OBJECTIVES

The **Online Food Delivery Project** is designed with the following key objectives to enhance the user experience, security, and functionality of the platform:

1. **Develop a User-Friendly Online Food Ordering Platform** ₒ Ensure an intuitive and seamless interface for customers and restaurant owners. ₒ Simplify the ordering process with clear navigation, categorized menus, and order tracking. ₒ Provide a hassle-free experience for users across different devices and screen sizes.

2. **Implement a Secure Authentication System Using JWT and Spring Security** ₒ

   - Utilize **JSON Web Tokens (JWT)** for secure and efficient user authentication.
   - Integrate **Spring Security** to enforce authentication and authorization protocols
     - Prevent unauthorized access and protect sensitive user data.

3. **Enforce Role-Based Access Control (RBAC) with Defined User Roles**

   ₒ Implement distinct user roles:

   - **ROLE_CUSTOMER** – Allows users to browse menus, place orders, and track order status.

   - **ROLE_RESTAURANT_OWNER** – Enables restaurant owners to manage their menu, process orders, and handle customer interactions.

   ₒ Restrict access to certain functionalities based on assigned roles to ensure security and proper functionality.

4. **Integrate Secure Payment Processing Using Stripe Payment Gateway**
   ○ Implement **Stripe Payment Gateway** to handle transactions securely and efficiently. ○ Support multiple payment methods, including credit/debit cards, UPI, and digital wallets. ○ Ensure encrypted payment processing to protect user financial information.

5. **Ensure Efficient State Management Using Redux**
   ○ Utilize **Redux** for centralized state management to handle complex application states. ○ Improve performance and maintainability by managing user authentication, cart items, and order history efficiently. ○ Facilitate seamless data flow between components for a smooth user experience.

6. Create a Visually Appealing and Responsive UI/UX Using Tailwind CSS and

Material-UI (MUI) ○ Leverage **Tailwind CSS** for utility-first styling and rapid UI development. ○ Use **Material-UI (MUI)** components to enhance design consistency and improve user interaction. ○ Ensure full responsiveness across desktops, tablets, and mobile devices for an optimal browsing experience.