DHA SUFFA UNIVERSITY

Department of Computer Science Project Proposal

Course Code: SE-2001L

Course Title: Data Structure and Algorithm Lab FALL- 2024

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| **Project Detail** |  | | | | |
| **Group Members**  (maximum 5 members allowed) |  | **S#** | **Name** | **Roll No** |  |
| **1** | **Muhammad Hammad Alam** | **SE-231024** |
| **2** | **Aitasam Hussain** | **SE-231047** |
| **3** | **Syed Fraheem Ahmad** | **SE-231015** |
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| **Project Title** | **CANTEEN MANAGEMENT SYSTEM** | | | | |
| **Problem Statement** | **In educational institutions, offices, and other large organizations, managing the canteen operations efficiently remains a challenging task. The traditional methods of manual order taking, inventory management, and billing often lead to errors, delays, and dissatisfaction among customers. Canteen staff struggles to maintain accurate records, leading to issues like stock shortages, waste, and inefficient use of resources. Furthermore, customers often face long queues, confusion over menu items, and inconsistent service quality.**  **There is a need for an automated and integrated Canteen Management System (CMS) that can streamline the order process, maintain real-time inventory, automate billing, and improve overall customer experience. The CMS should allow users to place orders seamlessly, track food availability, and reduce wait times while providing canteen staff with an efficient tool to manage resources, track sales, and ensure smooth operations. The system should also generate reports to aid decision-making, improve inventory control, and reduce costs.**  **“This project aims to design and develop a robust Canteen Management System that addresses the current inefficiencies and enhances the operational experience for both customers and staff.”** | | | | |
| **Project Description** | **“The Canteen Management System (CMS) is an automated solution designed to improve the efficiency of canteen operations. It enables customers to place orders, view menu items, and track order status, while allowing staff to manage inventory, process billing, and generate sales reports. The system aims to reduce errors, optimize resource management, and enhance the overall experience for both customers and canteen staff.”** | | | | |
| **Tools and Technologies** | * Java. * IntelliJ Idea | | | | |

**Date of Submission: 18/Jan/2025 Approved/Not Approved**

*Miss Afifa Farooq*