landscape where scams and fraudulent activities are increasingly sophisticated and pervasive.

Online scams come in many forms and often exploit individuals' lack of knowledge about safe internet practices. Among the most common scams are phishing attempts, where scammers impersonate legitimate entities to trick users into revealing personal information, and advanced fee fraud, where scammers promise large returns in exchange for an upfront fee. Other scams can involve fake lotteries or prizes, fraudulent online marketplaces, or even romance scams that prey on the lonely and vulnerable.

Through this micro credential, learners are introduced to the various types of online scams and how they work. They are taught to recognize the signs of scams, which can include unsolicited communications, pressure tactics, too-good-to-be-true offers, requests for sensitive information, and unusual payment methods.

Moreover, learners are equipped with the tools and strategies to verify the authenticity of unsolicited offers. These can include techniques like checking the sender's email address or URL for anomalies, researching the offer or sender online, contacting the supposed sender directly through a verified method, and not clicking on suspicious links or attachments.

A key part of this learning outcome is fostering a sense of healthy scepticism towards unsolicited offers online. Learners are encouraged to question the legitimacy of unexpected offers and to always take the time to verify before engaging. They are reminded that legitimate entities rarely, if ever, request sensitive information or payments via email or text message.

Importantly, learners are also provided guidance on what to do if they fall victim to a scam. This includes immediate steps like contacting their bank or credit card company, changing passwords, and reporting the scam to local law enforcement and online platforms. They are also educated on longer-term measures like monitoring their credit reports for signs of identity theft.

The ability to recognize online scams and maintain a healthy scepticism towards unsolicited offers online is an essential skill for navigating the digital world. Through this learning outcome, individuals are equipped with the knowledge and tools to protect themselves from online scams, contributing to a safer and more secure online environment.

In summary, the Digital Citizenship and Online Security Proficiency Micro Credential provides learners with a comprehensive understanding of three critical aspects of online safety and security - electronic identification, data protection on social media, and online scams. By completing this program, learners will be equipped with the knowledge and skills to safely navigate the digital world, protect their personal and professional data, and advocate for safe and responsible digital practices within their communities.

This in-depth, detailed program requires a significant commitment from learners but promises to deliver critical knowledge and skills that are becoming increasingly essential in the modern digital world. As our lives become ever more intertwined with digital technologies, this micro credential represents a critical investment in individual and collective digital safety and security.

## Questions

1. What is electronic identification (e-ID) and why is it important in today's digital world?
2. What are the potential security risks associated with using e-ID and how can these be mitigated?
3. Explain the best practices for using e-ID securely.
4. What steps should be taken if a person suspects their e-ID data has been compromised?
5. Why is data protection crucial when using social media for professional or educational purposes?
6. What are some common data security threats associated with professional or educational use of social media?
7. How can an individual manage their digital footprint effectively on social media platforms?
8. Describe the role of laws and regulations, such as GDPR, in data protection on social media.
9. What are the best practices for sharing data securely on social media platforms for professional or educational purposes?
10. Define online scams and provide examples of common types of scams that individuals might encounter online.
11. What are some red flags or signs of online scams that individuals should be aware of?
12. Explain the techniques to verify the authenticity of unsolicited offers online.
13. Discuss the importance of developing a healthy skepticism towards unsolicited offers online.
14. What immediate steps should an individual take if they fall victim to an online scam?
15. What are some long-term measures individuals can take after falling victim to an online scam?



## Cybersecurity Best Practices and Online Behavior Assessment (MC 4.2.B.3)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Cybersecurity Best Practices and Online Behavior Assessment Code: MC 4.2.B.3
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review



## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.26 and 4.2.27):

- Prepare your computer and smartphone by installing and updating necessary security software.
- Rate your online habits in terms of their security risk.

## Description

In the prevailing digital era, where the utilization of technological devices such as computers and smartphones has become an everyday occurrence, understanding cybersecurity practices and online behavior management is of vital importance. The Cybersecurity Best Practices and Online Behavior Assessment Micro Credential program focuses on these two key elements, instructing learners to both prepare their digital devices through appropriate security measures, and evaluate their online habits in the context of security risk.

The first learning outcome involves enabling learners to effectively prepare their computers and smartphones through the installation and regular updating of crucial security software. Technological devices form an integral part of our lives, storing sensitive data ranging from personal information to professional documents.

Therefore, ensuring the security of these devices becomes paramount.

The installation of security software is a vital first step in safeguarding these devices. Security software serves as a defensive wall against various online threats, such as viruses, malware, ransomware, and spyware. The range of security software includes antivirus programs, firewalls, antispyware, and encryption tools, among others. This learning outcome covers an understanding of different types of security software, their specific roles, and the importance of maintaining the most current versions.

Regular updating of security software is equally critical. Cyber threats evolve constantly, with new types of viruses and malware emerging regularly. To combat these evolving threats, security software providers release regular updates, patches, and enhancements to their programs. These updates contain important improvements and novel defenses against recently identified threats.

The program provides an understanding of the updating process, the risks associated with outdated security software, and the importance of keeping all software, including operating systems, web browsers, and apps, current.

Additionally, the course touches on other security practices like strong password creation, two-factor authentication, and safe browsing habits.

The Micro Credential aims at constituting a solid base of ensuring Security in Computers and Smartphones through Installation and Regular Updates of Relevant Software

Software security is a broad term that includes a variety of applications developed to shield computers and smartphones from digital threats. This encompasses antivirus programs designed to identify, eradicate, and defend against viruses and other kinds of malware, firewalls that manage and block unauthorized device access, anti-spyware software that guards against unauthorized data collection, and encryption tools that secure data by transforming it into a format that can only be decrypted with the appropriate key.

This learning outcome concentrates on imparting knowledge about the significance of each type of software in maintaining device security. It also emphasizes the necessity of a cohesive security approach where various software types collectively create an extensive security barrier.

The frequency of updating all installed security software is another pivotal element of device security. With the ever-evolving nature of cyber threats, and new types of viruses and malware emerging consistently, security software providers routinely roll out updates encompassing enhancements, resolution of existing issues, and fresh defenses against these evolving threats. By keeping their security software up-to-date, users can ensure optimal defense for their devices against prevailing threats.

