

**UNIVERSITY INSTITUTE OF COMPUTING**

**PROJECT REPORT**

**ON**

**FOOD DELIVERY APP**

**Program Name: BCA**

**Subject Name/Code: Database Management System Lab(23CAP-252)**

**Submitted by:**

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**Abstract:**

**This project aims to design and implement a database system for a food delivery app using SQL. The app allows users to browse and order food from various restaurants, track their orders, and manage their accounts. The database system is designed to store and manage data related to users, restaurants, orders, and menu items. The project includes the creation of tables, indexes, views, and stored procedures to support the app's functionality.**

**Introduction:**

**The food delivery app is a web-based application that enables users to order food from their favourite restaurants. The app requires a robust database system to manage user data, restaurant information, menu items, and orders. This project focuses on designing and implementing a SQL database system to support the app's functionality.**

**Objective:**

**Primary Objective:**

1. **To design and implement a database system for a food delivery app using SQL.**

**Secondary Objectives:**

1. **Data Management: Store and manage user data, restaurant information, menu items, and orders.**
2. **Data Retrieval: Retrieve data efficiently to support app functionality.**
3. **Data Security: Ensure data security and integrity.**
4. **Scalability: Design a scalable database system to accommodate growing user traffic and data.**

**About the language(PHP):**

**PHP (Hypertext Pre-Processor) is a server-side scripting language used for web development.**

**Features:**

**1. Server-side scripting: PHP code is executed on the server, generating HTML output.**

**2. Dynamic content: PHP allows for dynamic content generation and interaction with databases.**

**3. Open-source: PHP is an open-source language with a large community and extensive libraries.**

**Technique Used:**

**1. Database Design: Entity-Relationship Modeling , Normalization,**

**2. SQL: Structured Query Language, Query Optimization, Indexing.**

**3. Data Modeling: Data Warehousing, Data Mining.**

**4. Data Security: Encryption, Access Control.**

**5. Performance Optimization: Caching, Partitioning.**

**Input:**

**1. User Data: Name, Email, Password, Address.**

**2. Restaurant Data: Name, Address, Contact Details.**

**3. Menu Item Data: Name, Description, Price, Restaurant ID.**

**4. Order Data: User ID, Restaurant ID, Order Date, Total Cost.**

**5. Order Item Data: Order ID, Menu Item ID, Quantity.**

**SQL Queries:**

**The following SQL queries were used to create and populate the database:**

**1. CREATE TABLE: creates the tables for users, restaurants, menu items, orders, and order items.**

**2. INSERT INTO: inserts data into the tables.**

**3. SELECT: retrieves data from the tables.**

**4. JOIN: joins tables to retrieve related data.**

**5. INDEX: creates indexes to improve query performance.**

**Conclusion:**

**The SQL database system designed for the food delivery app provides a robust and scalable solution for managing user data, restaurant information, menu items, and orders. The database system includes tables, indexes, views, and stored procedures to support the app's functionality. The project demonstrates the importance of database design and SQL queries in developing a web-based application.**