CSCI 165 (FLEX) Lab#10

Usually, a lab is made available on Wednesday, and due by Friday midnight of the same week.

jQuery is tailor-made to respond to events in an HTML page. An event represents the precise moment when something happens. Examples of events include "clicking or moving a mouse over an element". The objective of this lab is to program an action in jQuery when an event happens. In this lab, you will write a jQuery program that convert someone's height (in feet and inches) into inches only or centimeters only.

Requirements:

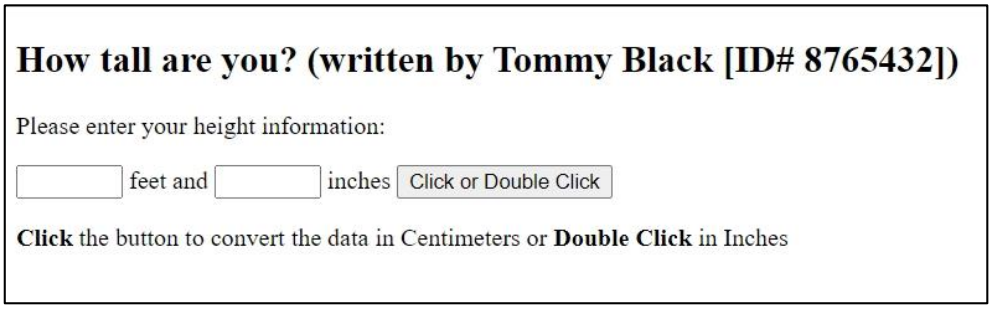
Step 1: Download the work file

Download and open LAB_10.zip. Unzip it and open it with Notepad++. The framework of the program is given and you need to complete the program.

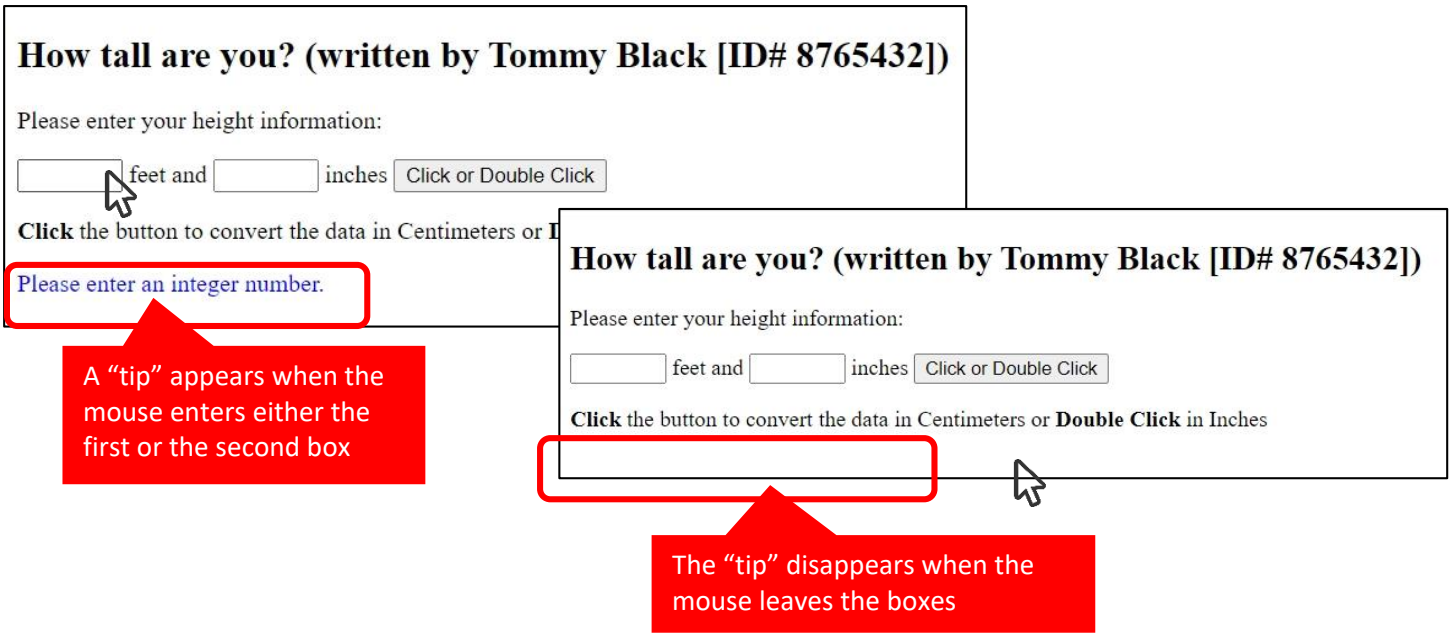
Step 2: Learn the program from output scenarios

