

FOOD DELIVERY WEBSITE

23CSE461- Full Stack Framework

Snap Dish

Snap it. Eat it. Love it





Github URL:

<https://github.com/kireeti-ai/SnapDish>


Collaborators

- Organization : Snap Dish
- URL of Organization :<https://github.com/kireeti-ai/SnapDish>

GROUP MEMBERS

Roll No	Name	Official Email id	Contribution	Photo
CB.SC.U 4CSE230 16	VASISHTA	cb.sc.u4cse23016@ cb.students.amrita.e du	<ul style="list-style-type: none"> • Frontend: Build Home Page and Menu Page (React.js) Develop Navigation Bar and Footer Implement Search Bar • Backend: Develop User Authentication APIs (Sign Up, Sign In) Create Order Management APIs (Place/Cancel Order) Set up Database Models for users and orders 	
CB.SC.U 4CSE230 57	KIREETI	cb.sc.u4cse23057@ cb.students.amrita.e du	<ul style="list-style-type: none"> • Frontend: Design Restaurant Listing Page and Item Details Page Develop Cart and Checkout Components Implement Order Confirmation Page • Backend: Develop Restaurant and Menu APIs Integrate Payment Processing AP Implement Order History and Invoices 	

GROUP MEMBERS

Roll No	Name	Official Email id	Contribution	Photo
CB.SC.U4 CSE23212	Tarak	cb.sc.u4cse23212@ cb.students.amrita.e du	<ul style="list-style-type: none">• Frontend: Build Order Tracking Page and User Profile Page Ensure Mobile Responsiveness Ensure Accessibility Compliance• Backend: Set up Admin APIs for managing restaurants and orders Implement Discounts, Refunds, Cancellation Handling Handle Basic Data Validation	

Abstract

The Food Delivery Website is an online platform developed to help users easily browse restaurants, explore menus, place orders, make payments, and track deliveries in real time. The product offers key features such as personalized recommendations, live order tracking, secure payment gateways, and a comprehensive admin dashboard to manage restaurants, menus, users, and delivery operations. While it resembles popular services like Zomato and Swiggy in its core functions, it stands out by offering lower commissions for small businesses, IoT-based delivery monitoring, and advanced customization options. The application is fully responsive, using a mobile-first design to ensure smooth performance across smartphones, tablets, and desktops. It provides detailed reports including order summaries, sales analytics, delivery performance metrics, and user activity logs to help stakeholders monitor operations. Testing for the product will be carried out through unit tests of backend APIs, component testing on the frontend, end-to-end test scenarios, and user acceptance testing to ensure reliability, security, and an excellent user experience.

List of similar products and features

Product Name	URL	Features	What features are missing in the product? (Can also include responsiveness, Technology aspects)
Swiggy	www.Swiggy.com	Restaurant search, online ordering, reviews, live tracking	reviews, Weather check for delivery agents, more commission for the agents
Zomato	www.Zomato.com	Quick ordering, real-time tracking, subscriptions	Less focus on low commissions, basic offline responsiveness

Uniqueness of product

- This food delivery platform stands out because it combines real-time order tracking, AI-driven recommendations, and seamless payment options to enhance user experience. Unlike existing services like Zomato or Swiggy, this product offers advanced personalization, faster load times across devices, and integrated loyalty rewards for frequent users. Its design is responsive and accessible, ensuring smooth usage on mobile and web. A unique advantage is that if a user cancels an order, they are only charged 10% of the amount instead of the full price, while the food is resold to other customers at a discounted rate, reducing waste and improving affordability. Based on demographic analysis, there is high demand for localized, affordable delivery in Tier 2 and Tier 3 cities, which this platform aims to address. By incorporating modern technologies such as cloud hosting, automated notifications, and secure payment gateways, the product delivers reliability and innovation that meets evolving customer expectations.

Full Stack AI product

- **Personalized Recommendations** AI analyzes user history and preferences to suggest dishes, restaurants, and offers in real time.
- **Smart Search and Voice Ordering** Voice commands and image-based search make ordering easier and faster for all users.
- **Dynamic Pricing and Cancellation Management** AI automatically applies discounts on cancelled orders and resells them to nearby users at reduced prices.
- **Fraud Detection and Security** AI algorithms detect suspicious activities and ensure secure transactions.
- **Predictive Analytics for Demand Forecasting** AI predicts peak hours, popular dishes, and user demand trends to optimize delivery resources.

