Project Roadmap: P3 Food Delivery App

Project Roadmap

This project consists of four main parts:

- Frontend (React.js): User interface for browsing, ordering food, and tracking deliveries.

- Backend (Express.js & Node.js): Handles authentication, order management, and restaurant data.

- Database (MongoDB): Stores user details, restaurant info, orders, reviews, and analytics.

- AI Features: Personalized recommendations, demand forecasting, and chatbots.

Features Breakdown

1. User Authentication: Secure login, sign-up, profile management.

2. Restaurant Listings: Browse restaurants with categories (AI: Personalized recommendations).

3. Food Recommendations: AI-based food recommendation system.

4. Search & Filters: Search food/restaurants (AI: NLP-based search ranking).

5. Order Placement: Add to cart, checkout, payments.

6. Delivery Tracking: Real-time delivery status.

7. User Reviews & Ratings: Leave feedback on food/restaurants (AI: Sentiment analysis).

8. Admin Dashboard: Manage restaurants, orders, users.

9. Demand Prediction: ML-based demand forecasting.

10. Chatbot Support: AI-powered chatbot for food ordering.

How We Start This Project

1. Set Up Repository:

   - Initialize GitHub repo with separate folders for frontend & backend.

   - Install dependencies for React, Express, and MongoDB.

2. Backend Development:

   - Build Express.js server and set up MongoDB database.

   - Implement user authentication with JWT.

3. Frontend Development:

   - Set up React project with TailwindCSS.

   - Develop pages for login, restaurant listing, cart, and checkout.

4. AI & Advanced Features:

   - Train and integrate ML models for food recommendations.

   - Implement sentiment analysis on user reviews.

5. Deployment & Testing:

   - Deploy backend using Render/Vercel and frontend with Netlify.

   - Implement CI/CD for automated testing and updates.

User Stories

Customer:

- As a customer, I want to browse restaurants, so I can see available options.

- As a customer, I want to add food to my cart, so I can place an order.

- As a customer, I want to track my delivery in real-time, so I know when my order arrives.

Restaurant Owner:

- As a restaurant owner, I want to manage my menu, so I can update food items.

- As a restaurant owner, I want to see incoming orders, so I can prepare food quickly.

Delivery Partner:

- As a delivery partner, I want to receive new orders, so I can pick them up and deliver.

- As a delivery partner, I want to update the delivery status, so customers know the progress.

Admin:

- As an admin, I want to manage all users, so I can ensure platform security.

- As an admin, I want to generate reports, so I can monitor platform performance.