This learning outcome also encompasses other security measures such as periodic operating system and application updates, secure password practices, two-factor authentication, and safe browsing habits, which collectively form a comprehensive security protocol to defend users from most digital threats.

The second learning outcome involves developing the skills to assess online habits concerning their security risk. The internet, while a vast resource, also harbors potential security threats. The online habits of an individual can significantly influence their exposure to these threats.

This learning outcome instructs learners on the concept of risk in the context of online behavior. It provides an overview of common high-risk online behaviors, such as clicking on unknown links, using unsecured Wi-Fi networks, and sharing sensitive information online. It also highlights low-risk habits that enhance online security, such as visiting only HTTPS-secured websites, logging out of accounts when not in use, and regularly updating privacy settings.

Through this program, learners develop the capacity to critically analyze their online habits, distinguish between high-risk and low-risk behaviors, and make necessary adjustments to enhance their online safety. This learning outcome not only covers personal habits but also extends to professional behavior, highlighting the importance of safe online habits in protecting not just individuals but also workplaces and institutions.

The actions and habits individuals display while online significantly affect their susceptibility to cyber threats. Certain practices, such as navigating only HTTPS-secured websites, employing strong, distinct passwords, and signing out of accounts when not in use, can considerably decrease the risk of being victimized by cyber threats.

On the other hand, high-risk actions like clicking on links from unknown emails, using unsecured Wi-Fi networks, and disclosing excessive personal information online can notably increase this risk.

In this learning outcome, individuals are taught to critically evaluate their online behavior. They are trained to recognize behaviors that could potentially expose them to risks and are armed with the knowledge to adjust their habits to improve security.

Crucially, this analysis isn't confined to personal habits. The course also covers the impact of online behavior in a work context. With increasing dependence on digital platforms in workplaces, safe online practices have become essential in safeguarding not just individuals but also businesses and institutions.

In summary, the Cybersecurity Best Practices and Online Behavior Assessment Micro Credential program empowers learners to improve their digital security through effective preparation of their devices and careful scrutiny of their online habits. By completing this program, individuals will not only improve their own digital security but also contribute to a safer digital community. It provides a comprehensive understanding and

mastery of personal cybersecurity, creating responsible digital citizens well-equipped to navigate the digital landscape securely.

### Questions

1. What is the significance of installing security software on technological devices such as computers and smartphones?
2. What types of security software are available and what are their specific roles in protecting digital devices?
3. Why is it crucial to keep security software up-to-date? How do regular updates contribute to cybersecurity?
4. What are some of the risks associated with using outdated security software?
5. Beyond updating security software, what are other important practices to ensure the security of digital devices?
6. How does secure password creation and two-factor authentication contribute to overall device security?
7. How do the actions and habits of an individual while online impact their susceptibility to cyber threats?
8. What are examples of high-risk and low-risk online behaviors in the context of cybersecurity?
9. How can one critically evaluate their online behavior to identify potential security risks?
10. Why is it important to make necessary adjustments to online habits to enhance safety?
11. In what ways can safe online habits protect not just individuals but also workplaces and institutions?
12. How does the Cybersecurity Best Practices and Online Behavior Assessment Micro Credential program contribute to creating responsible digital citizens?
13. How does the knowledge acquired from the Micro Credential program improve personal digital security and contribute to a safer digital community?

## Comprehensive Digital Privacy, Child Safety, and Secure Browsing Proficiency (MC 4.2.B.4)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Comprehensive Digital Privacy, Child Safety, and Secure Browsing Proficiency Code: MC 4.2.B.4
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.28, 4.2.29 and 4.2.30):

- Discuss that personal data processing is subject to local regulations like GDPR.
- Indicate the existence of child-friendly browsers and show concern for the online safety of children by using or recommending these browsers.
- Differentiate between secure and insecure websites when browsing.

## Description

The Comprehensive Digital Privacy, Child Safety, and Secure Browsing Proficiency Micro Credential is a multifaceted program that deepens learners' understanding and skills regarding three crucial areas of digital safety: personal data protection laws, child-safe internet tools, and identification of secure and insecure websites.

The program delves into the critical aspect of personal data processing and its pertinent regulations. Given the volume of personal data that circulates online, the importance of privacy protection laws such as the General Data Protection Regulation (GDPR) is substantial. GDPR, a stringent privacy and security law implemented in the European Union, has wide-ranging implications for data management around the globe. This program offers comprehensive learning outcomes centered around GDPR and similar laws that are designed to protect personal data. This includes understanding the purpose and key elements of these regulations, recognizing the rights of data subjects, and identifying the responsibilities of data processors and controllers.

Personal data processing refers to any action that is performed on personal data, including collection, recording, organization, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination, or otherwise making available, alignment or combination, restriction, erasure or destruction.

Regulation of personal data processing has become critically important with the increase in digitalization of services and activities. Laws such as the General Data Protection Regulation (GDPR) in the European Union were created to protect citizens' privacy and personal data.

GDPR was adopted in 2016 and came into effect in 2018. It is considered one of the toughest privacy and security laws in the world, although it was crafted and passed by the European Union, it imposes obligations onto organizations anywhere, so long as they target or collect data related to people in the EU.

The regulation is predicated on several principles surrounding the processing of personal data. These include lawfulness, fairness and transparency, purpose limitation, data minimization, accuracy, storage limitation, integrity and confidentiality, and accountability.

Under the GDPR, individuals have several rights, including:

1. The right to be informed: Individuals have the right to be informed about the collection and use of their personal data.

2. The right of access: Individuals have the right to access their personal data and supplementary information.
3. The right to rectification: Individuals have the right to have inaccurate personal data rectified, or completed if it is incomplete.
4. The right to erasure (also known as the 'right to be forgotten'): Individuals have the right to have personal data erased.
5. The right to restrict processing: Individuals have the right to request the restriction or suppression of their personal data.
6. The right to data portability: This allows individuals to obtain and reuse their personal data for their own purposes across different services.
7. The right to object: In certain circumstances, individuals have the right to object to the processing of their personal data.
8. Rights in relation to automated decision making and profiling: Individuals have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning them or similarly significantly affects them.

