

KEY IN-CLASS STUDENT ACTIVITY 1.1: UNDERSTAND THE PLATFORM FUNDAMENTALS

Lesson Objective 1.1:

Understand the platform fundamentals. *Topics include:* leveraging existing HTML5 skills and content for slate/tablet applications.

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

1. Internet access

Guiding questions:

1. **How does a web designer accommodate the various devices that might be used to view a website?** Since the introduction of smaller devices used to access the Internet (such as slates, tablets, smartphones, and more) web developers have had to consider how various platforms handle the new HTML5 features.
2. **What must be considered when selecting a host for your website or application?** The process of hosting a website or web application involves identifying a company that offers the necessary services to place your application on their server (typically for a charge) and make it available to the public. When choosing a host, you should consider security, reliability, scalability, and technical support. For example, IIS provides web services and the necessary platform required to run most websites and applications.
3. **How can HTML5 enhance the user experience on a slate or tablet hardware platform?** A major feature of HTML5 is the elimination of the dependency on browser plug-ins, which allows the user to view content without relying on other software such as Flash or Microsoft® Silverlight®.

Student activity:

Directions to the student:

Read the following scenario and answer the questions. Complete the hands-on activities. Request assistance from the instructor as needed. Verify your answers with the instructor.

Complete the table to identify the HTML5 changes and determine which elements are supported by each version of the browser.

Scenario:

Cassie Hicks is just starting a teaching position at a local high school and has been assigned to teach a web design course in addition to computer science courses.

To prepare for the course, Cassie needs to make sure she knows the latest trends and tools used in the industry. She quickly learns that the biggest change is the move from HTML4 to HTML5. Cassie decides to create a table with a list of some of the major changes and the current support by browser version. She can then use this table to help her students understand how these types of changes are implemented incrementally by browser manufacturers and why they must always test in various browsers for compatibility.

Content:

1. Where should Cassie start looking for information on HTML5?

There are several places in the Internet for Cassie to start her search, including (let the students use Bing® to search for their own resources, but if they need assistance provide them with this table):

MSDN Resources	
MSDN® Magazine, August 2011 issue	http://msdn.microsoft.com/en-us/magazine/hh335062.aspx
MSDN Developer samples	http://code.msdn.microsoft.com/site/search?f%5B0%5D.Type=Technology&f%5B0%5D.Value=HTML5
Learn HTML5 in 5 Minutes!	http://msdn.microsoft.com/en-us/hh549253
New! HTML 5 and CSS: Six Complete Lessons	http://blogs.msdn.com/b/mis_laboratory/archive/2011/10/18/new-html-5-and-css-six-complete-lessons.aspx
Other Resources	
W3 Schools	http://www.w3schools.com/html5/default.asp

2. Why is it important to understand the support of HTML5 on various platforms?

Answers will vary, but look for keywords such as video and audio independent of plug-ins, necessity to provide code for browsers that currently don't support HTML5 fully, understanding of the difference between a screen with a touch sensor or monitor that uses keyboard and mouse, etc.

3. Complete the following table by indicating whether or not Internet Explorer 9 supports the new tag.

New HTML5 tag	Internet Explorer® 9 Support?
<!DOCTYPE html>	Yes
<audio>	Yes
<video>	Yes
<canvas>	Yes
<time>	No
<nav>	Yes
<details>	No
<link>	Yes

Add more tags as appropriate for student skill level.