

KEY IN-CLASS STUDENT ACTIVITY 1.3: DEBUG AND TEST AN HTML5-BASED TOUCH-ENABLED APPLICATION

Lesson Objective 1.3:

Debug and test an HTML5-based touch-enabled application.

Resources, software, and additional files needed for this lesson:

1. None.

Guiding questions:

1. **Why is it important to debug and test your application?** The introduction of so many new devices that can be used to access web applications makes it more important than ever to test and debug your application thoroughly. It is also important to understand how users interact with these devices via the keyboard and mouse, pen, or even a finger touch.
2. **What are the features of an HTML5-based touch-enabled application?** The W3C is working on the HTML5 touch events specifications, which include: touchstart: a finger is placed on a DOM element; touchmove: a finger is dragged along a DOM element; and touchend: a finger is removed from a DOM element. These elements provide the user with touch-sensitive features when viewing a web page, such as drawing on a canvas (another new HTML5 tag).
3. **How is an HTML5 touch-enabled application tested?** On the PC, the developer can simulate single touches using the mouse. There are also several emulators available such as Microsoft's Internet Explorer® Test Drive (see references for URL). The W3C has several validators for testing the code, such as the mobile validator: <http://validator.w3.org/mobile/>. Of course, the best way is to actually test it on as many devices as possible.

Student activity:

Directions to the student:

Read the following scenario and answer the questions. Verify your answers with the instructor.

Scenario:

Lucio Iallo recently started his own web design business. He is aware that many small businesses need a presence on the web. In addition, he knows that these web sites must be scalable to participate in the exponential growth of the mobile web.

Lucio's friend, who works at the Alpine Ski Resort, mentioned that the resort is looking for someone to create a website for the business. Lucio has arranged a meeting with the resort owner to discuss what the resort needs for its web presence. To make a good impression, and hopefully be hired for the job, Lucio is making a list of questions to review with his potential client.

Content:

1. What questions should Lucio ask to gather the information he needs to for the basic design of the site?

Answers will vary, but questions should include:

What is the main functionality needed when viewing the site on a workstation such as a smartphone compared to a mobile device?

How often will the site need to be updated?

2. What questions should Lucio ask about the layout of the mobile version?

What graphics will be included?

How should the site navigation differ from the PC version?

3. What should Lucio included in his plans for testing the application?

Test various page sizes on various browsers.

Watch for mobile devices that do not support style sheets or scripts.

If forms are required, carefully consider whether the layout allows users enough room to enter the data from a small device.