Furthermore, the program also focuses on the impact of these regulations on daily internet usage, exploring how these laws influence how personal data is collected, stored, and processed. This understanding is paramount for not only safeguarding one's own digital information but also contributes to maintaining high standards of privacy in professional and personal online environments.

Another significant area of focus is child safety on the internet. With an ever-increasing number of children accessing the internet, the necessity for child-friendly digital tools has never been more crucial. Child-friendly browsers provide a safer, more controlled environment for children to explore the internet by restricting access to potentially harmful content and ensuring the privacy of the young user.

The Micro Credential program places a strong emphasis on understanding these tools, detailing how they operate, their key features, and the benefits they bring to ensuring a safer internet experience for children. This knowledge proves instrumental for individuals involved in children's online activities, such as parents, educators, and guardians. It empowers them to recommend or use these browsers, thereby actively promoting and enabling safer internet use among young digital natives.

Child-friendly browsers, also known as kid-safe browsers, are web browsers designed specifically for children's use. These browsers prioritize online safety by providing an environment where children can explore the internet securely, without the risk of stumbling upon inappropriate content or falling prey to online threats. The use of these browsers demonstrates a commitment to the safety of children online and can be recommended to parents, educators, or caregivers as a tool to foster safe and positive internet use.

One of the primary characteristics of child-friendly browsers is content filtering. This feature prevents access to websites containing explicit, violent, or inappropriate material, by blocking them automatically. Some child-friendly browsers use a whitelist approach, where only pre-approved websites can be accessed. Others employ a blacklist system, where specific harmful or inappropriate sites are blocked. Many use a combination of both.

Some child-friendly browsers also include time management features, allowing adults to set limits on how much time children can spend online. This promotes balanced screen time and helps prevent internet addiction.

Another feature common to these browsers is simplified user interfaces with larger buttons and simplified menus, which are easier for young users to navigate. Some even offer visual and auditory cues to guide children's browsing experiences.

Privacy is another critical aspect of child-friendly browsers. They do not collect personal data or allow third-party ads, which is crucial in the age of digital privacy concerns. They also often integrate with educational tools and resources, providing a productive online environment for learning.

Examples of child-friendly browsers include Zoodles, KidzSearch, and KIDOZ. These platforms provide a safe and controlled environment for kids to explore the web, learn new things, and have fun online.

Promoting the use of child-friendly browsers is an important step in ensuring online safety for children. It is a part of digital citizenship and awareness, showing concern and responsibility for children's online experiences. By using or recommending these browsers, one can contribute to a safer online environment for the most vulnerable internet users.

It's important to note that while child-friendly browsers are an excellent tool for online safety, they should be used in conjunction with active adult supervision and guidance about safe online behavior. The combination of technology and education is the best approach to keep children safe online.

The final critical learning outcome of the program focuses on the differentiation between secure and insecure websites. With numerous potential cybersecurity threats, it is crucial for internet users to be able to identify and differentiate between websites that provide a secure, encrypted connection and those that don't.

This involves understanding the principles of secure connections, recognizing the visual cues associated with secure websites (such as HTTPS protocols and the padlock symbol), and comprehending the potential risks of navigating insecure websites. The outcome provides the tools to avoid potential threats such as malware, phishing, and data theft, greatly enhancing the individual's safety and the security of their personal data while browsing online.

Secure connections are a fundamental part of safe web browsing, particularly when interacting with websites that require sensitive information, such as online banking or shopping sites. Understanding the principles of secure connections helps individuals differentiate between secure and insecure websites, which in turn aids in mitigating the risk of data theft or other malicious activities.

A secure website connection is established using a protocol known as HTTPS (Hypertext Transfer Protocol Secure). This is a version of HTTP that works in combination with another protocol, SSL (Secure Sockets Layer), or its successor, TLS (Transport Layer Security), to transport data safely.

When a user visits a website with an HTTPS connection, their browser will form a secure connection with the website's server. This connection is encrypted, meaning that any data transferred between the user's device and the server (such as passwords, credit card numbers, or other personal information) cannot be easily read or tampered with by a third party. The encryption takes place using an SSL or TLS certificate, which the website's server provides.

To identify a secure website connection, there are several visual cues users should look for in their web browser:



1. The URL of the website: A secure website will have 'https://' at the beginning of its URL. The 's' stands for 'secure' and is the key indicator of a secure connection.
2. Padlock icon: Most modern web browsers display a padlock icon in the address bar when the user is visiting a secure website. Clicking on the padlock will often provide additional information about the website's security.
3. Certificate information: On clicking the padlock icon, users can access information about the site's SSL or TLS certificate, including who issued it and when it's valid until.
4. Website seal: Some secure websites display a security seal, which is a visual indicator provided by the entity that issued the SSL or TLS certificate.
5. Green address bar: In some browsers, the address bar or the name of the website owner will turn green for particularly secure sites that have an Extended Validation (EV) SSL certificate.

It's important to note that while these visual cues indicate that a secure connection has been established, they do not guarantee that the website itself is safe or free from malicious content. Users should still exercise caution and good judgment when entering personal information online.

In essence, the Comprehensive Digital Privacy, Child Safety, and Secure Browsing Proficiency Micro Credential is a well-rounded program aimed at thoroughly preparing learners to navigate the digital world securely. By honing their knowledge and skills in the crucial areas of personal data regulations, child safety online, and identifying secure websites, learners can better protect themselves and others, fostering a safer digital landscape for all. The completion of this program signifies not just personal proficiency but also the capacity to contribute meaningfully to a more secure digital society.

