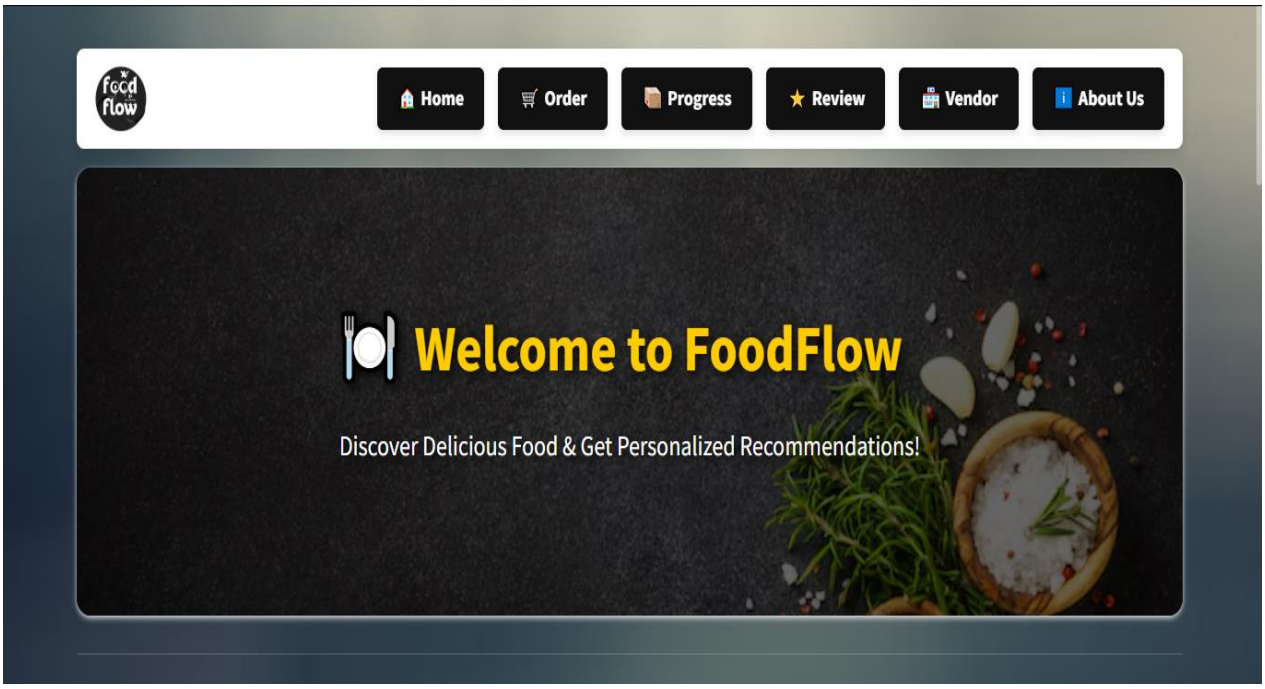
FoodFlow



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Project Overview:

Technology Stack:

- ✓ Frontend & UI: Streamlit (Python based framework)
- ✓ Backend & Database: SQLite3 (Lightweight relational database)
- ✓ Visualization & Analytics: Plotly, Pandas
- ✓ Authentication & Session Management: Stramlit session state

The Food Flow project is a food recommendation and ordering system designed to enhance the food selection process by providing categorized recommendations and an easy to use ordering interface. The system enables users to browse food items by category, recommendations, place order, and track order progress, review appears in histogram and also taking user feedback, while vendors can list, update, and manage their products.

Aim:

The aim of this project is to develop a food recommendation system that provided users with an efficient and user-friendly platform to select and order food based on categorized recommendations. The system enhances user experience by ordering process with cart management, order tracking, and vendor functionalities.

Purpose:

The purpose of this project is to facilitate the users in selecting food more efficiently by categorizing options into seven distinct categories. By offering categorized recommendations and minimizing the need for manual searches, the system saves user time and improves their ordering experience. Additionally, the platform provides vendors with functionalities to manage their food items, ensuring a seamless interaction between buyers and sellers.