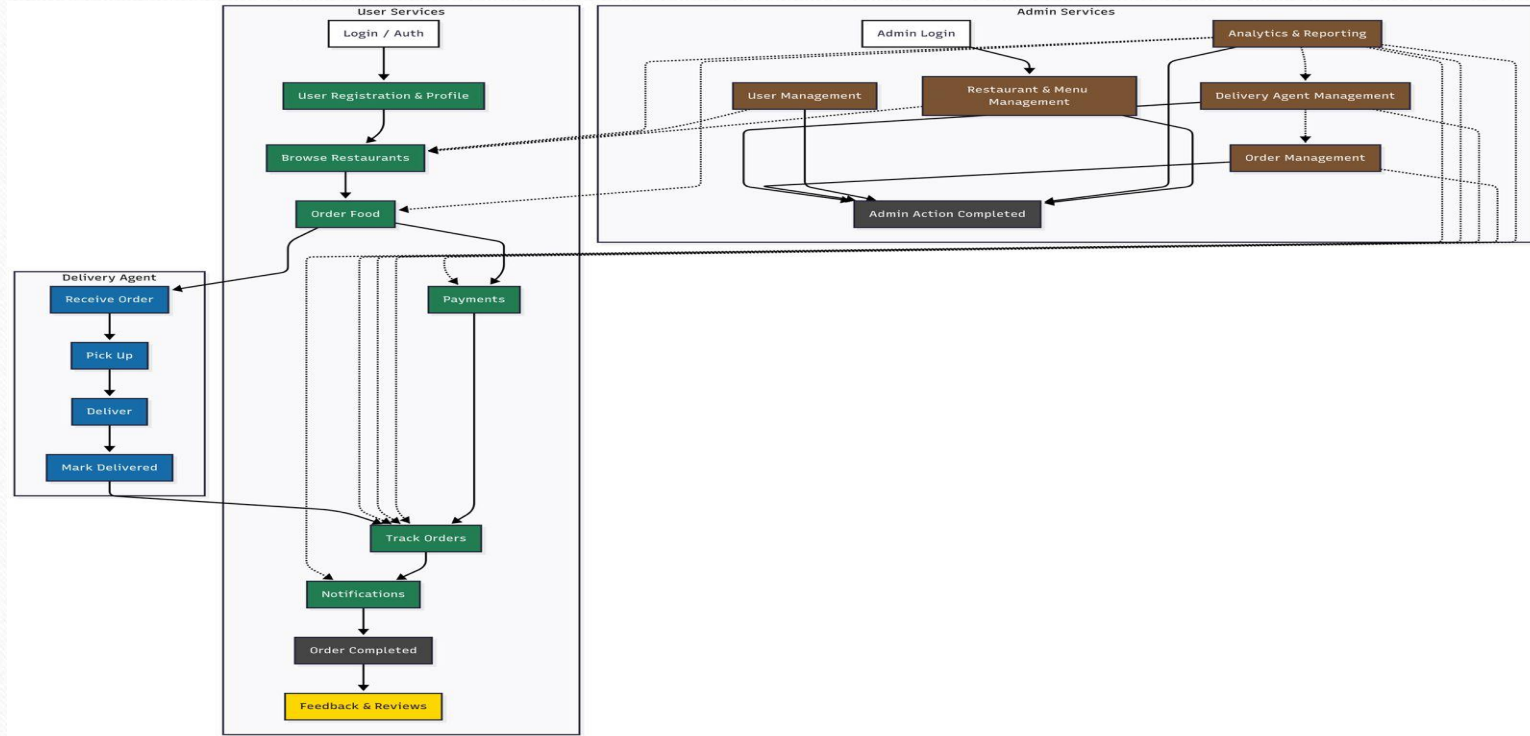
Users/Roles

User Name	Role	Type of functions expected by user
Customer	End User	<ul style="list-style-type: none">a. Browse Restaurants and menusb. Place and Cancel ordersc. Make paymentsd. Track delivery statuse. View order historyf. Manage profileg. Address
Restaurant Owner	Vendor	<ul style="list-style-type: none">a. add/update restaurant detailsb. Mange Menus and pricingc. Accept or reject orderd. Mark orders as preparede. Process cancellations and refund
Delivery agent	Delivery Personnel	<ul style="list-style-type: none">a. View assigned deliveriesb. Update delivery statusc. Access delivery routesd. Customer info

Users/Roles

User Name	Role	Type of functions expected by user
Administrator	System Admin	a. Manage all User b. Accounts(Approve-block) c. Restaurants and delivery agent d. Orders and payments e. Handle disputes and refunds

Block Diagram



Module Details

Module Name	Sub Module	Functions
Restaurant Browsing	Restaurant Discovery	<ol style="list-style-type: none">1) Search Restaurants by Location2) Filter by Cuisine & Ratings3) View Menus
	Favorites	<ol style="list-style-type: none">1. Save Favorite Restaurants2. View Saved Restaurants
Order Management	Cart & Checkout	<ol style="list-style-type: none">1. Add Items to Cart2. Customize Order3. Apply4. Discounts/Coupons
	Payment Processing	<ol style="list-style-type: none">1. Choose Payment Method2. Secure Checkout3. Get Payment Confirmation
User Account	Profile & Preferences	<ol style="list-style-type: none">1. Create Account2. Save Addresses3. Manage Preferences

Module Details

Module Name	Sub Module	Functions
Reviews & Feedback	Ratings & Reviews	<ol style="list-style-type: none">1. Rate Restaurants2. Submit Reviews3. View Ratings
Admin Management	Restaurant & Menu Management	<ol style="list-style-type: none">1. Add/Update Restaurants2. Manage Menus3. Enable/Disable Listings
	User Management	<ol style="list-style-type: none">1. Approve/block users2. Manage permissions3. Enable/disable listings
	Delivery Agent Management	<ol style="list-style-type: none">1. -assign Deliveries2. -Track Delivery Status

What kind of responsiveness is planned to provided in the product?

- The product allows restaurants to onboard in less than 24 hours, with instant menu setup and payment integration, enabling them to start receiving orders immediately.
- Users stay engaged through personalized recommendations, loyalty rewards, real-time order tracking, and AI-powered chat support that guides them throughout the ordering process.
- The platform leverages SEO optimization, Google My Business integration, social media marketing, and referral campaigns to improve visibility and drive organic traffic ahead of competitors like Zomato.
- The product uses React.js for fast responsive interfaces, Node.js backend APIs, AI recommendation engines, real-time IoT delivery tracking, and secure payment gateways to ensure a seamless experience.

Technology Stack

- Front End - HTML5, CSS3, JavaScript, React.js
- Back End - Node.js + Express.js
- Scripting language - JavaScript (frontend and backend)Python (for AI modules)
- Editor - Visual Studio Code
- Language -
- Server - AWS EC2
- Testing Tool - Jest
- Framework Details:

1. React.js for frontend SPA

2. Express.js for backend REST APIs

Reference

- Swiggy(www.swiggy.com)
- Zomato(www.Zomato.com)