

IT5007: Software Engineering on Application Architecture

Tutorial-2: Hotel California Waitlist System

Deadline: 5th Sept. 23:59 PM

Points: 20

You have been recruited to the famed Hotel California that receives a footfall of about 200-300 reservations a day. However, the waiting list maintained at the hotel is just of 25 entries, and any customer arriving right after is denied entry. Your task is to develop an offline web application that can be used to maintain the waiting list. The web app is supposed to be used by the front desk staff. The computer on which the system is maintained is old, so refrain from using external databases (e.g., MySQL), and maintain the data internally, within the browser using JavaScript.

The front-end needs to have the following functionality:

- 1) Adding an entry for a new customer to the waitlist (button)
- 2) Removing the entry of a customer who is seated (button)
- 3) Display the contents of the list when requested (button)
- 4) Keep updating the free slots available on the waitlist, on the homepage
- 5) Include a button to go to the homepage (button)
- 6) Add sufficient messages to keep the front desk informed (e.g., error when an add is requested to an already full waitlist)
- 7) Try to make the website look pretty by using stylesheets. For example, try to have the same header and footer for all pages. All headers should have the same style, etc.

The JavaScript based backend needs to maintain the database of the following form:

Serial No.	Name	Phone number	Timestamp
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Submission details:

- 1) Submission is through Luminus. The folder will be available soon.
- 2) Files: Submit just one zip file. Name the zip file with your matric number and name.
 - a. Submit your source files: html, js, css. Only one file each allowed. Justify if you need to add more files.
 - b. Submit a small one page report with 2 subheadings: HTML, JS, CSS. List all important features you have implemented under each category.
- 3) Any additional feature that you come up with (other than what is mentioned in the problem statement) will carry 2 bonus points. Of course, the total points for this tutorial are fixed. For example, you cannot get more than 20! An example would be to add an asynchronous timer for some reason.