Hackathon Task for Web and Mobile App Development (Batch – 7)

Restaurant Ordering App

Description

This app allows users to browse a restaurant's menu, place orders, and manage user accounts. It's a miniaturized version of a full-featured restaurant app, with Firebase powering real-time data updates and Firestore storing all menu and order details.

Key Features

1. **User Authentication & Profiles**
    - Use Firebase Authentication to let users create accounts or log in.
    - User profiles can store order history, preferences, and saved items.
2. **Menu Management**
    - Use Firestore to store menu items, categorized by type (e.g., appetizers, main courses, desserts).
    - Firebase Storage for storing menu item images.
    - Admin functionality for managing menu items (add, edit, delete).
3. **Ordering System**
    - Users can add items to a cart, customize items (e.g., toppings or spice levels), and place orders.
    - Real-time updates of order status (e.g., "Preparing," "Ready for Pickup," "Delivered") through Firestore.
4. **Admin Dashboard**
    - A separate interface for restaurant staff to view and manage incoming orders.
    - Allows status updates on orders, accessible to the customer in real-time.
5. **Favorites and Wishlist**
    - Enable users to save favorite menu items or mark items they want to try in the future.
    - Store this data in Firestore for easy retrieval.
6. **Push Notifications (Optional)**
    - Send users notifications for order updates or special offers.
    - Firebase Cloud Messaging can be used for real-time notifications.

7. **Order History and Feedback**
    - Store completed orders in Firestore, allowing users to view past orders and reorder easily.
    - Allow users to leave feedback on each item they ordered, with ratings and comments saved in Firestore.
8. **Table Reservation (Optional)**
    - Users can reserve tables directly through the app for dine-in options.
    - Reservation details saved in Firestore, with options for date, time, and party size.

Technical Stack

- **Frontend**: React with Context for state management.
- **Database**: Firestore for real-time data storage and syncing.
- **Storage**: Firebase Storage for images of menu items and restaurant details.
- **Authentication**: Firebase Authentication for user login and account management.
- **Notifications**: Firebase Cloud Messaging (for sending notifications on order updates).

Stretch Goals

- **Multi-Restaurant Support**: If students want a bigger challenge, expand the app to support multiple restaurants.
- **Customer Reviews and Ratings**: Let customers leave reviews for menu items to create a community-driven feel.
- **Delivery Tracking**: Add a basic delivery tracking system for users who order food for delivery, using Firestore to update order location/status.

This project offers hands-on experience with a variety of Firebase services and teaches how to build a full-stack, real-time application that covers many aspects of app development.

Submit Here