

Course:	CSCI 3230U: Web Application Development
Semester:	Fall 2016
Course component:	Midterm lab exam

Instructions

This lab exam is to be completed and submitted to Blackboard before the lecture period has finished. You are permitted a single text file, containing any notes or code snippets that you want, or (alternatively) a single page, both sides printed or hand-written. Any communication with a live person (aside from the invigilators) is prohibited, as is the use of a file sharing tool (e.g. Google Drive).

Overview

This lab exam involves the creation of a web page (`midterm.html` specifically, containing an HTML table and a form) that will allow dynamic manipulation of the data in the table. The form will be completed such that it is possible to add a new row, and update an existing row.

Detailed Requirements

The base HTML and JavaScript documents have been provided along with this document in a `.ZIP` file. Extract this file to your lab exam working directory.

Styling

Note: Every one of these requirements is built into Bootstrap. It is not required that you do any CSS by hand.

The table should be formatted (using Bootstrap) following these guidelines (producing a result that looks like figure 1):

- The table should be formatted as a Bootstrap table
- The table rows should have alternating background colours
- When hovering, the table rows should be highlighted

The form should also be formatted as a horizontal form, along with all of the controls and labels. Similarly, you will have to style the components so that their layout matches that of figure 1.

For your convenience, the `class` attributes of the relevant has been included. You merely need to determine what that class (or classes) should be. All of the changes for this section should take place in the `.html` file.

Student Grades

SID	First Name	Last Name	Grade
200000001	Zhilong	Xu	C+
200000002	Amhed	Latif	B+
200000003	Loïc	Montpellier	D

SID:

First name:

Last name:

Grade:

Figure 1: The midterm.html page rendered showing the table with default contents

Clickable Rows

Write the event handlers, using jQuery, to allow the table rows to be clicked. When clicked, the data from the selected row should be copied into the text fields within the form. The form after the third row has been clicked is shown in figure 2. Use the hidden field to store the ID of the selected row.

Student Grades

SID	First Name	Last Name	Grade
200000001	Zhilong	Xu	C+
200000002	Amhed	Latif	B+
200000003	Loïc	Montpellier	D

SID:

First name:

Last name:

Grade:

Figure 2 – The form populated after the third row was clicked

Updating Rows

Write the event handler, using jQuery, to allow any table row to be updated. When the Update button is clicked, the data from the form text fields should be copied into a table row, which will replace the table row previously selected. The form after the third row has been updated is shown in figure 3.

Student Grades

SID	First Name	Last Name	Grade
200000001	Zhilong	Xu	C+
200000002	Amhed	Latif	B+
200000003	Loïc	Montpellier	C-

SID:

First name:

Last name:

Grade:

Figure 3 – The table updated after the Update button was clicked

Adding Rows

Write the event handler, using jQuery, to allow a table row to be added. When clicked, the data from the form text fields should be copied into a new table row, which should be appended to the table. The table after a new row has been added is shown in figure 4.

Student Grades

SID	First Name	Last Name	Grade
200000001	Zhilong	Xu	C+
200000002	Amhed	Latif	B+
200000003	Loïc	Montpellier	C-
200000004	Cynthia	Freeman	A-

SID:

First name:

Last name:

Grade:

Figure 4 – The table updated after the Add button was clicked

How to Submit

Collect all of your files (HTML, JavaScript) and put them into a single ZIP file (e.g. Midterm_RandyFortier.zip), which should be submitted to Blackboard, using the drop box for this lab exam.

Note: Please do not use .rar or .7z formats for your submission.