SpeedyPlate - Online Food Ordering Platform

*GitHub Repository: https://github.com/raghuramayya4/SpeedyPlate\_SmartInternz.git*

# 1. Introduction

SpeedyPlate is a modern and responsive food ordering platform developed using the MERN stack (MongoDB, Express.js, React, Node.js). It brings together three key user roles—Users, Restaurants, and Admins—to create a unified and functional online food delivery experience.

# 2. Project Objective

The aim of SpeedyPlate is to offer a seamless online food ordering experience by enabling users to browse menus, place orders, and track them. Restaurants can manage their offerings, while Admins maintain the integrity and flow of the system via approvals and monitoring capabilities.

# 3. Architecture Overview

SpeedyPlate follows a three-tier architecture:  
• Frontend: React.js application  
• Backend: Express.js REST API  
• Database: MongoDB Atlas (cloud)  
Data is passed securely between the frontend and backend using JSON, and user sessions are managed via localStorage.

# 4. Key Features

• Role-based Authentication (User, Restaurant, Admin)  
• Restaurant approval workflow  
• Cart and checkout system  
• Admin dashboard for monitoring users, products, and orders  
• Automatic diet-based menu suggestion (Prototype)  
• Responsive design for mobile devices

# 5. Flow of the Application

• User: Signup > Browse Menu > Add to Cart > Enter Delivery Details > Place Order > Track via Profile  
• Restaurant: Register > Await Admin Approval > Add/Update Food Items > View Orders  
• Admin: Login > Approve/Reject Restaurants > Monitor System  
Routing is handled using React Router.

# 6. Tech Stack & Prerequisites

• React.js (Frontend)  
• Node.js + Express.js (Backend API)  
• MongoDB + Mongoose (Database)  
• Axios for HTTP Requests  
• Git & GitHub for version control  
• Postman for API testing

# 7. GitHub Integration

• Repository: https://github.com/raghuramayya4/SpeedyPlate\_SmartInternz.git  
• git clone <repo-url>  
• git branch -M main  
• git add .  
• git commit -m "Initial Commit"  
• git push -u origin main

# 8. Database Schema (MongoDB)

• User: { name, email, password, usertype, approval }  
• FoodItem: { title, description, price, itemImg, restaurantId }  
• Order: { userId, foodItemId, price, quantity, address, orderDate }  
• Restaurant: { name, email, approvalStatus }

# 9. UI Screens Overview

• Home: Hero section with welcome + suggestion button  
• Menu: Grid view of food items with Add to Cart  
• Cart: Item list + order form  
• Profile: Orders history  
• Admin Dashboard: List of restaurants with approval option  
• Restaurant Dashboard: Item listing form

# 10. Conclusion & Future Scope

SpeedyPlate successfully integrates essential food ordering features in a single platform. For the future, we plan to:  
• Integrate payment gateway (Razorpay/Stripe)  
• Enable real-time restaurant responses  
• Add delivery tracking  
• Improve analytics for restaurants  
This project offers a solid prototype foundation for full-scale development in the future.