CS 387 Project - Restaurant Management System

Project Test Plan

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Functional Testing:

Use Case	Positive Case	Negative Case
Login	If username and password are correct and a row exists in the corresponding table for that role then login is successful.	If the pair (username, password) doesn't exist in the corresponding table for that role then login is unsuccessful.
View Employee details	If User login as a manager, then opens SingleEmployeePage to view details.	If not logged in as a manager, then go to LoginPage and says that, you don't have the permission.
Delete Employee details	If the employee details entered match with a row in the database then that row is deleted.	If the employee details entered do not match with a row in the database then a error message saying "the given details don't match with any employee" is shown.
Add Employee Details	Giving all the required inputs of the employee(username,pswd,name,ph_no,addr) and the User logged in as a manager.	Not giving some field of employee(like username or pswd) or the User not logged in as a Manager.
View Dish details	If logged in as any user, then opens SingleDishPage to view Dish details.	If not logged in, then goes to LoginPage and says to Login.
Delete dish	If the dish details entered match with a row in the dish table in the database then that row is deleted.	If the dish details entered do not match with a row in the database then a error message saying "the given details donot match with any dish" is shown.
Add Dish details	Giving all the required inputs of the Dish(dish_name,dish_type,cost) and the User logged in as a manager or a Chef.	Not giving some required field of Dish(like dish_name or dish_type or cost) or the User not logged in as a Manager and Chef.
View Item details	If logged in as any employee, then opens ItemsPage to view Items details.	If not logged in as a employee, then goes to LoginPage and says that, you don't have the permission.
View Items purchased and used up on that day	If logged in as a Manager, then opens PerDayPage to view DailyUsage Details	If not logged in as a manager, then goes to LoginPage and says that, you don't have the permission.
View Table Status	If logged in as any employee, then	If not logged in as a employee,

	opens TablesPage to view Tables status.	then goes to LoginPage and says that, you don't have the permission.
View order history details	If logged in as a Manager or Billing Manager, then opens PerDayPage to view Order History.	If not logged in as a Manager or a Billing Manager, then goes to LoginPage and says that, you don't have the permission.
View customer details	If logged in as a Manager or Customer, then opens CustomerDetailsPage.	If not logged in as a Manager or a Customer, then goes to LoginPage and says that, you don't have the permission.
View offer details	If logged in as a Manager or Customer, then opens SingleOfferPage.	If not logged in as a Manager or a Customer, then goes to LoginPage and says that, you don't have the permission.
View delivery person details	If logged in as a Manager, then opens DeliveryPersonPage	If not logged in as a Manager, then goes to LoginPage and says that, you don't have the permission.
View menu and select items	If logged in as a customer, then goes to DishesPage and selecting an item goes to SingleDishPage.	If not logged in as a Customer, then goes to LoginPage and says that, you have to Login.
View cart and confirm the order	If logged in as a customer, then goes to CartPage.	If not logged in as a Customer, then goes to LoginPage and says that, you have to Login.
View previous orders	If logged in as a customer, then shows their previous orders.	If not logged in as a customer then this page will not be accessible.
Change account details	If logged in as a customer then we will allow them to change their account details if the changes done are valid.	If not logged in as a customer then we will show an error message.
Change table status	If logged in as manager or head waiter and If the given table exists then it will change the table's status accordingly.	If not logged in as manager or if the specified table does not exist then it will give an appropriate error message.
Update about items	If logged in as manager or chef ,or automatically when a order is delivered/served. if the given items exist then they get updated.	If the login is not as a manager or chef or if the given item does not exist then we show an appropriate error message.
Create an order	If logged in as manager or head waiter or customer and the dishes are all available then the order will be accepted	If logged in as a delivery person or waiter or if any of the dishes is not available.

Assign a delivery person (This happens automatically or can be done by manager/ head waiter so if it is done manually we will also check if the person assigning the delivery person has corresponding authority to do so.)	If the given delivery person exists in the employee table and checks if they are out for delivery or on leave or they left , if not then it changes the status of the delivery person to out for delivery.	If the given delivery person doesn't exist or if he has left or on leave or out for delivery then it gives an appropriate error message.

Load Testing:

We plan to use Apache JMeter for load testing.
We plan to measure the time elapsed to get the results for each query for different sizes of data, we also plan to measure other statistics like number of requests that can be served per second and the throughput using JMeter. We plan to use thread groups functionality in Jmeter to simulate load using multiple clients. We will vary the number of clients in between 1 and 100 keeping the amount of data the same and measure all the previously mentioned statistics.

We plan to measure all the statistics for different sizes of data. We will vary the data as follows -
First we will have 100s of rows in the orders, order_dishes and dish_items and 10s of rows for the remaining tables and we plan to increase the number of rows in all the tables in the order of 10 till 10,000 rows for orders table.