

COM741 Web Applications Development

Practical 4 Solutions

To run the project and test each question, click the run button, then in the browser window that opens up within repl copy the url to a new browser window and append the name of the html page to be viewed (e.g. q1.html). (See practical4.jpg)

HTML

1. Complete `q1.html` by adding

```
<h2><b>Question 1</b></h2>

<!-- b. -->
<p>This is question 1 which <b>demonstrates</b> basic <em>formattin
g</em></p>
```

2. Complete `q2.html` by adding

```
<h3>Question 2</h3>

<!-- Put your solution here -->
<!-- a. -->
<ol>
  <li>Monday</li>
  <li>Tuesday</li>
  <li>Wednesday</li>
  <li>Thursday</li>
  <li>Friday</li>
</ol>

<!-- b. -->
<dl>
  <dt><b>COM741</b></dt>
  <dd><em>Web Applications Development</em></dd>
  <dt><b>COMXXX</b></dt>
  <dd><em>Title goes here</em></dd>
</dl>
```

3. Complete `q3.html` by adding a table containing the following header, body and

footer data

```
<table>
  <thead>
    <tr>
      <th>Module Code</th> <th>Description</th> <th>Result</th>
    </tr>
  </thead>

  <tbody>
    <tr>
      <td>COM136</td>
      <td>Programming 1</td>
      <td>67</td>
    </tr>
    <tr>
      <td>COM139</td>
      <td>Programming II</td>
      <td>61</td>
    </tr>
    <tr>
      <td>COM451</td>
      <td>Maths for Programmers</td>
      <td>69</td>
    </tr>
    <tr>
      <td>COM328</td>
      <td>Algorithms & Data Structures</td>
      <td>61</td>
    </tr>
  </tbody>

  <tfoot>
    <tr>
      <th></th>
      <th>AVERAGE RESULT</th>
      <th>67</th>
    </tr>
  </tfoot>
</table>
```

The default table styling is not great so we could apply some CSS to spruce things up.

```

<style>
  table, th, td {
    border: 1px solid black;
  }

  thead > tr {
    background-color: yellow;
  }

  tfoot > tr {
    background-color: grey;
  }
</style>

```

4. Amend the existing `index.html` file, setting the document title to 'Practical 3' and add a level 2 heading containing text "Practical 3 Questions". Then add HTML anchor tag links to each of the pages used to answer questions 1-3 inside an unordered list. Ensure all questions completed from this point on also have a link in this page.

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Practical 3</title>
</head>
<body>
  <h3>Practical 3 Questions</h3>
  <ul>
    <li><a href="q1.html">Question 1 - Basic HTML</a></li>
    <li><a href="q2.html">Question 2 - HTML Lists</a></li>
    <li><a href="q3.html">Question 3 - HTML Table</a></li>
    <li><a href="q5.html">Question 5 - CSS Styling</a></li>
    <li><a href="q6.html">Question 6 - Bootstrap Table</a></li>
    <li><a href="q7.html">Question 7 - Bootstrap Form</a></li>
    <li><a href="q8.html">Question 8 - Bootstrap Layout</a></li>
  </ul>
</body>
</html>

```

CSS

1. Complete `q5.html` by amending the `<style>` section as follows

```

<!-- apply custom classes to html elements -->
<h4 class="custom">Greetings</h4>
<p class="pad">Hello, Ciao, Bonjour, Hallo</p>
<a class="anchor" href="index.html">Index</a>

<!-- Add CSS styles Here -->
<style>
    body {
        background-color: whitesmoke;
        font-family: verdana;
        margin: 2em;
    }

    .pad {
        margin-top: 1em;
        margin-bottom: 2em;
    }

    .custom {
        font-family: Arial, Helvetica, sans-serif;
        font-size: x-large;
        color: green;
    }

    .anchor {
        text-decoration: none;
        background-color: lightgreen;
        color: black;
        border-radius: 6px;
        border-style: none;
        font-size: 1em;
        padding: 0.75em;
        outline: none;
    }

    .anchor:hover {
        cursor: pointer;
        background-color: green; /* #4CAF50; /* Green */
        color: white;
    }
</style>

```

Bootstrap

1. Complete `q6.html` by

```

<table class="table">
  <thead>
    <tr>
      <th>Module Code</th> <th>Description</th> <th>Result</th>
    </tr>
  </thead>

  <tbody>
    <tr>
      <td>COM136</td>
      <td>Programming 1</td>
      <td>67</td>
    </tr>
    <tr>
      <td>COM139</td>
      <td>Programming II</td>
      <td>61</td>
    </tr>
    <tr>
      <td>COM451</td>
      <td>Maths for Programmers</td>
      <td>69</td>
    </tr>
    <tr>
      <td>COM328</td>
      <td>Algorithms & Data Structures</td>
      <td>61</td>
    </tr>
  </tbody>

  <tfoot>
    <tr>
      <th></th>
      <th>AVERAGE RESULT</th>
      <th>67</th>
    </tr>
  </tfoot>
</table>

<a class="btn btn-secondary" href="index.html">Home</a>

```

- Complete `q7.html` by creating a form (applying relevant bootstrap styling) to collect data to create a new student (input field types are text for name and course, number for age, email for the email address and url for the photo Url). Add a Save button (use primary style) and a link that takes you back to the index page (use a button style of secondary)

```

<form class="form">
  <div class="mt-4">
    <label class="form-label">Name</label>
    <input class="form-control" type="text" name="name">
  </div>

  <div class="mt-4">
    <label class="form-label">Course</label>
    <input class="form-control" type="text" name="course">
  </div>

  <div class="mt-4">
    <label class="form-label">Age</label>
    <input class="form-control" type="number" name="age">
  </div>

  <div class="mt-4">
    <label class="form-label">Email </label>
    <input class="form-control" type="email" name="email">
  </div>

  <div class="mt-4">
    <input class="btn btn-primary" type="submit" value="Create">
    <a class="btn btn-secondary" href="index.html">Cancel</a>
  </div>
</form>

```

3. Complete `q8.html` by creating a bootstrap **grid layout** containing

- A level 2 heading containing “Student Details”. Add margin top and bottom to leave some space above and below the heading. Try different bootstrap margins and see which looks best (e.g. mt-1 to mt-5 or mb-1 to mb-5)
- A row containing 2 columns with width 2/3 and 1/3 respectively. Remember a row has 12 columns so setting first column to col-8 and the second to col-4 would be appropriate.
- In the first column create a **description list** using (`<dl>` `<dd>` and `<dt>`) tags to include the following details

```
<div class="container">
  <!-- Create a level 2 heading containing "Student Details" -->
  <h2 class="mt-5 mb-4">Student Details</h2>

  <!-- Create a row with two columns and fill columns as outlined -->
  <div class="row">
    <!-- first col 2/3 of width -->
    <div class="col-8">
      <dl>
        <dt>Name</dt>
        <dd>Homer Simpson</dd>
        <dt>Course</dt>
        <dd>Computing</dd>
        <dt>Age</dt>
        <dd>45</dd>
        <dt>Grade</dt>
        <dd>56</dd>
      </dl>
    </div>

    <!-- second col 1/3 of width -->
    <div class="col-4">
      
    <button class="btn btn-primary">Home</button>
  </div>
</div>
```