Uniqueness & Impact:

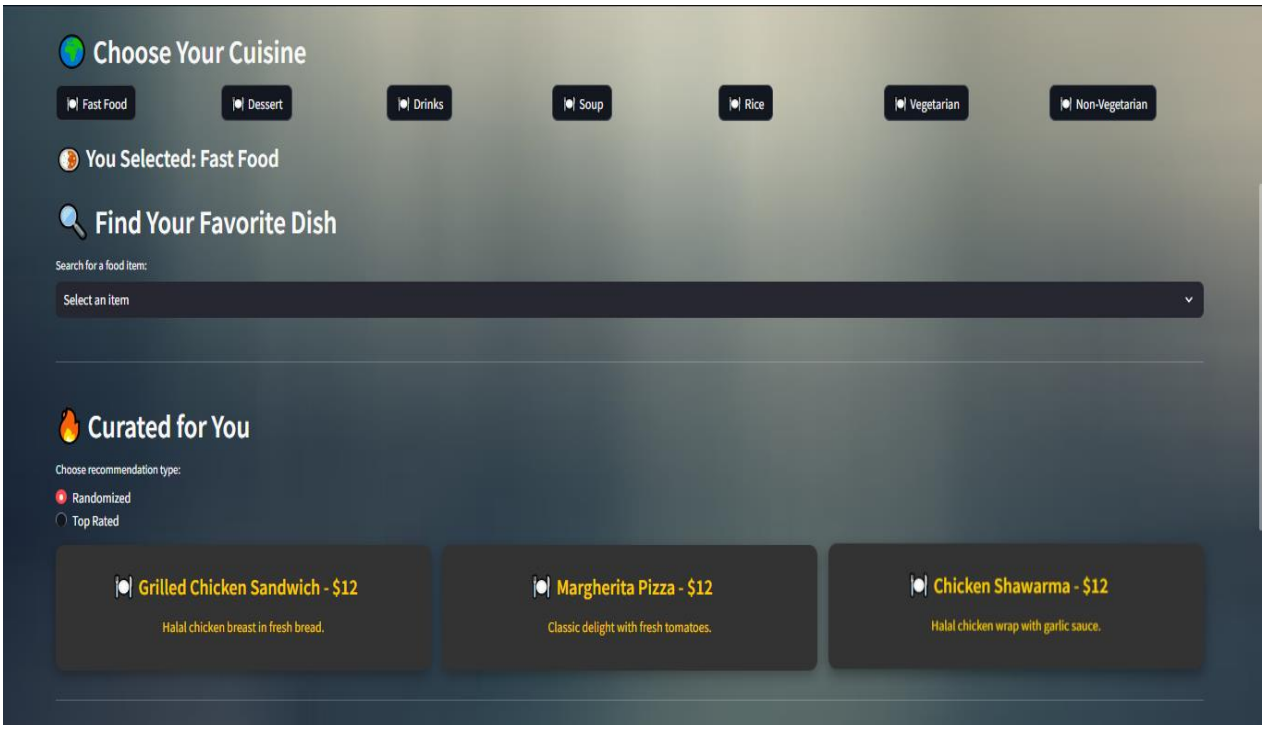
Unlike traditional food ordering applications, Food Flow offers:

- Dual recommendation techniques to improve food selection efficiency.
- Vendor dashboard & analytics, allowing sellers to manage their products and efficiently.
- Halal food accessibility, ensuring users can easily find and order verified Halal meals.

