## PROJECT: BUILDING DESKTOP AND MOBILE VERSIONS OF A WEBSITE

## **Project Introduction:**

In this project, you will create a website for desktop and mobile devices. The subject of your website can be one of your hobbies and interest. Part 1 of the project needs to be submitted in Module 3 and Part 2 in Module 6.

## **Course Learning Objectives Covered:**

- Describe various components of the Open Web Platform.
- Create a website using HTML5.
- Create a website that is optimized for viewing on a mobile device.
- Apply style to a website using CSS.
- Describe the use of scripting when creating a website.
- Create a dynamic website using JavaScript.
- Create a website that uses the jQuery framework.
- Create a mobile website that uses the jQuery Mobile framework.

## PROJECT SUBMISSION PLAN

Project Part	Description/Requirements of Project Part	Evaluation Criteria
Project Part	Assessment Preparation Checklist:	The <u>Project rubric</u> will
1	To prepare for this assessment:	be used to evaluate this
	Read Chapters 1–11 from your textbook, <i>Creating Websites</i>	assessment.
	Using HTML5, CSS3, and Javascript.	
	Review the lesson for Module 3 that provides some tips to	
	test the website.	
	Title: Creating a Hobbies Website	
	In this part of the project, you will create a home page and a	
	registration page for a website about one of your hobbies.	
	Perform the following tasks:	
	1. Choose the focus of your website and build a home page	

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	using HTML5 semantic elements. At minimum, the home	
	page should include:	
	<ul> <li>Three <section> blocks</section></li> </ul>	
	An article	
	A picture with a caption	
	<ul> <li>A navigation section with links to sites about your</li> </ul>	
	hobby	
	Headers to identify each section	
	2. Use the CSS styles to apply color and borders to your page.	
	3. The home page should include the following features:	
	A centered background image	
	Hint: use the properties of background-repeat and	
	background-position	
	<ul> <li>An image icon set as the list-item marker</li> </ul>	
	Hint: use a property of list-style-image	
	Standardized color to link/visited/unvisited/hover links	
	Hint: use the properties of the <a> tag to set link,</a>	
	visited, hover, and active	
	<ul> <li>A paragraph of text with a total width of 300px</li> </ul>	
	Hint: use the property of the <div> tag to set the width,</div>	
	padding, border, and margin	
	4. Create an external style sheet that formats the home page	
	as a hybrid layout that has the following elements:	
	A header	
	A footer	
	A left column that has a fixed layout	
	A right column that has a fixed layout	
	A center column that has a liquid layout	
	5. Create a registration form to collect member information.	

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	The registration should include at least the following	
	required form fields:	
	The required form fields:	
	<ul> <li>Username</li> </ul>	
	o Password	
	<ul> <li>Email address</li> </ul>	
	<ul> <li>An option to display the contact information to</li> </ul>	
	the public	
	<ul> <li>An option to receive updates from the website</li> </ul>	
	<ul> <li>A <textarea> to describe the new member&lt;/li&gt; &lt;/ul&gt;&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;&lt;ul&gt;     &lt;li&gt;Display the current date in the format of "October 24,&lt;/li&gt; &lt;/ul&gt;&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;2014."&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;&lt;ul&gt;     &lt;li&gt;Create another button. When the user clicks on it, a&lt;/li&gt; &lt;/ul&gt;&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;pop-up window will display more contact information&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;for new members.&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;6. Add validation logic to the registration page of the website.&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;The registration page should be implemented as a form&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;and should provide appropriate data validation. At&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;minimum, the following data should be collected and&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;validated:&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;&lt;ul&gt;     &lt;li&gt;An email address (required and must contain an @)&lt;/li&gt; &lt;/ul&gt;&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;&lt;ul&gt;     &lt;li&gt;A password (must be at least 8 characters long and&lt;/li&gt; &lt;/ul&gt;&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;contain at least one alphabetic character and at least&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;one numeric character)&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;A first name (required)&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;A last name (required)&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;&lt;ul&gt;     &lt;li&gt;An age (Required and must be a numeric value&lt;/li&gt; &lt;/ul&gt;&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;between 14 and 110)&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;Note: If validation is successful, the registration&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</textarea></li></ul>	