## Questions

1. What is the purpose of personal data protection laws like the General Data Protection Regulation (GDPR)?
2. How does GDPR apply to organizations outside the European Union?
3. What are some of the key principles surrounding the processing of personal data under GDPR?
4. Can you list and briefly explain the rights individuals have under GDPR?
5. How do privacy protection laws such as GDPR influence how personal data is collected, stored, and processed on a daily basis?
6. What is the role and importance of child-friendly browsers in ensuring online safety for children?
7. What are some of the key features of child-friendly browsers that make them suitable for children?
8. Name a few child-friendly browsers and discuss how they contribute to creating a safer online environment for children.
9. How do child-friendly browsers address privacy concerns?
10. How is a secure website connection established and why is it important?
11. What does HTTPS stand for and what does it signify in a website's URL?
12. How does a padlock icon in the address bar of a browser relate to website security?
13. What is a security seal on a website and what does it represent?
14. How does the color of an address bar or the name of the website owner indicate the level of security of a website?
15. Why is it still important to exercise caution when entering personal information online, even if visual cues of a secure connection are present?



## Advanced Digital Security and Encryption Proficiency (MC 4.2.B.5)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Advanced Digital Security and Encryption Proficiency Code: MC 4.2.B.5
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.31, 4.2.32 and 4.2.33):

- Identify suspicious e-mail messages that may contain phishing attempts or malware.
- Determine advanced security measures to protect personal data on social media accounts.
- Explain the concept of encryption and its role in protecting personal information.

## Description

The Advanced Digital Security and Encryption Proficiency Micro Credential program is a comprehensive learning pathway that emphasizes the importance of proactive cybersecurity practices in a highly digital age. It centers on three critical areas of online safety and data security: identifying suspicious email activities, securing personal data on social media platforms, and understanding the concept of encryption.

The first learning outcome focuses on the identification of suspicious email activities that might signify phishing attempts or malware dissemination. The prevalence of email as a tool for communication has made it a frequent target for cybercriminals, and thus, understanding how to detect and manage these potential threats is crucial. The program equips learners with the necessary skills to discern legitimate emails from malicious ones, highlighting the common indicators of phishing emails or those carrying malware. These may include unsolicited attachments, urgency in the message tone, misspellings or grammar errors, and incongruences in the email sender information.

Email has become a ubiquitous form of communication in both personal and professional settings. However, its widespread use has also made it a frequent target for cybercriminals who use deceptive techniques such as phishing or malware distribution to deceive recipients, often with the goal of stealing sensitive information or compromising security systems.

Phishing is a type of cyberattack where the attacker disguises themselves as a reputable entity or person in an email or other communication to distribute malicious links or attachments that can perform a variety of functions, including stealing login credentials or banking information, installing malware, or locking the user out of their data until they pay a ransom.

In the present Micro Credential program, learners are taught how to recognize signs of phishing and other malicious email activities. For example, phishing emails

often try to create a sense of urgency or fear, encouraging the recipient to click on a link or open an attachment without thinking. They may contain generic greetings, misspellings, and grammar errors, and often the email address of the sender will not quite match the organization they're supposedly representing.

Malware, or malicious software, refers to any program or file that is harmful to a computer user. Malware includes computer viruses, worms, Trojan horses, and spyware. These malicious programs can perform a variety of functions, including stealing, encrypting or deleting sensitive data, altering or hijacking core computing functions, and monitoring users' computer activity without their permission.

Emails can be used to distribute malware in several ways, including through attachments or embedded links. The email may appear to come from a trusted source, such as a friend or a well-known company, and urge the

recipient to open an attachment or click on a link. Once the user has taken this action, the malware can be installed on their system.

In the Micro Credential program, learners are taught how to identify potential malware threats in emails. This includes understanding the types of files that are often used to transmit malware (such as .exe or .zip files), the dangers of clicking on unknown links, and the importance of maintaining up-to-date antivirus software.

The program emphasizes the importance of always treating unsolicited emails with caution, especially those that request sensitive information, urge quick action, have unprofessional design or poor grammar, or contain unsolicited attachments. By recognizing these red flags, users can significantly reduce their risk of falling victim to phishing or malware attacks.

Overall, the ability to identify suspicious email activities is a crucial skill in the modern digital age. It can protect individuals and organizations from data breaches, financial loss, and other serious consequences associated with cyberattacks. The Micro Credential program provides the knowledge and skills necessary to navigate the digital world safely and effectively, fostering a more secure and privacy-conscious digital society.

This knowledge can significantly mitigate the risk of data breaches and other cyber threats that might compromise the user's digital security.

In the age of social media, the program also addresses the protection of personal data on these platforms as the second learning outcome. Even as these platforms offer numerous benefits, they also pose substantial privacy concerns. The program provides a thorough understanding of the advanced security measures that can be taken to protect personal information on social media platforms. This includes instruction on best practices such as setting strong, unique passwords, enabling multi-factor authentication, limiting the sharing of sensitive information, understanding and managing privacy settings effectively, and recognizing and avoiding potential scams or fraudulent activities.

Social media has fundamentally altered the way people communicate, share information, and interact. However, its pervasiveness in everyday life has introduced significant concerns about data privacy and security. Given the vast amount of personal data shared on these platforms, users often become targets for cybercriminals, leading to potential data breaches, identity theft, and other forms of cybercrime.

In this Micro Credential program, the second learning outcome revolves around understanding and implementing advanced security measures to protect personal information on social media platforms. These platforms include but are not limited to Facebook, Instagram, Twitter, LinkedIn, and Snapchat.

One of the primary aspects covered under this learning outcome is the creation and management of strong, unique passwords. A robust password is a user's first line of defense against unauthorized access. The program details the elements of strong passwords, which typically involve a mix of uppercase and lowercase letters, numbers, and symbols, and are not easily guessable (like "password123" or "qwerty"). Additionally, the program encourages the use of different passwords for different platforms to prevent a security breach on one platform from affecting other accounts.

In addition to robust password practices, the program covers the importance of enabling multi-factor authentication (MFA) on social media accounts. MFA adds an extra layer of security by requiring users to provide at least two or more verification factors to gain access to an account, making it harder for potential intruders to gain access.

