

# TEB 1043 / TFB 1033: Object-Oriented Programming

Final Project Documentation: YOYAKU

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## Introduction

### **Project Description:**

This project involves the development of a robust client-server reservation system designed to streamline the booking and management of tables and dining services within a restaurant setting. The system will enable customers to reserve tables, and restaurant staff to manage reservation

### **Objectives:**

Develop a User-Friendly Interface: Customers can easily navigate and make reservations. Administrative Control: Provide restaurant managers with tools to manage reservations, and approve or deny booking requests.

## **Application:**

User Authentication and Roles: Secure login with role-based access for customers, restaurant staff, and administrators. Reservation Management: Customers can book, modify, and cancel reservations for tables. Mobile Compatibility: Responsive design for access on desktops, tablets, and smartphones. Feedback System: Allow customers to provide feedback on their dining experience and the booking process.

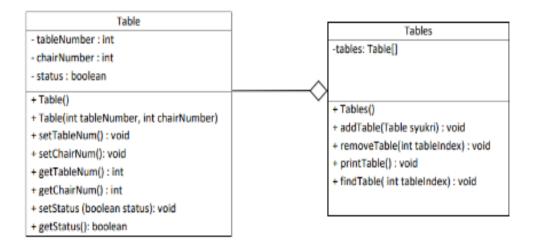
#### **Market Potential:**

Restaurants: Primary market includes small and medium scale restaurants seeking efficient table management solutions. Customization Opportunities: Potential to customise and expand the system for specific needs of different types of restaurants (casual dining & cafes). Potential Customers: Targeting independent restaurants as well as restaurant chains enhances market reach.

# **UML** Diagram

+ setTableStatus( boolean status): void

#### UML DIAGRAM Client - name: String - clients : Client[] - phoneNumber : String + Client() + Clients() + Client(String name, String phoneNumber) + addClient(Client aiman) : void + setName(): void + removeClient(int clientIndex) : void + setPhoneNumber(): void + printClient(): void + getName(): String + findClient( int clientIndex ) : void + getPhoneNumber(): String Reservations Reservation -reservations: Reservation[] - tableNumber: int - pax : int - status: boolean - name: String + Reservations() - phoneNumber: String + addRes(ashwin : Reservations) : void + Reservation() + removeRes(int restIndex) : void +Reservation(int tableNumber, int pax, + printRes(): void Boolean status) + findRes(int resIndex): void + setTable() : void + setPax(): void + getTable(): int + getPax(): int + readClientDetails(): void

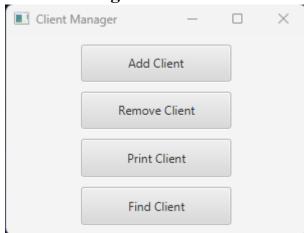


# **Project Implementation**

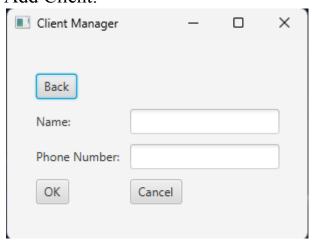
### Main Menu:



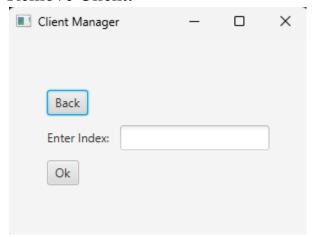
# **Client Manager:**



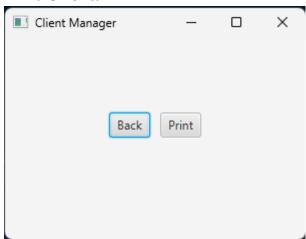
### Add Client:



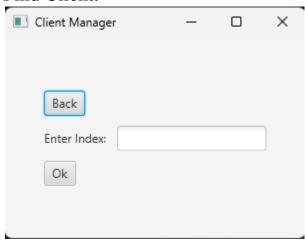
### Remove Client:



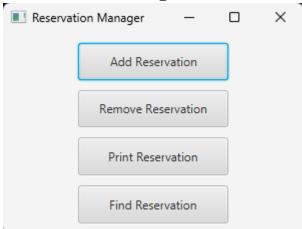
## Print Client:



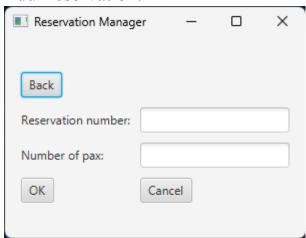
# Find Client:



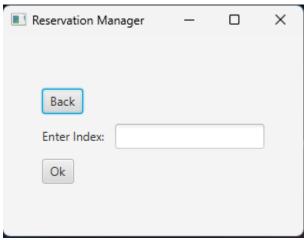
# **Reservation Manager:**



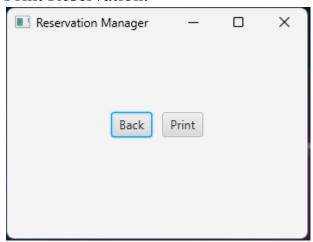
### Add Reservation:



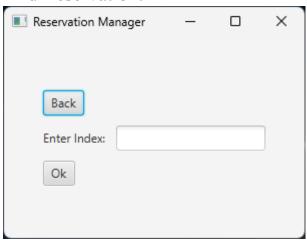
### Remove Reservation:



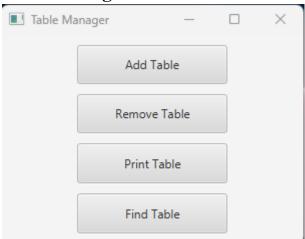
## Print Reservation:



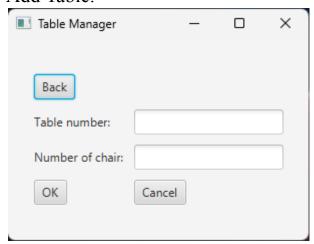
# Find Reservation:



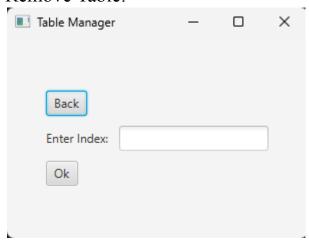
## **Table Manager:**



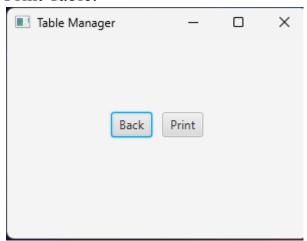
## Add Table:



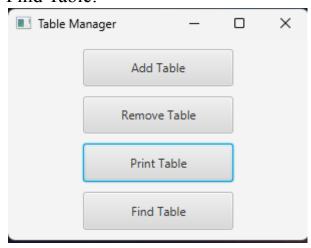
# Remove Table:



# Print Table:



# Find Table:



## Conclusion

This project aims to provide a practical solution for the restaurant industry by simplifying the booking and management of tables and dining services. By developing a user-friendly interface and tools for administrative control, the system will help restaurants efficiently handle reservations and improve customer satisfaction. With features like secure user authentication, mobile compatibility, and a feedback system, this project has the potential to enhance the daily operations of small to medium-sized restaurants. Overall, this reservation system can contribute to more organised and streamlined restaurant management.