Fast React Pizza – Project Report

# 1. Project Overview

Fast React Pizza is a full-stack pizza-ordering application built using React and Redux Toolkit.  
It allows users to browse a menu, add items to a cart, choose delivery options, and place an order.  
The application features dynamic data loading, cart management, and real-time order tracking.

# 2. Tech Stack

- React (functional components, hooks)  
- Redux Toolkit (state management with slices and thunks)  
- React Router DOM (routing)  
- TailwindCSS (styling)  
- Vite (fast bundler)

# 3. Features and Data Flow

1. Menu items are fetched from an API and displayed on the menu page.  
2. Users can add or remove pizzas from the cart.  
3. Delivery can be set to normal or priority (adds 20% cost).  
4. Orders are submitted via a POST API with user details and cart contents.  
5. Order ID is generated and used to fetch order status for tracking.

# 4. Data Flow Description

- menuSlice fetches menu items and caches them.  
- cartSlice manages all cart operations including item quantity and priority toggle.  
- userSlice stores user-provided name and optionally GPS location.  
- orderSlice handles order submission and retrieval.  
- Data flows from UI → Redux Store → API and back.

# 5. Capstone Project Additions

To convert this into a formal capstone project, include the following:  
1. Data Flow Diagram (DFD)  
2. UML Diagrams:  
 - Use Case Diagram  
 - Class Diagram  
 - Sequence Diagram  
 - Component Diagram  
3. Database Schema (if backend is added)  
4. Test cases or test plan  
5. Deployment process (Netlify, Vercel, or manual setup)

# 6. Interview Walkthrough Script

“In this project I used React with Redux Toolkit and React Router. The app flow is: first the user enters their name, then they’re taken to the menu screen where pizzas are fetched dynamically from an API. Redux stores global slices like user info, menu data, cart content, and order info. Users can add items to their cart, toggle priority, input details or auto-fill via GPS, then submit the order via an API call which returns a unique order ID. I then use that ID to fetch the order’s status and display it. Styling was handled by Tailwind and the build is powered by Vite.”