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	information should be written to the page.	
	Submission Requirements:	
	Follow the given steps to submit the assessment:	
	1. Save the one-page Microsoft Word document containing	
	all the required screenshots, an html file for the home	
	page, an html file for the registration page, and a .css file	
	for the external style sheet in a folder.	
	2. Compress the folder using the default compression utility.	
	3. To compress the folder, right-click the folder, point to Send	
	to, and click Compressed (zipped) folder.	
	4. Submit the compressed folder to your instructor.	
	Due: Module 3	
	<b>Grading Weight:</b> 12.5%	
Project Part	Assessment Preparation Checklist:	The <u>Project rubric</u> will
2	To prepare for this assessment:	be used to evaluate this
	<ul> <li>Read Chapters 12–17 and 20–21 from your textbook,</li> </ul>	assessment.
	Creating Websites Using HTML5, CSS3, and Javascript.	
	<ul> <li>Review the lesson for Module 6 that provides some tips to</li> </ul>	
	test the desktop and mobile websites.	
	Title: Creating Desktop and Mobile Versions of the Website	
	In this part of the project, you will complete the registration form.	
	You will also create a mobile version of the website. Complete the	
	following tasks:	
	1. The registration page should be implemented as a form	
	and should provide the following features and interactions	
	by JavaScript:	
	Create a button that can change the color or image of	
	the background.	

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		A reset button: When this button is clicked, all form	
		data will be cleared.	
		When all form data is clear, set the focus back to the	
		first form field.	
		An alert box appears when the user clicks on any	
		required form field. The alert box will give an example	
		of the required data and its format.	
		Create a help icon (something like a question mark	
		icon). When the user rests the mouse on it, some help	
		reference (for instance an example of the required data	
		and its format) will display.	
		When the user moves the mouse off the icon, the help	
		information will be hidden.	
	2.	Test out the website by at least two mobile devices (use	
		the Opera Mobile Emulator) and take screenshots for	
		submission.	
	3.	Enhance the home page and the registration page by	
		creating and linking CSS style sheets that format the pages	
		for screen sizes less than 320 pixels wide and screen sizes	
		between 320 and 480 pixels wide.	
	4.	Add script to ensure that HTML5 styles are applied when	
		the page is viewed in IE 8.	
		Create two CSS style sheets for the home page: one for	
		< 320 pixels wide and one for between 320 and 480	
		pixels wide.	
		Create two CSS style sheets for the registration page:	
		one for < 320 pixels wide and one for between 320 and	
		480 pixels wide.	
		Add JavaScript code to add the HTML5 elements you	

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	use to the DOM for both the pages.	
	<ul> <li>Add the necessary media queries and meta tags to the</li> </ul>	
	home page and the registration page.	
	5. Enhance the website with the following features:	
	• Create a multicolor title text with a <canvas> tag on</canvas>	
	the home page to describe the website.	
	<ul> <li>Use the datetime—either the local type or month type</li> </ul>	
	input for any date-related form field on the registration	
	page.	
	<ul> <li>Use the required attribute to validate any required</li> </ul>	
	field on the registration page.	
	<ul> <li>Test out the website using at least two mobile devices</li> </ul>	
	(use the emulator of Google Chrome) and take	
	screenshots for submission.	
	6. Add the following jQuery and jQuery mobile enhancements	
	to the website:	
	• Import the jQuery JavaScript file jquery-1.10.1.min.js	
	and add at least two jQuery effects to the website.	
	<ul> <li>Test out the jQuery effects by two different web</li> </ul>	
	browsers and take screenshots for submission.	
	<ul> <li>Then import the jQuery Mobile JavaScript file</li> </ul>	
	jquery.mobile-1.3.1.min.js and the jQuery Mobile CSS	
	file jquery.mobile-1.3.1.min.css to the website. Add at	
	least two jQuery Mobile buttons to the website.	
	Test out the website by two different mobile devices	
	(use the Opera Mobile emulator) and take screenshots	
	for submission.	
	7. Test your final website in desktop and mobile browsers.	

Project Part	Description/Requirements of Project Part	Evaluation Criteria
	Submission Requirements:	
	Follow the given steps to submit the assessment:	
	Save the Microsoft Word document containing all the	
	required screen shots, an html file for the home page, an	
	html file for the registration page, a .css file for the desktop	
	style sheet, a .css file for the mobile style sheet, and the	
	jQuery libraries for desktop and mobile in a folder.	
	Compress the folder using the default compression utility.	
	3. To compress the folder, right-click the folder, point to Send	
	to, and click Compressed (zipped) folder.	
	4. Submit the compressed folder to your instructor.	
	Due: Module 6	
	Grading Weight: 12.5%	