Key Features:

1. Food Recommendation System:

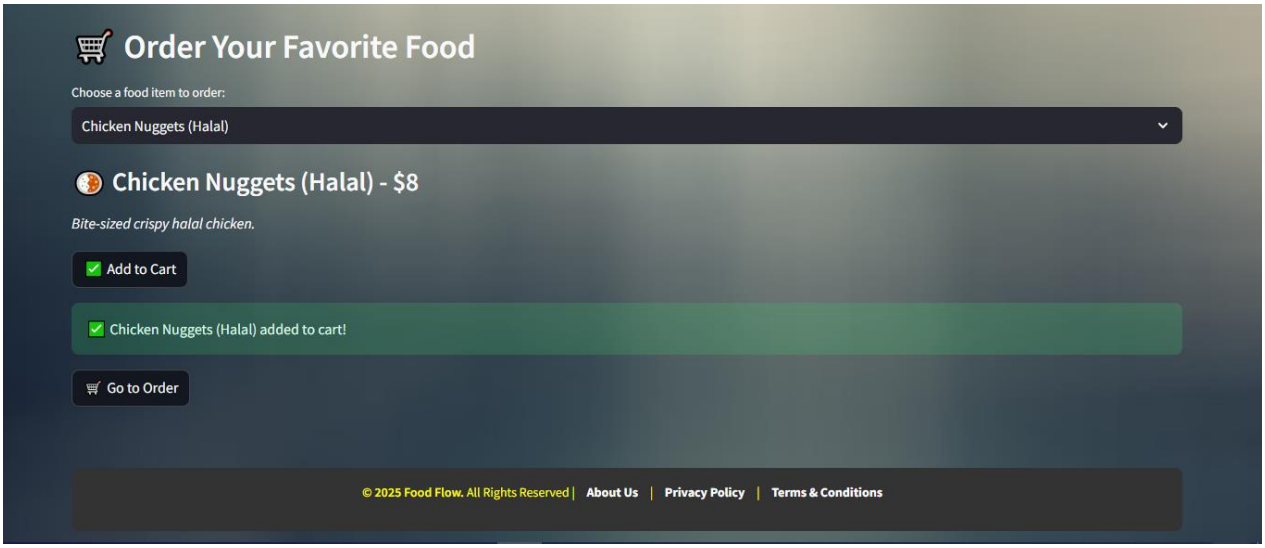
- User can choose from seven food categories: Fast Food, Desert, Drink, Soup, Rice, Vegetarian, and Non Vegetarian.
- **Two Randomized methods:**
- Randomized Recommendations: Display food options randomly according to the selected category.
- Top-Rated Recommendations: Suggest food based on user reviews and ratings.

