

Interactive Design (11.01300) (2018) - Grades 6, 7, 8

Adopted 2018

Demonstrate employability skills required by business and industry and explore, research, and present careers in information technology. MS-CS-FID-1

- 1. Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.** MS-CS-FID-1.1
- 2. Demonstrate an understanding of collaborative interactions in the digital world.** MS-CS-FID-1.2
- 3. Model work-readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.** MS-CS-FID-1.3
- 4. Exhibit critical thinking and problem-solving skills to locate, analyze, and apply information in career planning and employment situations.** MS-CS-FID-1.4
- 5. Present a professional image through appearance, behavior and language.** MS-CS-FID-1.5
- 6. Investigate educational requirements, job responsibilities, employment trends, and opportunities within information technology career pathways using credible sources.** MS-CS-FID-1.6

Develop a plan to create, design, and build a website with digital content to a specific target market. MS-CS-FID-2

- 1. Identify the objectives (e.g., increase sales, promote new products, increase company awareness, target new customers) for the website's target market.** MS-CS-FID-2.1
- 2. Specify website requirements, including timeline and resources, and organize them into a requirements document.** MS-CS-FID-2.2
- 3. Find and evaluate similar websites (in terms of overall function and layout) using an evaluation instrument for side-by-side comparison. Consider major design elements (ease of use, responsiveness, adaptability to mobile, tablet and desktop, etc.).** MS-CS-FID-2.3
- 4. Evaluate a variety of web design tools and development platforms using an evaluation instrument and choose the appropriate platform.** MS-CS-FID-2.4
- 5. Create a plan on paper or in a word processing document that outlines the content of the website.** MS-CS-FID-2.5

Design digital products that reveal a professional layout and look by applying design principles to produce professional quality digital products. MS-CS-FID-3

- 1. Identify graphical elements and the appropriate use of elements on a web site.** MS-CS-FID-3.1
- 2. Explore and apply color principles to digital products.** MS-CS-FID-3.2
- 3. Establish a brand through consistent use of graphics, color, layout and text.** MS-CS-FID-3.3
- 4. Analyze the look and layout of a website based on the first impression of content and page elements. Get feedback from independent users and incorporate where appropriate.** MS-CS-FID-3.4

Create a single functional web page using a web development platform based on a design mockup and user requirements. MS-CS-FID-4

- 1. Create and edit images and graphics for website publication.** MS-CS-FID-4.1
- 2. Plan, produce, and edit digital audio for website publication.** MS-CS-FID-4.2
- 3. Plan, produce, edit, and post a multimedia-rich video project to a website.** MS-CS-FID-4.3
- 4. Plan, produce, and edit animations for website publication.** MS-CS-FID-4.4

Develop and use a test plan to debug each new website version to ensure it runs as intended and meets the end-user requirements for a responsive site. MS-CS-FID-5

- 1. Create a test and debug plan. Resolve issues and fix any errors that surface during the test and debug process.** MS-CS-FID-5.1
- 2. Create an end user testing plan, get user feedback, and incorporate feedback into the final website.** MS-CS-FID-5.2
- 3. Prepare website for publishing and promotion.** MS-CS-FID-5.3

Develop a plan to create, design, and build a game with digital content for a specific target market. MS-CS-FID-6

- 1. Explore various game types, including role-playing games (RPG), real-time strategy (RTS), simulations, puzzles, educational, massively multiplayer online (MMO), and others.** MS-CS-FID-6.1
- 2. Create a Game Design Document (GDD), which includes, characters, story, theme, and gameplay mechanics.** MS-CS-FID-6.2

Develop a visual model of a game using the Game Design Document (GDD). MS-CS-FID-7

- 1. Create storyboards from the GDD that demonstrate game progression and consistent use of a theme.** MS-CS-FID-7.1
- 2. Use the GDD to design the wireframes and comprehensive layout for the user experience (UX).** MS-CS-FID-7.2

Create a functional game, using a game development platform, based on the storyboards,

- 1. Create game elements, backgrounds, and characters.** MS-CS-FID-8.1
- 2. Use scripting languages to create desired game mechanics, and to control the environment, user interface (UI), and character behaviors.** MS-CS-FID-8.2

wireframes, and comprehensive layout. MS-CS-FID-8

3. Plan, produce, and edit graphics and animations for game publication. MS-CS-FID-8.3

4. Plan, produce, and edit digital audio for game publication. MS-CS-FID-8.4

Develop a test plan to debug and use each time a version of the game is released to ensure it runs as intended and meets the end-user requirements. MS-CS-FID-9

1. Create a test and debug plan. Resolve any issues and fix any errors that surface during the test and debug process. MS-CS-FID-9.1

2. Create an end user testing plan, get user feedback, and incorporate feedback into the final game. MS-CS-FID-9.2

3. Prepare final game for publishing prior to publishing to the target audience. MS-CS-FID-9.3