The program also emphasizes the importance of understanding and effectively managing privacy settings on social media platforms. Users often share sensitive information on these platforms without realizing that their posts, comments, likes, shares, and even personal details may be visible to a wider audience than they intended. The program provides a thorough understanding of privacy settings, guiding learners on how to control who can see their information and how it can be shared.

Moreover, the program covers the identification and avoidance of scams and fraudulent activities commonly encountered on social media. These could include phishing attempts, scam messages, fraudulent friend requests, or scam advertisements.

By the end of this module, learners will have a comprehensive understanding of how to safeguard their personal data on social media platforms. This knowledge and set of skills not only contribute to personal digital security but also influence a broader culture of online safety and data privacy. This learning outcome is an essential aspect of ensuring individuals' and communities' digital wellbeing, fostering a safer and more privacy-aware social media landscape.

This knowledge helps ensure the secure usage of social media platforms, protecting users against data breaches and potential identity theft.

Lastly, the program delves into the concept of encryption and its paramount role in protecting personal information. It offers an in-depth exploration of how encryption works as a security measure, scrambling data into unreadable format that can only be deciphered with the correct decryption key. It further explores the various forms of encryption, such as symmetric and asymmetric encryption, and the contexts in which they are applied. This understanding allows individuals to appreciate the role of encryption in maintaining the confidentiality and integrity of data, whether it be in personal communications, business transactions, or the broader digital landscape. Encryption is a critical aspect of cybersecurity and data privacy. It is a process that converts readable text or data, known as plaintext, into an encoded version called ciphertext, which can only be decoded or decrypted by those who possess the appropriate decryption key. The primary purpose of encryption is to protect the confidentiality of digital data stored on computer systems or transmitted via the internet or other computer networks.

Encryption works by employing complex algorithms to scramble data. There are two main types of encryption: symmetric and asymmetric.

1. **Symmetric Encryption:** In symmetric encryption, the same key is used for both encryption and decryption. This means that the sender and the receiver must both have the same key. The most common type of symmetric encryption is Advanced Encryption Standard (AES), which is approved by the U.S. Government and by European Regulations for encrypting classified information, both at Civil as well as Military grade encryption standards. Actual standards prescribe at least AES 256 (key length in bits) to be labelled as “secure”.

2. **Asymmetric Encryption:** Asymmetric encryption, also known as public-key encryption, uses two keys instead of one. The public key, which is known to everyone, is used for encryption, while the private key, which is kept secret by the recipient, is used for decryption. The most common type of asymmetric encryption is the RSA algorithm. Asymmetric encryption is often used in secure communications such as SSL and TLS protocols (<https://>), which secure data transmission on the internet. International standards indicate a minimum key length of 2048 bits to consider the encryption “secure”.

The huge difference in key length (256 V/s 2024 bits) between symmetric and asymmetric keys, relies on the intrinsic design of RSA asymmetric algorithm that needs the product of two prime numbers (noted as  $d$ " $p$ " and " $q$ ") to create the core of the asymmetric keys (noted as " $n$ "). As prime numbers are easily diradated with numbers of 5, 6 or more digits, the statistic universe shall be hugely bigger then natural numbers.

One of the primary uses of encryption is in protecting the integrity of data during transmission. When data is encrypted, it becomes unreadable to anyone without the decryption key, thus ensuring that the data can't be intercepted and read during transmission. This is particularly important when transmitting sensitive data, such as credit card numbers or personal information, over the internet.

Another crucial use of encryption is in protecting stored data. By encrypting files or entire storage devices, users can ensure that even if the data is stolen or accessed without authorization, it will remain unreadable and therefore useless to the unauthorized party.

Encryption plays a vital role in numerous areas, including internet security, communication systems, banking and finance, healthcare, and more. It is a fundamental pillar of secure digital communication and data storage, preventing unauthorized access and maintaining data integrity and confidentiality.

However, it's essential to note that while encryption can significantly enhance data security, it is not infallible and should be used as part of a broader approach to cybersecurity that includes good digital hygiene habits, use of secure networks, and regular software updates.

In essence, the Advanced Digital Security and Encryption Proficiency Micro Credential program is designed to enhance the learner's understanding and capabilities regarding crucial aspects of digital safety and data security. Upon completion, the individual will be well-versed in identifying and mitigating potential online threats, protecting their personal data in social media environments, and understanding the vital role of encryption in securing digital information. This proficiency is not just personally beneficial, but it can also significantly contribute to a safer, more secure digital society.

## Questions

1. What are some common indicators of a phishing email?
2. Can you explain the term "malware" and list some of its types?
3. How can you identify a potential malware threat in an email?
4. What is the importance of treating unsolicited emails with caution?
5. What are the elements of a strong, unique password?
6. Can you explain the concept of multi-factor authentication and its importance in social media platforms?
7. How can privacy settings on social media platforms be managed effectively?
8. What types of scams or fraudulent activities are commonly encountered on social media?
9. Why is encryption important in protecting personal information?
10. Can you explain the difference between symmetric and asymmetric encryption?
11. What is the role of encryption in data transmission?
12. How does encryption help in protecting stored data?
13. Why should encryption be considered as part of a broader approach to cybersecurity?
14. What is the role of encryption in internet security and communication systems?
15. How does a good understanding of email security contribute to a safer, more secure digital society?
16. In what ways does effective password management on social media platforms enhance personal data

- security?
17. How does understanding encryption enhance one's capabilities regarding digital safety and data security?
  18. Can you provide examples of situations where symmetric encryption is more advantageous to use than asymmetric encryption, and vice versa?
  19. How does the key management differ in symmetric and asymmetric encryption and what are the implications of these differences in terms of security and convenience?
  20. Can you explain the functioning of the Advanced Encryption Standard (AES) algorithm used in symmetric encryption and the RSA algorithm used in asymmetric encryption?
  21. How do the differences in the algorithms of symmetric (like AES) and asymmetric encryption (like RSA) impact their respective security and performance?

## Advanced Personal Data Protection and Privacy Analysis (MC 4.2.B.6)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Advanced Personal Data Protection and Privacy Analysis Code: MC 4.2.B.6
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.34, 4.2.35):

- Recognize the potential risks of sharing personal data on social media and take necessary precautions.
- Compare the privacy policies of various apps or services to determine their data collection practices.

