



CAFETERIA SYSTEM



Team Members:-

Yousef Waleed Farid – 324243437@sha.edu.eg - 14B

Yousef Mohammed Ajeeb - 324243649@sha.edu.eg - 14B

Yousef Ebada El Said - 324243492@sha.edu.eg -14B

Yousef Refat Adly - 324243410@sha.edu.eg -14B

Yousef Ibrahim Abd El Ghani - 324243093@sha.edu.eg - 13B

System Description:

full-stack software system designed to enhance cafeteria operations at universities. Long queues, mistakes made when handling cash, and poor inventory management are all common problems. The system uses efficient back-end architecture and a cross-platform mobile application (Flutter) to bridge the gap between students and kitchen staff.

System Overview:

1. Student Mobile Application

- **Menu Browsing:** Categorized view of available items.
- **Digital Wallet:** A secure, closed-loop financial system where students pay using pre-loaded credits.
- **Smart Ordering:** Users can place orders with specific instructions (e.g., "No pickles").
- **Order Tracking:** Real-time status updates (Pending Preparing Ready).

2. Admin & Kitchen Portal

- **Wallet Top-Up:** Authorized staff can perform "Credit" transactions to add funds to student wallets upon receiving physical cash.
- **Live Order Management:** Kitchen staff view incoming orders and custom comments.
- **Inventory Control:** Automated tracking of stock levels; items are marked "Unavailable" automatically when storage runs out.

ERD Diagram for the database:-

