ORDER ON THE GO PROJECT REPORT

Your On-Demand Food Ordering Solution

Team Members:

Usha Rani	23MH1A0593(**Team Leader**)
Vennapusa Ashok	23MH1A05E2
Chandrika Nallamilli	23MH1A05N5
Vasamsetti Bhavit Chanakya	24P35A0556

Brainstorming & Ideation

Problem Statement:

In today's fast-paced lifestyle, customers demand a convenient, efficient, and reliable food ordering experience.
Traditional food ordering systems often involve delays, lack of restaurant availability updates, and poor user interface.

Proposed Solution:

OrderOnTheGo is a responsive, on-demand food ordering web application that connects users with nearby restaurants in real-time.
Users can browse menus, place orders, make payments, and track deliveries—all from a single platform.
Restaurants can manage their menus, receive orders, and update availability seamlessly.

Target Users:

The primary users of this system include working professionals, students, urban families, office teams, and local restaurants. Users benefit from a quick and seamless food ordering experience, while restaurants can efficiently manage orders and increase their visibility.

Expected Outcome:

The expected outcome is a responsive, easy-to-use web application that enables users to browse menus, place food orders, and track deliveries in real-time. The system provides a reliable interface for both customers and restaurants, ensuring a smooth and efficient food ordering experience.

Requirement Analysis

Technical Requirements:

- **Frontend: HTML, CSS, JavaScript (React optional)**
- **Backend: Python (Flask/Django)**
- **Database: MySQL**
- **Payment Integration: Razorpay / Stripe**
- **Hosting: AWS**

Functional Requirements:

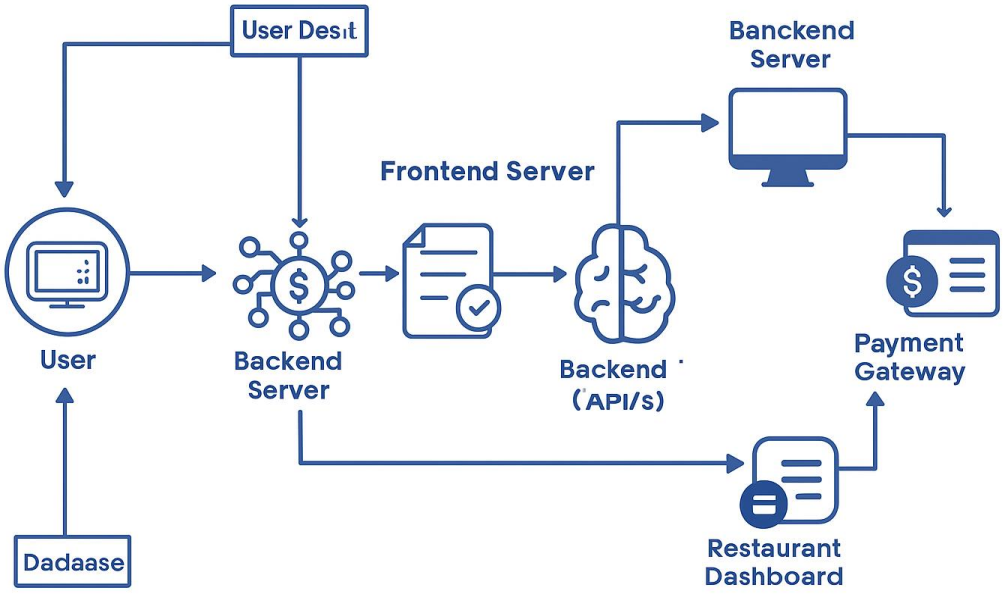
- User registration & login
- Browse restaurants & menus
- Cart functionality
- Real-time order placement
- Payment integration
- Restaurant order management
- Delivery tracking
- Admin dashboard

Constraints & Challenges:

- Real-time order updates
- Managing concurrent user sessions
- Integration with multiple restaurants
- Secure payment processing
- Mobile responsiveness