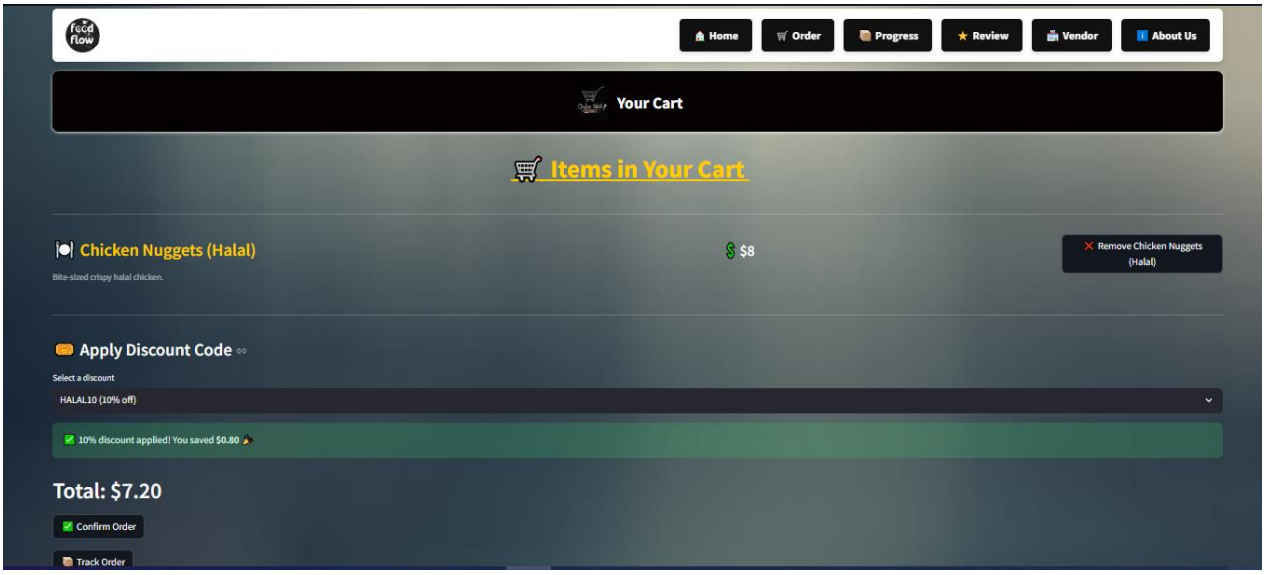


2. Food Ordering & Cart Management:

 User can add food items to their cart, review the selection, and remove items if needed.

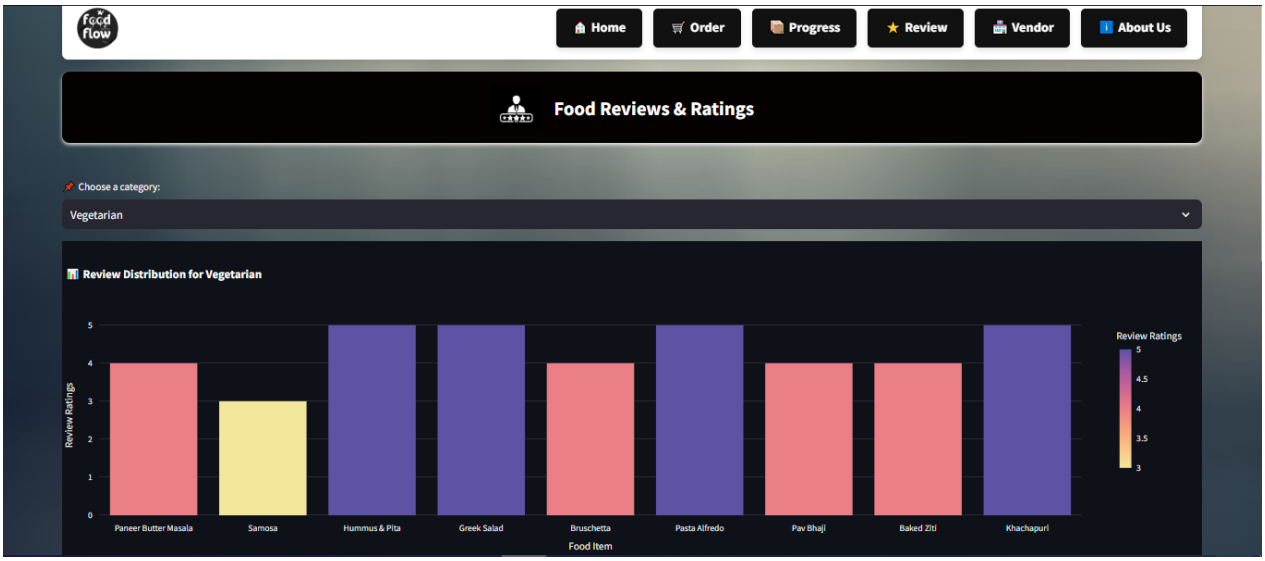
 Once the order is confirmed, user can track the order status in real time.





