CSE4500 – Platform Computing

Project1 - Physics Projectile App 2

(Accompanying Lecture Video: https://www.youtube.com/watch?v=PWlmERloosI)

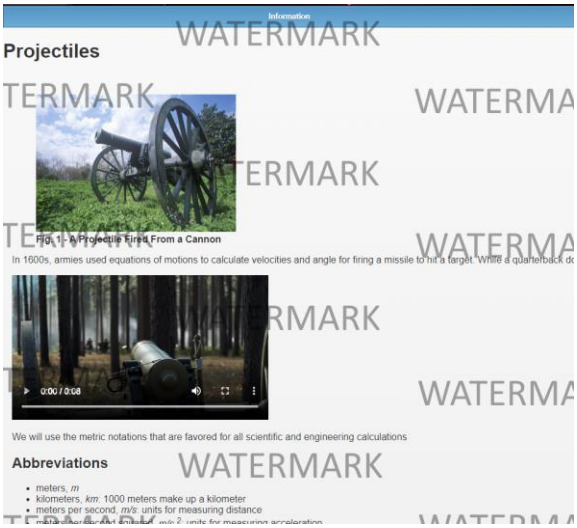
Introduction

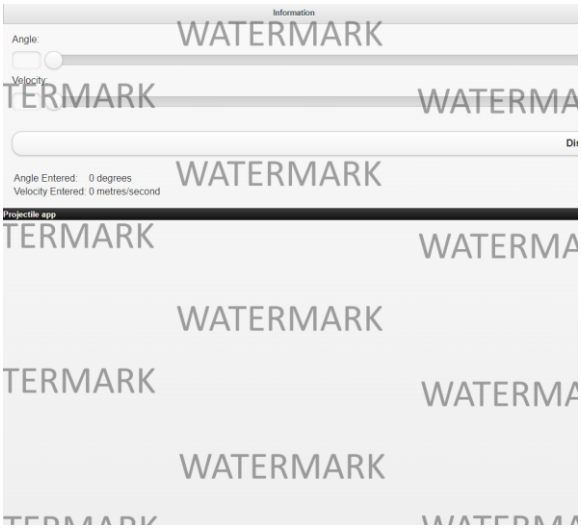
In this project, we will expand our knowledge of web applications by modifying our Physics Projectile App to include jQuery, jQueryMobile, and JavaScript.

jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.

jQueryMobile is a unified, HTML5-based user interface system for all popular mobile device platforms, built on the rock-solid jQuery and jQuery UI foundation. Its lightweight code is built with progressive enhancement, and has a flexible, easily themeable design. jQuery mobile framework takes the 'write less, do more' mantra to the next level: Instead of writing unique apps for each mobile device or OS, the jQuery mobile framework allows you to design a single highly-branded web site or application that will work on all popular smartphone, tablet, and desktop platforms.

JavaScript was originally developed under the name ActionScript by Netscape, which developed the first multimedia web browser. It was one of the first languages associated with web programming.





Instructions

1. Inside your folder *CSE4500Projects*, create a new folder called *Project2*.
2. Open the folder *Project2* using Visual Studio Code.
3. Add this starting code:

```
<!DOCTYPE html>
<html>

<head>
  <title>Physics Simulator App</title>
  <link rel="stylesheet" href="css/jquery.mobile-1.3.1.min.css">
  <script src="scripts/jquery-1.8.3.min.js">
  </script>
  <script src="scripts/chromeFileProtocolFix.js"></script>
  <script src="scripts/jquery.mobile-1.3.1.min.js">
  </script>
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>

<body>

</body>

</html>
```

4. Follow the steps in the accompanying lecture video in order to finish Project2 (https://www.youtube.com/watch?v=PWlmERloosI). You will modify the code to complete the following:
    a. Add the jQueryMobile script.
    b. Add the jQueryMobile Cascading Style Sheet.
    c. Add a header, footer, and content.
    d. Use JQuery to add a button widget.
    e. Use jQuery to add slider widgets.
    f. Add a JavaScript function that accepts and returns input to the user.
    g. Add another webpage to your project.

Lab Report

Use the 'Lab Report Template' found on Blackboard/Canvas. Your lab report must contain the following:

- Report:
  - There are three total ways to add JavaScript to your HTML code. Describe all three with 2 or more sentences each.
  - Explain how you add multiple pages to an HTML web app.
  - Explain how you add a widget (like a button) to an HTML web app.
- Source Code:
  - index.html
  - information.html
  - physicsProjectileApp1.js
- Screenshot:
  - Screenshot of index.html.
  - Screenshot of information.html.