## Description

The Advanced Personal Data Protection and Privacy Analysis Micro Credential program is an exhaustive educational pathway designed to fortify learners' understanding of data privacy, personal cybersecurity practices, and their rights as digital citizens. This program underscores the relevance of proactive and informed practices in the face of an increasingly digital landscape, with a keen focus on the potential risks of sharing personal data on social media platforms, as well as the ability to evaluate and contrast data collection practices across various digital applications and services.

The first learning outcome engages learners in the exploration of potential risks tied to the sharing of personal data on social media platforms. Despite the numerous communication and connection advantages that social media platforms provide, they also present significant threats related to data privacy and security. The pervasive nature of these platforms and the resulting extensive sharing of personal information make users vulnerable to cybercriminal activities, which can lead to data breaches, identity theft, and other cybercrimes.

Learning Outcome 1: Recognizing potential risks of sharing personal data on social media and taking necessary precautions.

Social media platforms have become an integral part of everyday life. However, as individuals share a substantial amount of personal information on these platforms, there are considerable potential risks associated with data privacy and security. The program provides an in-depth understanding of how cybercriminals exploit these platforms and their users. For example, cybercriminals often use phishing techniques to lure users into revealing sensitive information, or they can exploit poor privacy settings to gain unauthorized access to personal data.

The program further elucidates the strategies and preventative measures users can take to safeguard their personal data on these platforms. This includes learning how to use privacy settings effectively, restricting who can view personal information, being cautious of friend requests from unfamiliar people, and understanding the implications of geotagging and public check-ins.

Moreover, the program covers the importance of critically evaluating applications connected to social media platforms, as these often have access to personal information and may not adhere to the same privacy standards as the platform itself.

In response to this, learners are guided through the best practices to protect their personal information on these platforms. The curriculum includes discussions on the understanding of how shared data can be used or misused, the importance of managing privacy settings effectively to limit who can view their shared content, and the concept of digital footprint and its long-lasting impact. These discussions aim to instill in learners an awareness of the potential ramifications of indiscriminate data sharing on such platforms.

The second learning outcome is centered around developing learners' abilities to critically assess and compare the privacy policies of various digital applications and services. Given the current digital landscape where data



is regarded as a highly valuable commodity, a wide array of applications and services frequently gather substantial user data, often with the justification of enhancing user experiences. However, these practices bring forth notable privacy concerns.

Learning Outcome 2: Comparing the privacy policies of various apps or services to determine their data collection practices

This learning outcome focuses on equipping learners with the ability to critically assess and compare the privacy policies and data collection practices of various apps and digital services. With the digital era's advent, data has become a valuable asset, and many companies employ data-driven strategies to enhance user experience, often at the expense of user privacy.

The curriculum here includes understanding the terminology and legal frameworks often used in privacy policies, recognizing how data is collected, stored, and shared, and identifying the control users have over their data. The program discusses practical examples of privacy policies, shedding light on different policies and how companies may use collected data.

The program also covers major data protection regulations such as the General Data Protection Regulation (GDPR), providing learners with a clear understanding of their rights concerning their personal data.

As the result of the Advanced Personal Data Protection and Privacy Analysis Micro Credential program, learners will not only have a comprehensive understanding of the potential risks associated with personal data sharing on social media but will also have developed the skills needed to critically evaluate and compare various digital services' data collection practices and privacy policies.

In this context, learners are taught how to discern what types of data these services and apps are collecting, how this information is being used, stored, and potentially shared, and what control the users retain over their personal data. This involves understanding the often complex and lengthy privacy policies and terms of service agreements, which many users accept without thorough examination. Instruction also covers regulatory frameworks like the General Data Protection Regulation (GDPR), which provides strict rights and protections to consumers regarding their personal data.

Upon completion of the Advanced Personal Data Protection and Privacy Analysis Micro Credential program, learners will possess an in-depth understanding of the potential risks and the requisite preventative measures related to personal data sharing on social media. They will also have trained their ability to critically evaluate and compare the data collection and privacy practices of various digital services. These competencies extend beyond personal benefit, fostering a more informed, responsible, and privacy-conscious digital society.

## Questions

1. What are some common risks associated with sharing personal data on social media platforms?
2. How can privacy settings on social media platforms help protect personal data?
3. What precautions should be taken when accepting friend requests or followers on social media?
4. What are the potential implications of geotagging and public check-ins on social media?
5. How can third-party applications connected to social media platforms pose a risk to personal data?
6. Why is it important to read and understand the privacy policies of digital services?
7. What key terms and legal frameworks should one be aware of when evaluating privacy policies?



8. How can a user identify the types of data being collected by a service as detailed in its privacy policy?
9. What aspects of data storage and sharing should one look for in a privacy policy?
10. How do regulations like the GDPR affect a user's rights concerning their personal data?
11. How can a comparison of privacy policies across different services help a user make informed choices about which services to use?

## Advanced Personal Data Security and Privacy (MC 4.2.B.7)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Advanced Personal Data Security and Privacy Code: MC 4.2.B.7
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.36, 4.2.37 and 4.2.38):

- Describe the concept of encrypted communication, and value your privacy by choosing communication apps that provide end-to-end encryption.
- Adopt the best practices for protecting personal data in various online contexts.
- Investigate any anomalies in your devices that might indicate a privacy breach.

## Description

As the world rapidly transitions to digital platforms, the Advanced Personal Data Security and Privacy Micro Credential program empowers learners with a holistic understanding of personal data security in the online sphere. Through an in-depth exploration of encrypted communication, personal data protection practices, and privacy breach detection, the program imparts necessary skills and knowledge to ensure secure digital interactions.

To begin with, encrypted communication forms the cornerstone of safe online communication, serving as the first learning outcome. Encryption is a powerful security tool that masks information to prevent unauthorized access. Encrypted communication leverages this technology to protect information as it travels from sender to receiver, ensuring that the content remains confidential and maintains its integrity.