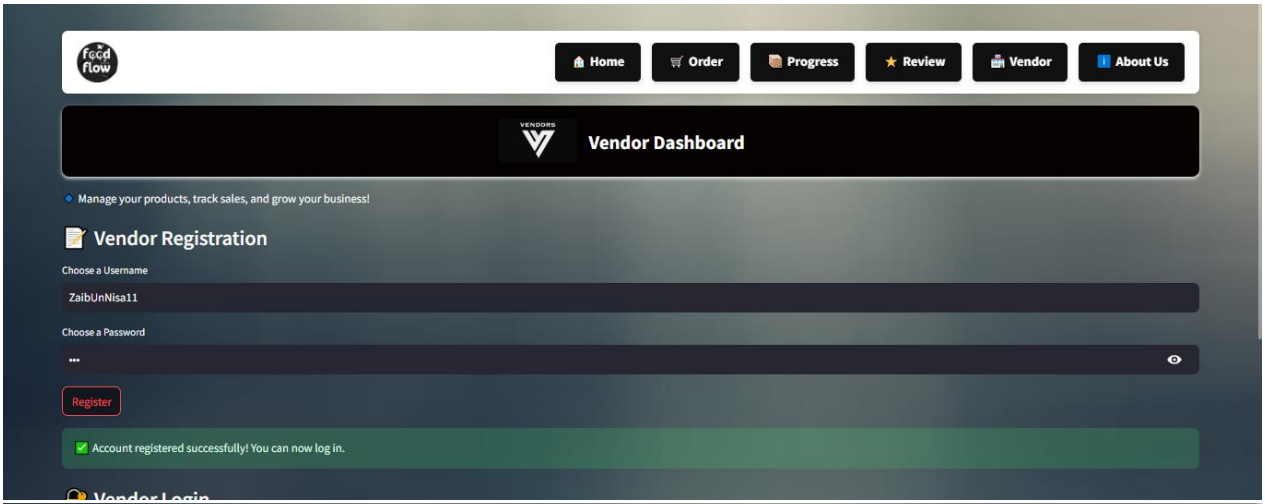
3. User Review & Rating System:

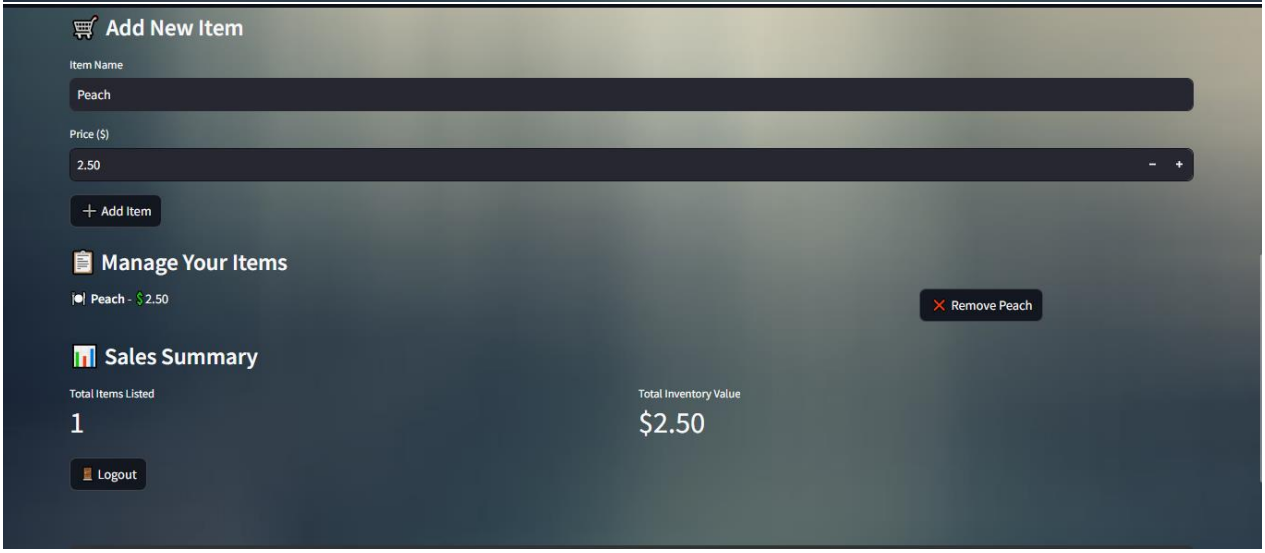
- User can submit reviews, rate food items (1-5 stars), and leave comments.
- The system provides a bar chat visualization of food ratings within each category.



