

## **ISIT207 Assignment 3 (30%)**

### **Aim:**

The objectives of this assignment include learning:

- JavaScript, jQuery
- ASP.NET
- Database
- JSON, XML

### **Task 1: (5 marks)**

- a) Develop a webpage using Razor code (Razor is a markup language for embedding .NET based code into webpages) in which students can see the current vote for three lecturers. Students should be able to see the total number of votes as well as the vote of each lecturer. (Note: No login page is required)
- b) Anybody who wishes to vote must inform the administrator (the webpage will not cater for any voting function). The administrator will then append the vote cast (typically is the name of the lecturer) to the text file.
- c) You must use one text file to record the vote. Using database is NOT allowed in this task.

### **Task 2: (5 marks)**

- a) By making use of jQuery, write the necessary code to cater to the following scenario:  
In every 3 seconds, changes an image of a webpage based on 3 existing images. For this purpose, in every 3 seconds, an image is randomly selected from the remaining 2 images and replaces the current image.
- b) When the user clicks an image, a webpage containing that image will appear on the screen. Each image should be linked to a specific webpage using the relative path. Add some effects to the image and caption where appropriate.

### **Task 3: (5 marks)**

- a) Consider the following XML syntax which defines an extinct animal object with 5 extinct animal records, and represent its equivalent in JSON syntax.

```
<extinctanimal>
  <animal>
    <Type>Woolly Mammoth</Type> <Rank>One</Rank>
  </animal>
  <animal>
    < Type>Dodo</ Type> <Rank>Two</Rank>
  </animal>
  <animal>
    < Type>Sabre-toothed Cat</Type> <Rank>Three</Rank>
  </animal>
  <animal>
    < Type>Great Auk</Type> <Rank>Four</Rank>
  </animal>
  <animal>
    < Type>Stellers Sea Cow</Type> <Rank>Five</Rank>
  </animal>
</extinctanimal>
```

- b) Then write the necessary JavaScript code that accepts this JSON code using `JSON.parse()`. Use a loop to display the JSON code as follows (use `innerHTML`).

- Woolly Mammoth is ranked number One
- Dodo is ranked number Two
- Sabre-toothed Cat is ranked number Three
- Great Auk is ranked number Four
- Stellers Sea Cow is ranked number Five

**Task 4: (15 marks)**

- a) Design a food ordering website (skeletal design will do) in which a database will be used.
- b) Note that a constraint on your website is that the users can access it only if they have proper username and password, e.g. login page.
- c) Implement the website using ASP.NET.
- d) In your website, the users should be able to add/modify/delete the content of the database based on the food type and quantity they have selected. It must have a summary page to show the order too, e.g. query the database based on the order they have just entered; you must use SQL for any add/modify/delete query.
- e) By using at least 3 highly related features of UI in jQuery, add some client-side functionalities to your food ordering website.

**Due:**

14 Nov 2021 23:55pm (Singapore Time)

**Demo:** to be advised

**Submission:**

You need to submit your solutions on all the tasks to Moodle before the due date.

You are to create four folders, all files needed for task 1 must be in a folder call “Task1”, all files needed for task 2 must be in a folder call “Task 2”, and so on. Zip the four folders together and upload to Moodle. Include your student name and student ID (UOW ID) as comments in all the files.