Practical 4 – jQuery
Out of 15 Marks

DUE: 2022-04-01 before 23:59

IMPORTANT NOTES:
- This is an individual micro practical.
- Practical work is based on assessment objectives.
- If an objective has been achieved a mark will be allocated.
- All micro practical activities conceptually (based on skills) feed into one or more homework assignments.
- By completing the practical work, you will learn the necessary skills to complete homework assignments.

INSTRUCTIONS:
- For this practical you will receive specific instructions that you need to follow.
- When uploading the practical homework, zip the entire project and then please upload it using the following naming convention. **Source Code:** Zip your source code files together and name it **uXXXXXXXX_PR04.zip**, where XXXXXXXX is your student number, e.g., u12345678_PR0X.zip.

SUBMISSION DEADLINE: 2022-04-01 before 23:59
- There shall be no extensions to the deadline.
- If practical work submissions are uploaded too late, then upload errors WILL happen.
- Do not wait to the last minute to complete the practical assignments.
- Start working on the practical work as soon as it is published.
- Verify the completeness of your upload.
- There are multiple upload opportunities enabled if your upload is incomplete.
- Incomplete uploads will be considered unsubmitted work.
- E-mail submissions WILL NOT be accepted.
- Late submissions WILL NOT be accepted.
- **NO EXCEPTIONS WILL BE MADE FOR ANYONE.**

1. TOOLS, SKILLS, KNOWLEDGE REQUIRED:

- jQuery.
- jQuery functions.
- jQuery HTML DOM targeting.
- jQuery HTML DOM event listeners.
- jQuery HTML DOM table manipulation and alteration.

2. STANDARD REQUIREMENTS:

The following is a list of mandatory requirements.

2.1. DESCRIPTION OF BEHAVIOUR

When you open the page for the first time, the index.html page should look like the following. You will find two table rows and two buttons. One button is in the first row, and another button is in a paragraph underneath the table.	**Click me to add row!** **Time Stamp** / **Delete Row** **What are the number of NEW Rows?**

When you click on the "Click met to add row!" button then a new row should be added. The following is an example of the "Click met to add row!" button having been clicked 5 times. As can be seen, each time a new row is added a Time Stamp is added to the first cell and a button named "Remove" is added to the second cell. The button in the last paragraph is moved downward as new rows are added to the body of the table. Also note that the style being applied to the table, text and the buttons are consistent and does not change. This means that the style, date time data and the button should be created when a new row is added.	**Click me to add row!** **Time Stamp** / **Delete Row** 13:50:23 / Remove 13:50:23 / Remove 13:50:23 / Remove 13:50:24 / Remove 13:50:24 / Remove **What are the number of NEW Rows?**

When you click on the "What is the number of the NEW Rows?" Then an alert should be displayed that indicates the number of rows that has been added should be displayed. The following example shows that five news rows have been added. It is important to note that the first two rows are not included in the calculation of the total rows that have been added. Considering that we added 5 rows, only a "5" should be included in the alert. The alert should exclude the first two rows in the general calculation. Clicking on the "OK" button of the alert should simply close the alert. No additional action should be added to the alert. *The grey in the focus of the example is part of the alert function on the page.*	**Click me to add row!** **Time Stamp** / **Delete Row** 13:50:23 / Remove 13:50:23 / Remove 13:50:23 / Remove 13:50:24 / Remove 13:50:24 / Remove **What are the number of NEW Rows?** ⊕ file:// There are 5 additional rows. OK