4. Vendor Management System:

- Vendors can register, log in, and manage their product listings.
- Sales analytics are provided, including the total number of listed items and inventory value.

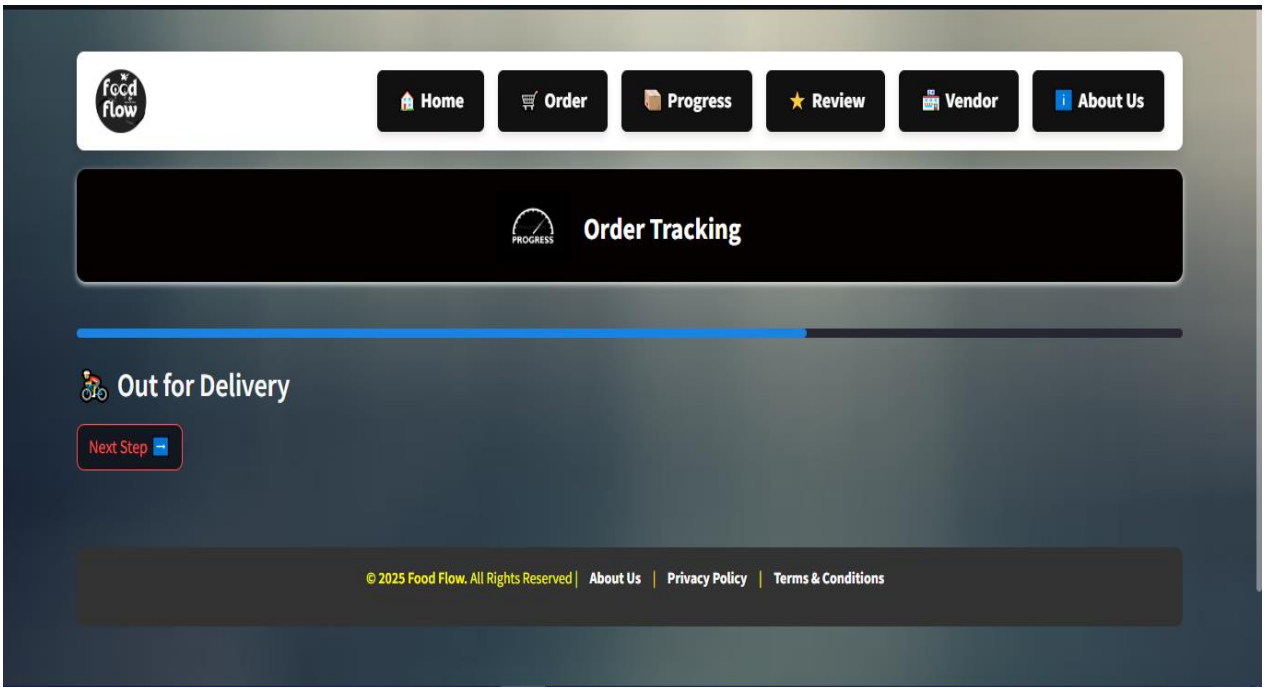


