

KEY IN-CLASS STUDENT ACTIVITY 4.3: CODE ANIMATIONS BY USING JAVASCRIPT

Lesson Objective 4.3:

Code animation by using JavaScript.

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

1. Microsoft® Expression® Web 4 (preferred) or Notepad++. Notepad++ provides real-time feedback for writing JavaScript. Download: <http://www.notepadplusplus.org/>.

Guiding questions:

1. **How can JavaScript be used to create animations?** Animations are considered an illusion of movement by creating the appearance of motion on the page. JavaScript can be used to change the location of an element, or switch one image for another (by changing the value of the src attribute).
2. **What are the benefits of using an animation library?** Libraries such as jQuery, Windows Library for JavaScript, Yahoo User Interface Library (YUI), and MooTools are available for developers to use and also to contribute their JavaScript code to. By using libraries, we increase reusability and decrease the time it takes to build web pages.

Student activity:

Directions to the student:

Read the following scenario. Use the new CSS Region and multi-column styles to create a fluid web page. Share your project with the class.

Scenario:

One of the differences between the students in elementary school today compared to students two decades ago is the influence of the digital age. Today's students are considered digital natives; they have grown up using digital devices such as MP3 players, SmartPhones, touch screen devices, and more.

Diane Forsyth's friend, who teaches students ages five to seven years old, wants ideas about how to make her website more interactive to grab the attention of her students. Diane recommends adding more animations to the site. She suggests using the jQuery animation library to add effects such as pop-ups, tooltips, and slideUp and slideDown features.

Content:

1. Create an HTML page.
2. Add the code to import the jQuery library in the <head> section. (You must first download the library file from jQuery.com or get a copy from your instructor.)
3. Complete these tasks:
 - a. Add animations to create a pop-up message.
 - b. Use a tooltip to provide a description of an image when a mouse-over event occurs.
 - c. Use a slideUp to provide the answer to an on-screen question.
4. View the web page in a browser and check each of the animations.

Student projects will vary.