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Description automatically generated**NATIONAL UNIVERSITY OF COMPUTER AND EMERGING**

**SCIENCE**

**(KARACHI CAMPUS)**

**FAST SCHOOL OF COMPUTING**

**Spring 2024**

**Project Proposal: Restaurant Management System(RMS)**

**Object oriented programming.**

**Section -2H**

**GROUP MEMBERS:**

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**Introduction:**

The Restaurant Management System (RMS) project aims to develop a comprehensive software solution to automate and streamline various aspects of restaurant operations. This proposal outlines the necessity for such a system, its objectives, and expected outcomes.

**Existing System:**

Traditional restaurant management involves manual processes for menu management, order processing, table reservations, inventory tracking, billing, and employee management. These processes are prone to errors, inefficiencies, and delays, leading to suboptimal customer experiences and operational challenges**.**

**Problem Statement:**

The existing system suffers from inefficiencies and lacks integration between various operational aspects. To address these issues, we propose the development of a Restaurant Management System with enhanced features and automation capabilities.

**Proposed Solution:**

We aim to incorporate new features such as menu management, order processing, table reservations, inventory tracking, billing, and employee management into the system. These features will be implemented using Object-Oriented Programming (OOP) principles for modularity, extensibility, and maintainability.

**Salient Features:**

**Menu Management:** Utilizing encapsulation to manage menu items efficiently.

**Order Processing**: Implementing abstraction for seamless order handling.

**Table Reservations:** Leveraging inheritance for flexible reservation management.

**Inventory Tracking:** Applying polymorphism for uniform inventory management.

**Billing and Payments**: Utilizing encapsulation for accurate billing and payment processing.

**Employee Management:** Employing inheritance for effective employee scheduling and monitoring.

**Tools & Technologies:**

**The Restaurant Management System will be developed using C++ and windows.**

**APPROVED NOT APPROVED**