**Bashir Mohammed**

**Report**

**Introduction**

The restaurant management system is a web-based application designed to facilitate restaurant operations such as reservation management, processing customer information, and updating restaurant preferences This report presents the system's design, operation, and codebase overview for.

**Code Explanation:**

The RestaurantServer.py script acts as the main server-side component that manages communication between customers and the restaurant management system. It listens to HTTP requests and routes them to the appropriate destinations for processing. For example, if a customer wants to add a new reservation or update an existing one, they send a POST request to the corresponding endpoint such as /addReservation or /updateReservations . The server analyzes the incoming data, communicates with the MySQL database using methods from the RestaurantDatabase class, and returns the appropriate response. The RestaurantDatabase.py file contains the logic to connect to the MySQL database. It defines a class called RestaurantDatabase, which initially establishes a connection to the database. This class provides methods for performing tasks such as adding, canceling a reservation, adding a customer, searching for a reservation for a specific customer, and enabling existing reservations new for.

**RestaurantServer.py:** This file contains the server-side code responsible for handling HTTP requests and routing them to appropriate endpoints.

**Server Initialization (run function):**

* Initializes an HTTP server on localhost and a specified port.
* Uses the **RestaurantPortalHandler** class as the request handler.

**Reasons I couldn’t finish all of it: I’m sorry I only manage to complete the MySQL part, My mum had serious health issues and I am the only son so I had take care of her and keep and an eye on her so I couldn’t fully focus on the project 100% that’s why I couldn’t finish it and decided to present what I have done right now, also I had other classes projects and exams time wasn’t on my side. I felt I was loosing my mind and I apologize for that but right after presenting this I will try my best to complete the python part and submit it before 11:59. Hope you understand.**