Project Design

System Architecture Diagram:



- **User Device → Frontend (UI) →** Sends user requests (menu, order)
- **Frontend → Backend Server (APIs) →** Processes orders, authentication
- **Backend → Database →** Stores user, restaurant, and order data
- **Backend → Payment Gateway →** Handles payment transactions
- **Backend → Restaurant Dashboard →** Manages menu and order updates

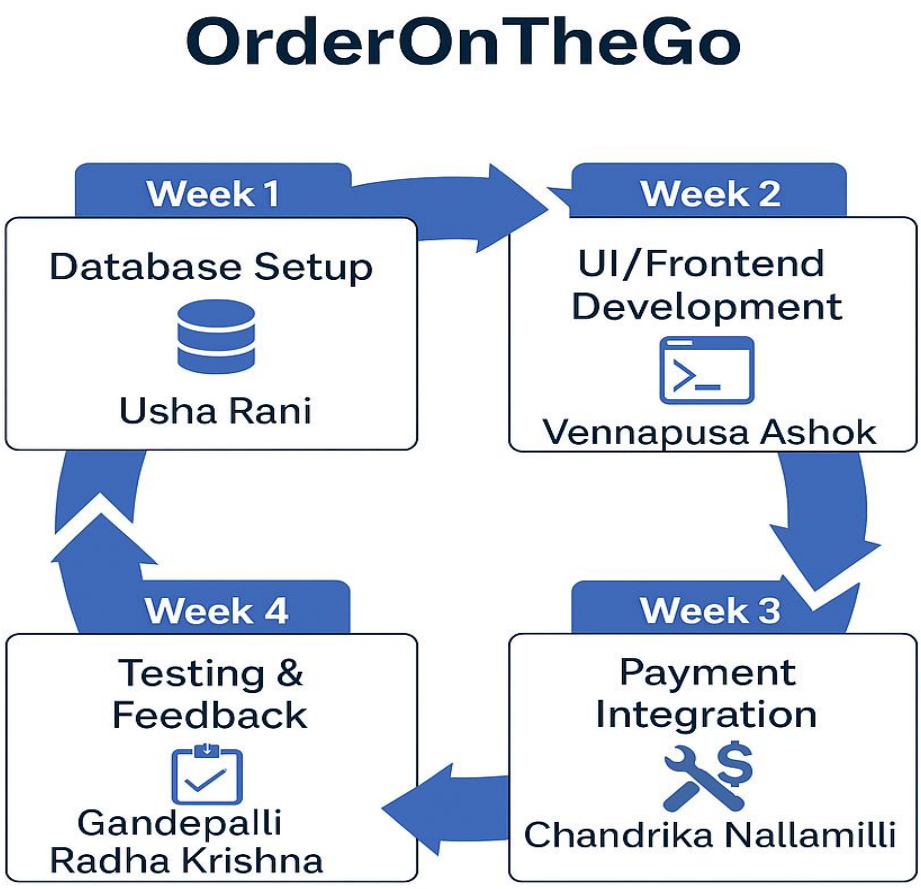
User Flow:

UI/UX Considerations:

- Clean and modern layout
- Mobile-first design
- Easy-to-use navigation
- Clear order status updates

Project Planning

Sprint Planning & Task Allocation :



Timeline & Milestones:

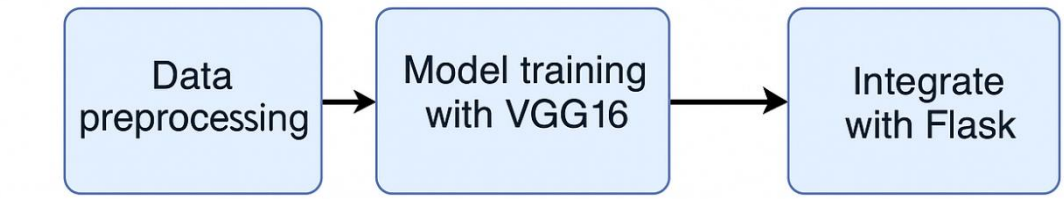
4 Weeks development plan with checkpoints after each phase.

