

# Web Design & Development

Use code that is clear, well-formatted, and appropriately documented. [CIS.HS.18.1](#)

- a** Identify alternative codes and discuss advantages and disadvantages that led to their decision. [CIS.HS.18.1.A](#)
- b** Review code to identify and fix errors. [CIS.HS.18.1.B](#)
- c** Determine if existing code opens a website up to vulnerabilities. [CIS.HS.18.1.C](#)

Assess content for accessibility issues and discuss the issue and possible solutions. [CIS.HS.18.2](#)

- a** Analyze content flow and present alternative content with screen readers and other adaptive technologies [CIS.HS.18.2.A](#)
- b** Consider mobile application functionality when network access is not available. [CIS.HS.18.2.B](#)

Create a single functional web page based on a design mockup and user requirements. [CIS.HS.18.3](#)

- a** Explain client and target audience needs. [CIS.HS.18.3.A](#)
- b** Assess the needs of clients based on current trends. [CIS.HS.18.3.B](#)
- c** Demonstrate use of collaborative development tools. [CIS.HS.18.3.C](#)

Create a web program that will utilize multiple languages and servers and will run on multiple platforms. [CIS.HS.18.4](#)

- a** Create a functional website with both front-end and back-end file management. [CIS.HS.18.4.A](#)
- b** Employ a variety of web technologies to produce a final product that meets industry web development standards. [CIS.HS.18.4.B](#)

Identify common tools used for workflows associated with content generation. [CIS.HS.18.5](#)

- a** Identify one or more tools (i.e., proprietary, open source, or otherwise) that are capable of creating the required content (i.e., image, video, text). [CIS.HS.18.5.A](#)
- b** Compare various tools designed for the same workflow. [CIS.HS.18.5.B](#)

Create web pages/apps without the aid of a prefabricated template. [CIS.HS.18.6](#)

- a** Illustrate industry standard development practices by coding web pages/apps. [CIS.HS.18.6.A](#)

Identify information that may be private or subject to ethical consideration. [CIS.HS.18.7](#)

- a** Identify issues with collected information such as usernames, passwords, location data, and preferences, and discuss the possible ramifications of misuse. [CIS.HS.18.7.A](#)

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**b Identify the benefits of a minimal set of permissions when authoring a mobile app and possible consequences of over requesting permissions. CIS.HS.18.7.B**

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**Describe opportunities in an information technology career field including but not limited to entrepreneurial opportunities, responsibilities, education, and certification. CIS.HS.18.8**

**a Identify information technologies used in various industries. CIS.HS.18.8.A**

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**b Discuss the impact of technology on all career fields. CIS.HS.18.8.B**

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**c Identify common tasks in career fields. CIS.HS.18.8.C**

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**d Discuss career opportunities in information technology career fields. CIS.HS.18.8.D**

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**e Describe the impact of technological change and the importance of lifelong learning in this career field. CIS.HS.18.8.E**