### **Project Proposal: Hotel Management System**

Project Title: Hotel Management System Prepared By: 22k-8717 22k-5008

The Hotel Management System is designed to facilitate seamless interaction between hotel guests and the kitchen or service staff. By using a user-friendly interface implemented in Assembly language, guests can effortlessly browse menus and place orders for breakfast, lunch, and dinner, enhancing the dining experience and operational Efficiency.

# **Objective:**

- To develop an automated system that allows guests to place food orders without human intervention.
- To streamline the order processing mechanism, reducing wait times and potential errors.
- To provide a clear, accurate accounting of orders and transactions that improves the billing process.

# Scope:

The system will provide the following features:

- An interactive console-based user interface where guests can choose from breakfast, lunch, and dinner menus.
- A backend logic system in Assembly language to handle order inputs, calculate total costs, and manage transaction processes.
- Basic error handling for input validation to ensure that orders are processed accurately. Methodology:
- 1. Requirements Gathering:
- Consult with hotel management to understand their needs and expectations from the system.
- Gather input from potential users to refine the system's functionality.
- 2. System Design:
- Define the overall system architecture, including the user interface layout and the backend processing logic.

- Design data structures for storing menu items, prices, and orders.
- 3. Implementation:
- Write the Assembly code for the user interface, including menu displays and user prompts.
- Implement the logic for handling orders, including calculations for totals and processing user payments.
- Integrate error handling mechanisms to manage incorrect inputs gracefully.
- 4. Testing:
- Conduct unit testing on individual procedures to ensure they function as expected.
- Perform integration testing to ensure that the system components work together seamlessly.
- Solicit feedback from trial users and refine the system based on their experiences.

#### **Expected Outcomes:**

- Reduced order processing time by at least 30%.
- Decrease in order errors by up to 50%.
- Increased customer satisfaction due to faster service.

## **Conclusion:**

This project will leverage the precision and efficiency of Assembly language to create a robust Hotel Management System that enhances the dining experience for guests and streamlines kitchen operations. With careful planning and execution, this system will set a new standard in hotel service automation.