

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 website using Razor code in which users can vote one of three celebrities.
- b) Everybody who votes should be able to see the total number of votes as well as the vote of each celebrity. (note: there is no need to have a login page)
- c) You must use one file to record the vote. Using databases are NOT allowed in this task.

Task 2: (5 marks)

- a) By the use of jQuery, write the necessary code which in every 1 second, changes an image of a webpage based on three existing images. For this purpose, in every 1 second, an image is randomly selected from the two remaining images and replaces the current image.
- b) When the user clicks an image, a webpage appears on the screen. Note that each image should be linked to a specific webpage using the relative path.

Task 3: (5 marks)

- a) Consider the following XML syntax which defines a slowanimal object with 3 animal records, and represent its equivalent in JSON syntax.

```
<slowanimal>
  <animal>
    <Category> Koala Bear </Category> <Speed>Very Slow</Speed>
  </animal>
  <animal>
    <Category>Sloth</Category> <Speed>Extremely Slow</Speed>
  </animal>
  <animal>
    <Category> Giant Tortoise </Category> <Speed>Really Slow</Speed>
  </animal>
</slowanimal>
```

- 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).

- Koala Bear is Very Slow
- Sloth is Extremely Slow
- Giant Tortoise is Really Slow

Task 4: (15 marks)

- a) Design the structure of a Singapore gift shop website in which a database is used.
- b) Note that a constraint on your website is that the users can access it only if they have proper username and password. (note: you must display one username and password in your 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 textboxes they fill. They should also be able to query the database based on the input they enter. (note: you must use SQL for add/modify/delete/query)
- e) By using at least 3 highly related features of UI in jQuery, add some client-side capability to your gift shop website.

Due:

19 Feb 2021 23:55pm (Singapore Time)

Demo: You must demo your solution to your tutor on the following date:

Full-Time students during tutorial 5

Part-Time students during tutorial 4

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.