Look at the following scenarios to have some ideas of the programming logic of the jQuery function.

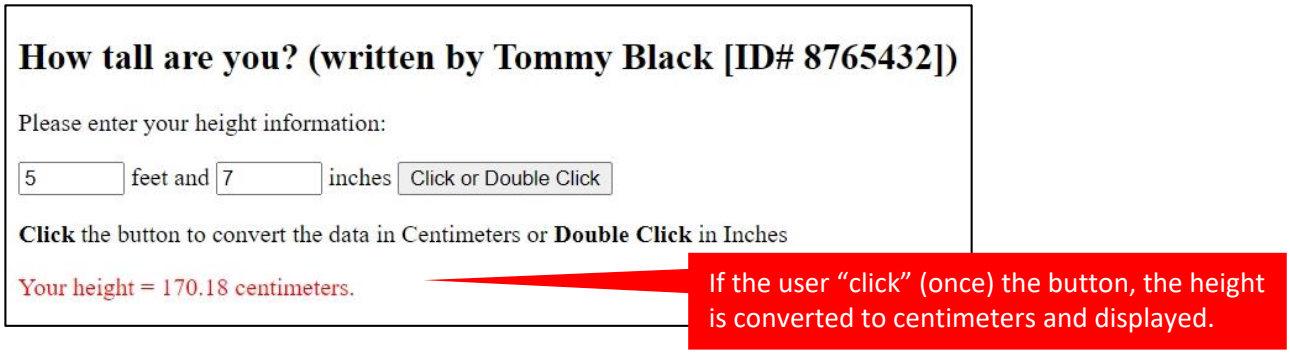
a. When the page is launched, it has the following user interface.



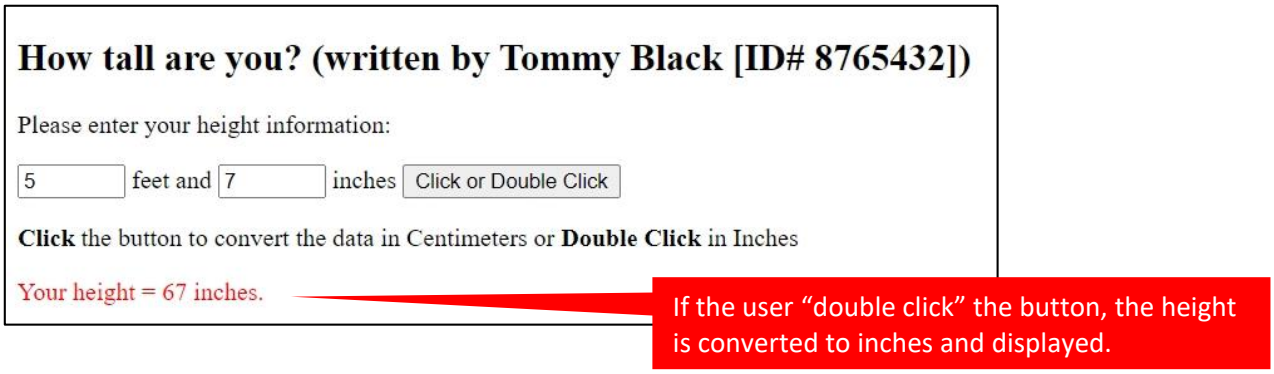
b. When the **mouse enters** any of the two input boxes, a "tip" message saying "Please enter an integer" appears. When the **mouse leaves** the boxes, the "tip" message disappears.



c. After entering two integer numbers (feet and inches) for the height to the text boxes, the user can **click** (once) the button to find out height in centimeters. The result is then displayed.



d. After entering two integer numbers to the text boxes, the user can **Double click** the button to find out the height in inches. The result is then displayed.