The program sheds light on the concept of end-to-end encryption, a particular form of encryption where only the communicating users can read the messages. In principle, it prevents potential eavesdroppers – including telecom providers, Internet providers, and even the service provider itself – from being able to access the cryptographic keys needed to decrypt the conversation. This advanced security measure is employed by many modern communication applications to protect users' privacy.

An in-depth analysis is provided for various encrypted communication applications such as Signal, WhatsApp, and Telegram, each differing in their level of security, privacy policies, and encryption protocols. The program, however, does not promote one application over the other. Instead, it stresses the significance of informed decision-making based on the evaluation of privacy needs, understanding of privacy policies, and comprehension of encryption standards of each application.

Moving beyond just communication, the second learning outcome equips learners with a comprehensive understanding of best practices for safeguarding personal data across diverse online contexts. The program emphasizes that each online platform or service requires a unique approach to data protection due to its distinctive functionality, privacy policies, and security measures.

With the ubiquity of online transactions, e-commerce platforms have become a hotspot for cybercriminals. Hence, the program highlights the importance of secure payment options, use of authorized platforms, and caution against sharing sensitive financial information.

Social media platforms, given their extensive reach and ability to disseminate information quickly, often inadvertently facilitate the spread of personal data. Therefore, understanding privacy settings, being discerning about accepting connection requests, and practicing caution with the kind of information shared are all part of this module.

Email and other professional communication tools, often used for sharing sensitive professional data, also require stringent security practices. The program guides learners through the processes of setting strong passwords, identifying phishing emails, and sharing data responsibly in these contexts.

The third learning outcome of the program deals with the detection of potential privacy breaches. Anomalies in devices, such as unexpected system crashes, slow performance, excessive pop-up ads, unrecognized applications, or unusual battery drainage, could indicate a privacy breach.

In this regard, the program instills an understanding of various cybersecurity tools and methods, such as antivirus software, firewalls, and intrusion detection systems, that can identify and manage these threats. The program further educates learners on how to regularly audit their devices and online accounts for unexpected changes, and how to take corrective actions in case of a breach, such as changing passwords, disconnecting from the internet, or contacting cybersecurity professionals.

In essence, the Advanced Personal Data Security and Privacy Micro Credential program cultivates a comprehensive understanding of online security and data privacy. By the end of the program, learners will possess the skills to securely communicate online, safeguard personal data across various platforms, and identify and respond to potential privacy breaches effectively.

This program stands as a testament to the need for a broader culture of digital security and privacy awareness in our increasingly interconnected society. The skills and knowledge gained here aren't limited to personal benefit alone. They also contribute to creating safer digital spaces for everyone, helping communities thrive in the digital age. In a world where the line between the digital and physical continually blurs, ensuring digital safety is no longer a luxury but a necessity. This Micro Credential program signifies an important step towards that, fostering the ability to confidently navigate the digital world, protecting both oneself and others from potential cyber threats.

## Questions

1. What is the purpose of encrypted communication in the context of online security?
2. Explain the concept of end-to-end encryption and its significance in preserving privacy.
3. Compare and contrast the encryption protocols of Signal, WhatsApp, and Telegram.
4. Why is it crucial to understand and evaluate the privacy policies of various communication applications?
5. What are the best practices for protecting personal data on e-commerce platforms?
6. Discuss the key considerations for protecting personal data on social media platforms.
7. What are some measures that can be taken to enhance the security of professional communication tools like email?
8. Identify and explain three anomalies in devices that might indicate a privacy breach.
9. How can cybersecurity tools such as antivirus software and firewalls help in identifying potential privacy breaches?
10. Discuss the steps involved in conducting an audit of devices and online accounts for privacy breaches.
11. What actions should be taken in the event of a detected privacy breach?
12. How does the knowledge and practices of personal data security contribute to the overall digital security culture?
13. How does ensuring personal digital safety contribute to the broader digital community and its wellbeing?

## Digital Privacy Management & Secure Online Interaction (MC 4.2.B.8)

### Basic Information

Identification of the learner	Any Citizen
Title and code of the micro-credential	Digital Privacy Management & Secure Online Interaction Code: MC 4.2.B.8
Country(ies)/Region(s) of the issuer	IRELAND, ITALY, CYPRUS, GREECE, ROMANIA <a href="http://dsw.projectsgallery.eu">http://dsw.projectsgallery.eu</a>
Awarding body(ies)	DSW Consortium Project Number: 101087628
Date of issuing	Nov 2023
Notional workload needed to achieve the learning outcomes	Minimum 3 – Maximum 8 hrs
Level of the learning experience leading to the micro-credential	INTERMEDIATE
Type of assessment	Automatically marked Questions Number of Questions: 16 – 20 Passing Score: 75%
Form of participation in the learning activity	Online Asynchronous
Type of quality assurance used to underpin the micro-credential	Peer Review

## Learning Outcomes

Learning Outcomes (ref. LOs 4.2.39, 4.2.40):

- Distinguish among all the types of “cookies” and how they can be used by websites for storing user data.
- Prioritize your online accounts based on the sensitivity of the information they hold.

## Description

The Digital Privacy Management & Secure Online Interaction Micro Credential Program offers a comprehensive understanding of two primary areas of digital safety and data security: discerning different types of "cookies" and their utilization in data storage on websites, and the categorization of online accounts based on the sensitivity of the information they contain.

The program embarks on an exploration of the nuanced world of "cookies" – small files that websites send to and store on users' devices to remember specific details about the visit. Cookies have become integral components of the web browsing experience, influencing how users interact with sites, the information that websites remember, and the types of ads users see. However, not all cookies are created equal, and understanding the different varieties is crucial for managing online privacy and data security.

Cookies are small pieces of data stored on a user's computer by the web browser while browsing a website. They play an essential role in enhancing the user experience by remembering information about the user's visit, such as login information, language preferences, and other settings. But while cookies offer convenience, they can also present privacy concerns because they can track browsing activity and collect data about users' online behavior.

