



Daffodil International University

Department of Computer Science and Engineering

Faculty of Science & Information Technology

Midterm Examination, Spring 2023

Course Code: CSE 333, Course Title: Software Engineering

Level: 3 Term: 3

Time: 1:5 Hrs

Marks: 25

Answer ALL Questions: *[The figures in the right margin indicate the full marks and corresponding course outcomes. All portions of each question must be answered sequentially.]*

Restaurant tips are the rewards or incentives for good service. Tips are voluntary additional payments for a service and are common in restaurants that offer the traditional table service, where the server interacts with the client extensively. Our flutter-based Restaurant Employees Tip Calculator helps to automatically calculate the employee's tip from the customer's payment. The system is user-friendly and it is easily accessible by the restaurant, employees and the customer. The tip from a customer given to the restaurant employees for their good services can be easily rewarded.

In this system, the tips are been calculated from the payment made by the customer at the restaurant. This system consists of three modules those are restaurant and admin, employees of the restaurant and the user. The admin can view all the employee's tips and customers who have tipped them. They can add or delete employees and employee categories from the system.

Employee category and calculated tip percentage is been added to the system by the admin. Admin can view all the tips from the customers to the user. If the customer pays by cash or pays separately at the restaurant, the admin can add ~~these~~ tips manually to the system. The employees can easily view their tips and sort them using a filter by month or year.

The user can log in to the system using their credentials. To make payment, the customer has to select a particular restaurant. In this system, have implemented the dummy model to make payments. The user can tip the employees accordingly. All the previous transactions can be viewed by the user.

1. Choose the software development model that will be suited best for the above-mentioned scenario and justify your answer. [5] CLO1
2. Illustrate the functional and Non-functional requirements for given scenario. [5] CLO2
3. Construct the Use Case diagram of the case study described by you. [5] CLO3
4. Illustrate the Use Case description for "Customer Payment" and "View All Employee Tips" process. [5] CLO2
5. Construct the activity diagram and Sequence for the "Customer Payment" and "View All Employee Tips" process. [5] CLO3