Logo, company name

Description automatically generatedDSA Project

Project Name: Table Talk Café

Group Members

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SUBMITTED TO: Dr. INAYAT UR REHMAN

**Project Description**

Our project is named Table Talk Café in which there are three major modules. Their names and functionalities are described below:

**Admin Module**

Our program is mainly controlled by admin menu. It is password protected. Admin can add, delete, and display menu list. He can also add or remove riders and Café members. Admin has the functionality to assign orders to the riders for delivery. Deliverable orders are placed in queue that means first in first served. Admin can also check the orders history and calculate the total earnings.

**Customer Module**

In user module, we have three functionalities. First, user can register themselves as a café member. Second, those who are registered as a member can view their order history and third one is placing new order. Members while accessing profile or placing order must log-in using their id and password. User can place order even if he/she is not a member. While placing order, user is being asked if he/she want delivery of food. If user choice is delivery of food, then the order is placed in queue and assigned to riders by admin.

**Rider Module**

This module has three functions. First, register as a new rider, second, access rider profile, and last one is to deliver an order (getting shortest path from café to the delivery address). Second and third functions are also password protected i.e., only registered riders can access them. In rider profile, after entering the log-in information rider can view his order history and total orders.

## **Task distribution**

**Customer Module, Fahad Ishaq (FA20-BCS-017)**

* Registering new customer
* Viewing customer profile
* Placing order and storing in different lists (Dine-in/delivery)

**Admin module, Muhammad Aarij (FA20-BCS-042)**

* Add, delete, view menu
* Access rider and customer profile
* Calculate earnings of orders

**Admin and Rider module, Muhammad Anees (FA20-BCS-045)**

* Code integration
* Assign orders to riders
* Delete registered customer or rider
* Riders’ registration
* Rider profile and delivering orders

We have implemented following data structures in our project:

* Linked Lists
* Queues
* Graph (Dijkstra)