Different types of cookies have different purposes, and understanding these can help individuals better manage their online privacy:

1. **Session cookies:** These are temporary cookies that are deleted when a user closes their web browser. They are used to remember the user's actions within a browsing session, such as items added to a shopping cart on an e-commerce site. These cookies typically don't raise major privacy concerns because they don't track the user's activity across multiple sessions or sites.
2. **Persistent cookies:** Unlike session cookies, persistent cookies remain on a user's computer even after they close their browser. They are used to remember a user's preferences and actions across multiple browsing sessions, such as site layout preferences or login information. Because they track activity over time, they can raise privacy concerns, particularly if they collect sensitive information.
3. **Secure cookies:** These are transmitted over encrypted connections (HTTPS), making them safer than regular cookies. They prevent the data they transmit from being intercepted by unauthorized parties.
4. **HTTP-only cookies:** These cookies can't be accessed by client-side scripts, such as JavaScript. This makes them more secure against certain types of attacks, like cross-site scripting (XSS) attacks, which use malicious scripts to steal cookies and the information they hold.
5. **Third-party cookies:** These are created by domains other than the one the user is currently visiting. They are often used for online advertising and can track a user's activity across many sites, raising significant privacy concerns.

By understanding these different types of cookies, individuals can make more informed decisions about their online privacy. For example, they might choose to block third-party cookies to prevent cross-site tracking, or they might regularly clear their cookies to remove persistent cookies and limit the amount of data that can be collected about their browsing history.

Additionally, understanding cookies can help individuals interpret website privacy policies, which often disclose the types of cookies a site uses and what they are used for. This knowledge allows users to make more informed choices about whether to use a site and how to set their privacy settings.

Finally, understanding the implications of cookies can encourage healthier online habits. For example, recognizing that cookies can track online activity might motivate individuals to use privacy-enhancing tools like ad blockers or virtual private networks (VPNs), or to use privacy-focused browsers or search engines that do not track user activity.

Cookies play a critical role in the modern internet, but they also raise privacy concerns. By understanding the diverse types of cookies and how websites utilize them, individuals can take proactive steps to manage their online privacy, such as adjusting their browser settings, regularly clearing cookies, using privacy-enhancing tools, and making more informed decisions about which websites to use. This can lead to a safer, more privacy-conscious online experience.

The second major learning outcome in this program relates to the prioritization of online accounts based on the sensitivity of the information they hold. In today's digital age, most individuals have numerous online accounts, ranging from social media platforms to online banking and shopping, each of which stores varying amounts of personal information.

Prioritizing online accounts based on the sensitivity of the information they hold is a critical step towards maintaining privacy and security in the digital sphere. Most individuals today operate numerous online accounts across a range of services.

These can include social media profiles, email accounts, online banking, e-commerce platforms, subscription services, health records, and more. Each of these accounts retains varying amounts of personal information and, thus, presents differing levels of risk if compromised.

The process of prioritization involves assessing the potential impact or damage that could occur if an unauthorized person were to gain access to each specific account.

Here are some elements to consider when prioritizing accounts:

1. **Financial information:** Online banking, credit card accounts, or any services that have your financial details (like PayPal or shopping sites) should be at the top of your priority list. A breach in these accounts can result in financial loss and identity theft.
2. **Email accounts:** Your primary email account, especially if it is used as a recovery email for other services, is also a high-priority account. Unauthorized access to your email can lead to a domino effect of breaches as it can be used to reset passwords and gain access to other accounts.
3. **Health records:** Any account containing sensitive health information is crucial, as a breach here could lead to serious privacy violations and potential misuse of personal health information.



4. Professional accounts: These include work emails, accounts related to your profession, or any platform that contains your professional data. Compromise of these accounts could lead to loss of intellectual property and damage to professional reputation.
5. Social Media Accounts: Even though they might not seem as critical as financial or professional accounts, social media accounts hold a lot of personal information that can be exploited for identity theft or used to target you and your contacts in phishing attacks.

After identifying and prioritizing accounts, one should use different strategies to enhance the security of these accounts:

- Use strong, unique passwords for each account. Consider using a password manager to keep track of them.
- Enable Two-Factor authentication (2FA) or Multi-Factor authentication (MFA) whenever possible.
- Regularly monitor and update security settings.
- Be mindful about sharing information, especially sensitive data, online.

Understanding the sensitivity of information held by different accounts and taking appropriate measures based on the level of risk involved is an essential practice to keep personal information safe and secure in the digital age. By prioritizing online accounts based on the sensitivity of the data they hold, individuals can allocate their security efforts efficiently, focusing on protecting the accounts that could cause the most harm if compromised.

Overall, this Micro Credential program equips individuals with critical knowledge about cookies' functionalities and the need for prioritizing online accounts based on the sensitivity of data, enabling them to navigate the digital world with increased awareness and proficiency. With these skills, individuals can better safeguard their personal information, contribute to a broader culture of data privacy, and foster a more secure digital society.

## Questions

1. Define cookies in the context of internet browsing and explain their primary function.
2. Distinguish between session cookies and persistent cookies. How do their functionalities differ?
3. What is the significance of secure cookies? Why are they considered safer than regular cookies?
4. Describe HTTP-only cookies and discuss how they provide additional security.
5. What are third-party cookies, and why might they be considered a privacy concern?
6. How does understanding different types of cookies help in managing online privacy?
7. How can knowledge about cookies assist an individual in interpreting a website's privacy policy?
8. Describe some strategies for managing cookies to enhance online privacy.
9. Explain the importance of prioritizing online accounts based on the sensitivity of the information they contain.
10. What factors should be considered when prioritizing online accounts for enhanced privacy and security?
11. Discuss the risks associated with the compromise of high-priority online accounts, such as those holding financial information or health records.
12. What can be the potential consequences of a breach in professional accounts?
13. Why is it important to consider social media accounts while prioritizing online accounts, even if they do not contain obvious sensitive data?
14. Describe the steps one can take to enhance the security of high-priority online accounts.
15. How does the practice of prioritizing online accounts based on data sensitivity contribute to overall personal information safety and data privacy?

