

IN-CLASS STUDENT ACTIVITY 4.6: CODE ADDITIONAL HTML5 APIs.

Lesson Objective 4.6:

Code additional HTML5 APIs.

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

1. Microsoft® Expression® Web 4 (preferred) or Notepad (Notepad++ is preferred; it provides real-time feedback for JavaScript).

Guiding questions:

1. List uses for an API that determines your current location.
2. What is the purpose of a web worker?
3. What is a WebSocket?

Student activity:

Directions to the student:

Read the following scenario. Create a one-page website to demonstrate the use of the Geolocation API.

Scenario:

Your friend, Wendy Teo, is training to run a 5-kilometer race next month to raise awareness of cystic fibrosis. Each day she runs a loop near her home, but she is not sure of the exact distance of the loop. It is vital to her training routine that she runs a specific distance each day.

To help Wendy figure out how far she is running in her practice sessions, you volunteer to create a web application that calculates the distance travelled. The web page will take advantage of the new HTML5 Geolocation API to calculate the distance travelled.

Content:

1. Create an HTML page.
2. Refer to the tutorial on HTML5 ROCKS for instructions to include a trip meter:
http://www.html5rocks.com/en/tutorials/geolocation/trip_meter/
3. If possible, publish your web page and access it from a mobile device (tablet or smartphone). Move to a different location. Check to see how far you travelled.