

IT5007: Software Engineering on Application Architecture
Tutorial-4: Hotel California Waitlist System Super Enhanced Version

Deadline: 3rd Oct. 23:59 PM

Points: 20

You just received the employee of the month award and now you have been invited for an interview at Google. You feel that you stand a greater chance of landing the job if you complete your dream project. Your task is to add interactive functionality to the static React framework that you built earlier. You believe that, to land this job, you must provide three specific improvements:

- (1) Enable all button clicks on the interface. [5 points]
- (2) Code the logic for adding/deleting customers. [7 points]
- (3) Code the logic for updating the table of waitlisted customers (i.e., displayCustomers component) and the free slots (i.e., displayFreeSlots component). [8 points]

The front-end requires the following changes:

- 1) Enable all button clicks that will display the corresponding React components that you designed in Tutorial 3. You must remove the button for displayCustomers and display this component all the time. [Hint: Refer Chapter 4 (Event Handling) of textbook]
- 2) Code the form for adding a Customer. On clicking the submit button, the internal data structure on which you store the waitlist must be updated. At the same time, the displayCustomer component should be updated dynamically. If you coded using React, this will automatically happen. [Hint: Refer Chapter 4 of textbook]
- 3) Likewise, code a form for deleting a Customer. On submit, the internal datastructure must be updated and in the front end, the displayCustomer should be automatically updated.
- 4) The number of free slots should also be automatically updated when you add or delete a customer.
- 5) Testing: You need to add/remove customers and see if the table and free slots are updated correctly. Corner cases such as underflow and overflow must also be tested.

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) 1 bonus points for any additional feature you may provide.