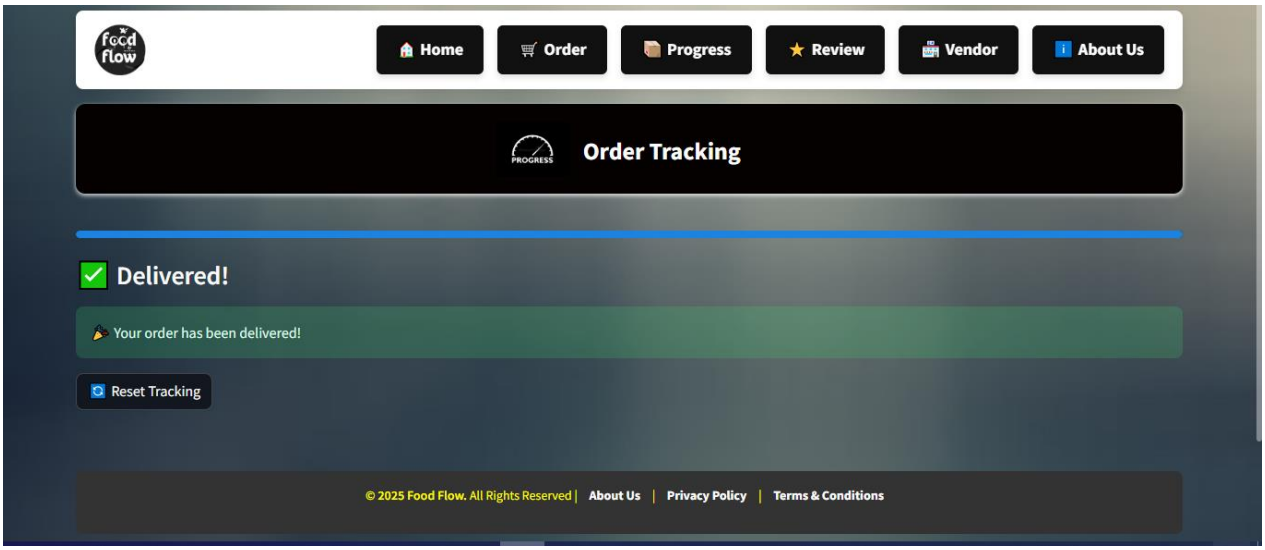


5. Order Tracking System:

 User can monitor their order progress through four stages:

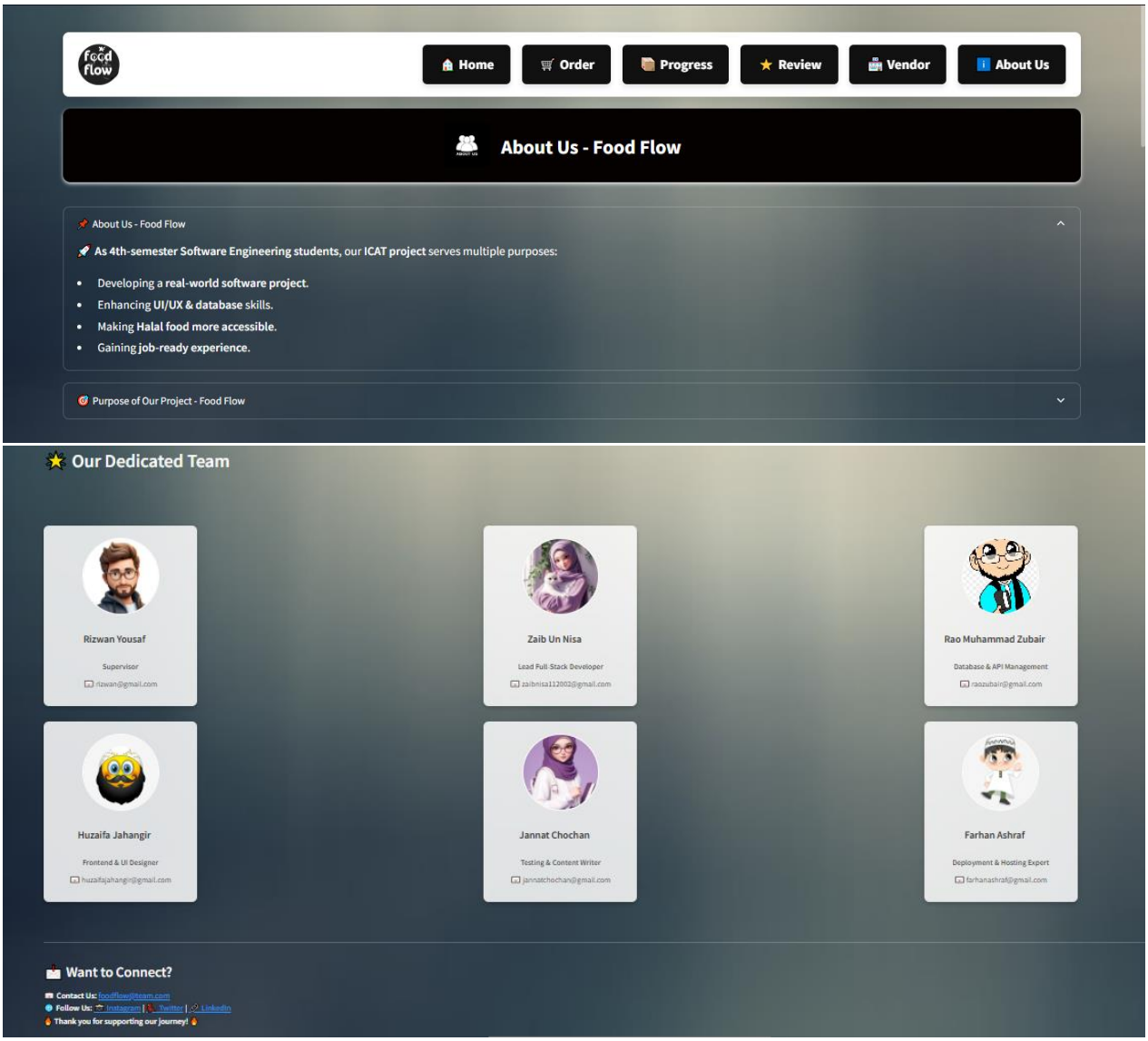
- ✓ Order Received
- ✓ Preparing Your Food
- ✓ Out for Delivery
- ✓ Delivered





