Ordering System – Integrated Project

1. Introduction

The Ordering System is a console-based application developed in C++ that demonstrates the integration of multiple programming concepts such as functions, file handling, conditional statements, and loops. The project focuses on integrating customer registration, ordering, and employee login into a single working system.

2. Problem Statement

Managing customer orders manually can be inefficient and error-prone. This project aims to create a simple automated ordering system where customers can register and place orders, orders are stored permanently using files, and employees can securely log in and view customer orders.

3. Objectives

• To implement customer registration functionality
• To design a menu-based ordering system
• To store order data using file handling
• To implement employee login using file-based authentication
• To integrate all modules into a single main program

4. System Description

The system consists of three main modules: Customer Registration and Ordering Module, Employee Login and Order Viewing Module, and Main Menu Integration Module. All modules are connected through a unified main menu.

5. Module Description

5.1 Customer Registration and Ordering Module

Customers enter a username and password. Registration details are stored in a file. Customers select items from a menu. The system calculates the bill based on item price and quantity. Orders are saved using file handling.

5.2 Employee Login and Order Viewing Module

Employee credentials are stored in a text file. Employees log in using username and password. The system verifies credentials from the file. Upon successful login, all customer orders are displayed.

5.3 Main Integration Module

Displays a main menu. Allows switching between customer and employee functionalities. Integrates all modules into a single executable program.

6. File Handling

The system uses text files to store data:
• employee.txt – stores employee usernames and passwords
• Orders file – stores customer order details
This ensures data persistence even after program termination.

7. Technologies Used

Programming Language: C++
Concepts Used: Functions, Conditional statements, Loops, File handling, Modular programming

8. Conclusion

This project successfully demonstrates the integration of multiple programming modules into a single working system. It provides a practical understanding of file handling and modular programming in C++. The project meets all functional requirements and serves as a foundation for more advanced systems.

9. Group Member Contributions

• Customer registration and ordering logic
• Employee login and authentication
• Order viewing functionality
• Integration of all modules into the main program