Project Development

Technology Stack Used:

- **HTML/CSS –** Used to design and style the user interface for a responsive and engaging experience.
- **JavaScript –** Powers the dynamic behavior of the web pages and handles user interactions.
- **Python 3.9** – Backend programming language used to manage business logic and server-side operations.
- **Flask 2.2.5 –** Lightweight Python web framework used to build and deploy the backend server.
- **MySQL –** Database used to store user data, restaurant information, menu items, and orders.
- **Razorpay** – Payment gateway to handle secure online transactions.
- **Netlify** – Platform used to deploy and host the frontend of the application.

Development Process:



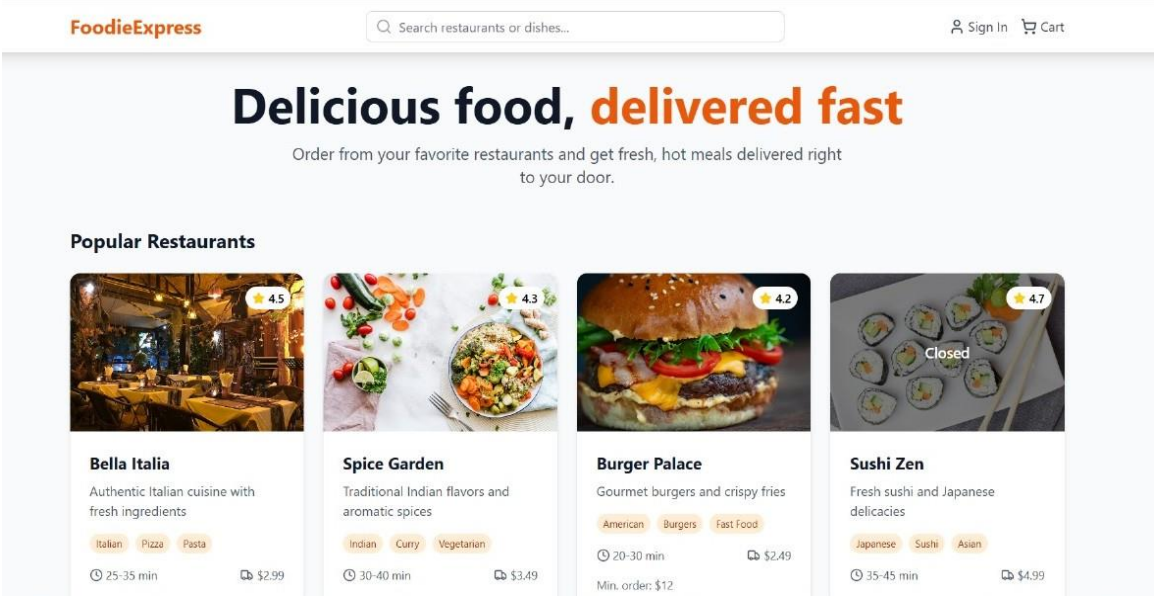
Challenges & Fixes:

- **Session timeout issues**: Fixed using JWT tokens
- **Slow API responses:** Optimized queries and endpoints.
- **Payment failures:** Added retry mechanism and validation.
- **Order mismatch:** Introduced order ID verification and logging

Functional & Performance Testing

Test Cases Executed:

- Login/logout functionality
- Cart management
- Payment process
- Order placement and delivery tracking
- Restaurant-side order handling



Bug Fixes & Improvements:

- Fixed login session bugs
- Improved database indexing for faster queries
- Enhanced mobile layout responsiveness

Final Validation:

- All core features implemented successfully
- Positive feedback in internal testing
- Meets the initial project goals

Deployment:

- Flask app tested successfully on local server
- App link : https://cheerful-gelato-d654b2.netlify.app/