Step 3: Write the program code by editing the index.html

(The complete program code is shown on the next page)

Step 4: Save the index.html (DO NOT Rename it)

Step 5: Launch (i.e., Run) the Web page using a browser

- Test the page to make sure its programming logic is written correctly. Fix any error.
- When testing your page, please make sure the jQuery-3.3.1.js is in the same folder as the index.html.

Step 6: Submit ONE file only. That is, submit only the index.html

- Upload the index.html file to the submission link "Lab#10_Desc_Submission" on the Moodle course website.
- When assessing your work, I will use my jQuery-3.3.1.js library file.

```html
<!DOCTYPE html>
<html>
<head>
    <!-- jQuery Lab#10 -->
    <title>jQuery Page</title>
    <script src="jQuery-3.3.1.js"></script>
    <style>
        #tip {
            display: none;
            color: blue;
        }
        p.answer {
            color: red;
        }
    </style>
    <script>
    //complete your program using jQuery
    $(document).ready(function(){
        $("#feet,#inches").mouseenter(function(){
            $("#tip").css("display", "inline");
        });
        $("#feet,#inches").mouseleave(function(){
            $("#tip").css("display", "none");
        });

        $("#myButton").click(function(){
            var f = parseInt($("#feet").val());
            var i = parseInt($("#inches").val());
            var cm = (f * 12 + i) * 2.54;
            $("#displayResult").text("Your height = " + cm + " centimeters.");
        });
        $("#myButton").dblclick(function(){
            var f = parseInt($("#feet").val());
            var i = parseInt($("#inches").val());
            var inches = (f * 12 + i);
            $("#displayResult").text("Your height = " + inches + " inches.");
        });
    });
    </script>
</head>

<body>
    <h2>How tall are you? (written by Tommy Black [ID# 8765432])</h2>
    <section>
        <p>Please enter your height information:</p>
        <p>
            <input id="feet" type="text" size="5"> feet and <input id="inches" type="text" size="5"> inches
            <button id="myButton" type="button">Click or Double Click</button>
        </p>
        <p><b>Click</b> the button to convert the data in Centimeters or <b>Double Click</b> in Inches </p>
        <p id="tip">Please enter an integer number.</p>
        <p class="answer" id="displayResult"></p>
    </section>
</body>
</html>
```

Include the jQuery library

The event when the mouse is entered any of the input boxes.

The event when the mouse is left any of the input boxes.

The event when the mouse is clicked on the button

The event when the mouse is double- clicked on the button

Replace “Tommy Black and [ID]” with your name and Student ID.

Assessment

The following penalties will be applied when assessing your work. Penalty will also be applied to overall quality of work. *(Note: assessment on quality is subject to the decision of the instructor)*

Web page/site do not display anything on the browser (i.e., there are error in your code, fix them before submitting you work)	-100% The most common mistake is "spelling error". Since the source code of the program is given, a request of sending your work to instructor before deadline and checking your code will not be accepted. Please use the features provided by the IDE, go through the program line by line, word by word and you can fix the error.
Requirements not fulfilled	Up to -100%; it depends on the % of requirements completed
Incorrect file name(s)	-5% per incorrect name (e.g., index.html.html, index(1).html, etc. are incorrect)
Unorganized code, improper code formatting,	Up to -30% (use Tab key instead of "a number of spaces" to make indentation, i.e., when you need to move a code statement to the right with indentation)