Project Number: 75

Project Title: Food Delivery Mobile Application

Project Clients: Babar Shaukt (B.S. Traders)

Project specializations: Software Development;Mobile Application Development;Web Application Development;Cloud Computing;

Number of groups: 2 group

Main contact: Babar Shaukt (B.S. Traders)

Background:

With the growing demand for on-demand food delivery, restaurants are seeking efficient solutions to connect with customers and manage orders seamlessly. This project aims to design and develop a mobile application for food delivery, enabling customers to browse menus, place orders, and track deliveries in real-time. Businesses can update their menus, manage order statuses, and communicate directly with customers and delivery drivers.

Requirements and Scope:

The project will focus on designing and implementing a cross-platform mobile application exclusively for restaurant delivery services. The application will cater to four main user groups:

• Customers: Browse restaurant menus, place orders, and track deliveries.

• Restaurants: Manage profiles, update menus, process orders, and monitor delivery status.

• Delivery Drivers: Accept and manage delivery orders, optimize routes, and update delivery statuses.

• Administrators: Oversee user management, performance analytics, and system maintenance.

Required Knowledge and skills:

The following are full list of features to be discussed with the groups:

Customer Features

• User Registration & Profile Management including Sign up, log in, and manage personal profiles.

o Secure authentication and account management.

- Order Placement & Management

o Browse restaurant menus with images, descriptions, and prices.

o Search for specific food items and filter by cuisine, ratings, or price.

o Place orders by selecting items and specifying delivery addresses.

o Track order status in real-time (e.g., Order Received, Preparing, Out for Delivery, Delivered).

o In-app messaging for order-related queries.

- Payment & Transactions

o Support multiple payment methods (credit/debit cards, digital wallets, etc.).

o Secure payment processing with real-time cost estimation.

o Invoice generation and transaction history.

- Review & Rating System

o Rate and review restaurants and drivers post-delivery.

o View aggregated ratings and feedback to guide future orders.

Restaurant Features

- Restaurant Registration & Profile Management

o Create and manage restaurant profiles with branding elements (logo, images, etc.).

o Update menus in real-time with detailed product information (ingredients, prices, delivery options).

- Order Management Dashboard

o Receive and manage incoming orders.

o Update order statuses (e.g., Order Received, Preparing, Ready for Pickup).

o Monitor order volume, customer feedback, and delivery performance.

- Promotional Tools

o Create and manage special offers, discounts, and loyalty programs.

Driver Features

- Driver Registration & Verification

o   Profile setup including identity verification and vehicle details.

- Delivery Management

o   Receive, accept, and manage restaurant delivery orders.

o   Access integrated navigation to optimize delivery routes.

o   Update order status throughout the delivery process (Picked Up, In Transit, Delivered).

- Earnings & Analytics

o   Track completed deliveries and monitor earnings.

o   View customer ratings and feedback.

Admin Features

- User & Partner Management

o   Oversee customer, restaurant, and driver accounts with appropriate access controls.

o   Approve new registrations and manage disputes.

- System Oversight

o   Monitor live delivery operations and performance metrics.

o   Generate comprehensive reports for continuous improvement.

- Dynamic Pricing & Promotions

o   Set pricing models and manage promotional campaigns based on demand.

System Features

- Cross-Platform Mobile Application

o   Optimized for both iOS and Android devices.

- Microservices Architecture

o   Ensures scalability, efficient load distribution, and rapid updates.

- Security & Compliance

o   Encrypted transactions, secure authentication, and adherence to data protection standards.

- Intuitive UI & UX

o   User interfaces designed following Material Design principles for a seamless user experience.

Expected outcomes/deliverables:

•   A fully functional, user-friendly mobile application dedicated to restaurant delivery.

•   Complete documentation; source code, requirements, design and archtecture, technology stack, APIs, testing and user and dpeloyment guide,