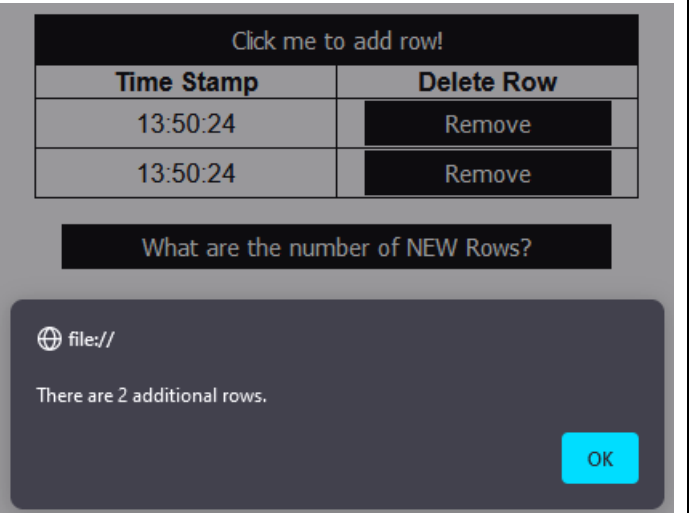|	
When you click on the Remove button, then the associated row should be removed. The following shows an example of 3 rows being removed. You should be able to remove any row in any sequence. Clicking on any of the "Remove" buttons should remove that specific row and all the content associated with that row.	**Click me to add row!** **Time Stamp** / **Delete Row** 13:50:24 / Remove 13:50:24 / Remove **What are the number of NEW Rows?**

When you click on the "What is the number of the NEW Rows?" button then an alert should be displayed that indicates the new number of rows that is left when the remove buttons are clicked. As can be seen, 3 rows were removed in the example and the alert shows that there are 2 rows. Please note – it is the exact same function as in the previous example showing 5 rows. The function does not change. It is merely reused. *The grey in the focus of the example is part of the alert function on the page.*	**Click me to add row!** **Time Stamp** / **Delete Row** 13:50:24 / Remove 13:50:24 / Remove **What are the number of NEW Rows?** ⊕ file:// There are 2 additional rows. OK

In total, you have three functions that achieve the aforementioned results. All of the skills required to complete this practical is part of the examples presented in class; however, additional reading on the topic is always especially useful at the end of the day.

The following is an overview of essentially what should happen in each of the three functions required for this page to function correctly.

2.2. FUNCTION 1 – ADD ROWS TO TABLE.

- The first function is an anonymous function.
- Add an event listener that responds when the "Click me to add row!" button is clicked.
- Use a "let" variable for the date to declare a new date.
- Use a "let" variable to declare a variable for "table" that will get an element from "tbody"
- Use innerHTML to add new rows to the provided table.
- Add a row with a table divider that contains the date and a button.
- Note the following:
  - o You will have to convert the date to string so that it can be transferred to the table.
  - o You will have to use JavaScript:void(0) on the button to ensure that the button is processed correctly.
  - o JavaScript:void(0) removes the "JavaScript" command functionality in the applicable section in which it is used.
  - o If you do not use JavaScript:void(0) then the "button" will be read as a button and not a a string to be processed by the DOM.
  - o All relevant styles should be applied to the table being added / created.

2.3. FUNCTION 2 – DELETE ROW FROM TABLE.

- The second function makes use of a parameter. In this case, the parameter is "e".
- This function needs to access the table by means of the table id, and when the user clicks delete, the function will remove the closes table row.

2.4. FUNCTION 3 – COUNT THE NUMBER OF ROWS ON SCREEN.

The third function is an anonymous function.
- This function counts the number of rows that has been added.
- This function SHOULD make use of the button class instead of a created ID.
- Please note that there are already x2 rows on the page. These two rows should not be included in the row count as they are not "new rows"
- The counted rows should then be displayed in a jQuery alert.

3. RESEARCH / READING REQUIREMENTS

The following is required reading and / or research.

- No additional research is required.
- All the content presented in, and / or may be found in the class example provides the knowledge and skills to complete this activity.
- The content presented in class will, however, need to be modified to fit the context of this practical activity.

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Checklist	MAX
1. Requirement 1 – Add row and associated content to table.	**8**
2. Requirement 2 – Delete row and content associated to row from table.	**4**
3. Requirement 3 – Count the rows added to the table. • Note – the starter rows should not be part of the count.	**3**
TOTAL MARK ALLOCATION	**15**