6. About US & Team Details

- The About Us page highlights the project's purpose, goals, and the development team.
- Team member details (roles, responsibilities, and contact information) are displayed in a visually appealing layout.



Future Enhancements:

Potential improvements include:

- AI-based personalized recommendations based on user preferences.
- Real-time order tracking with delivery updates.
- Payment gateway integration for seamless transactions.
- Expanded vendor features, such as sales reporting and customer insights.

Conclusion:

The Food Flow project successfully delivers an **efficient** and **interactive** food recommendation and ordering system. By incorporating categorized recommendations, user reviews, and vendor management, the platform **enhances** the overall food selection and ordering experience.

This system effectively reduces search time, improves food accessibility, and enables vendors to manage their products efficiently. With a secure authentication system, an intuitive user interface, and data visualization tools, the project demonstrates **practical software engineering principles.**

Looking ahead, further enhancements such as AI-driven personalized recommendations, realtime tracking, and payment integration can improve the system's capabilities and user experience. The project not only showcases full-stack development skills but also has **real-world applications** in the **food-tech industry**.

Why we choose Streamlit for Our project?

We choose streamlit for my project because it is **simple**, **fast**, and **powerful framework** for building **interactive web applications** using Python. Unlike flask and Django, Streamlit required **no frontend coding.**

For our project, **Food Flow**, Streamlit offers:

- ✓ **Easy UI development:** Pre-built widgets for seamless user interaction.
  Examples of Streamlit Widgets:
  st.button ("Click Me"): A clickable button. st.text_input ("Enater ur Name"): Atext input field. st.selectbox ("Chooose an option", ["A", "B", "C"]): A dropdown menu. st.slider ("Pick a Number" 1, 100): A slider to select a value.
  st.file_uploader ("Upload File"): A file upload option.
- ✓ **Data & AI Integration:** Supports ML models, recommendation systems, and visualizations.
- ✓ **Quick Development:** No need for complex backend setup can be hosted on the cloud instantly.
- ✓ **Real-Time Updates:** Auto refreshing UI without manual reloads.

Since our project involves food recommendations, order management, and interactive visuals, Streamlit provides the **perfect balance of simplicity and functionality**.


THANKS
FOR
YOUR
TIME