Capstone Project Report: Fast React Pizza

1. System Overview

Fast React Pizza is a modern frontend web application developed using ReactJS and Redux Toolkit. The app allows users to browse a pizza menu, add items to a cart, select delivery priority, input delivery details, and place an order. State management is handled with Redux, while asynchronous operations utilize Redux Thunks.

2. Functional Modules

- Menu Display

- Add to Cart

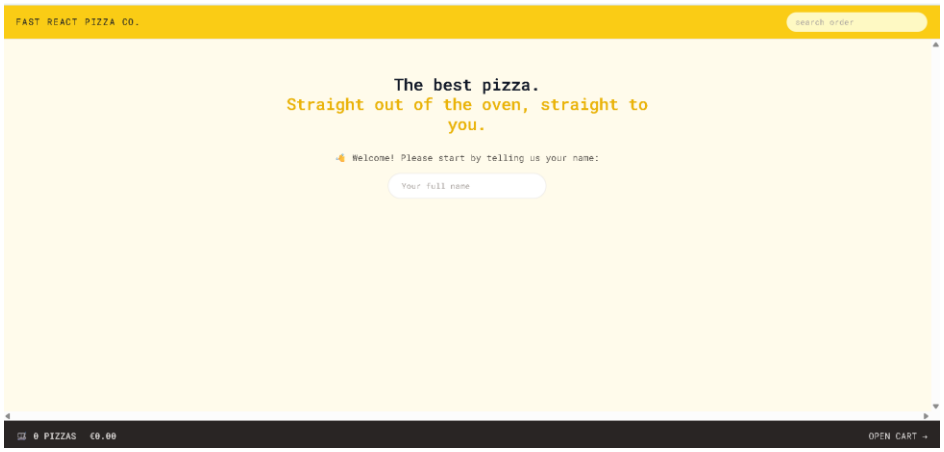
- Choose Delivery Priority

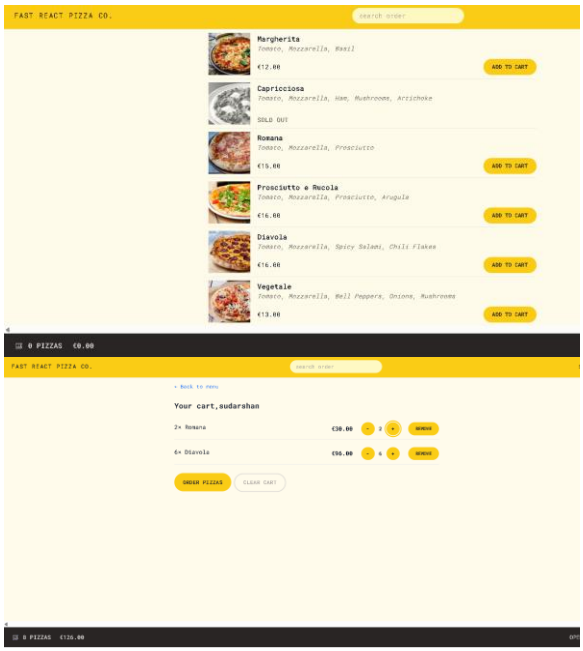
- Enter User Details

- Place Order

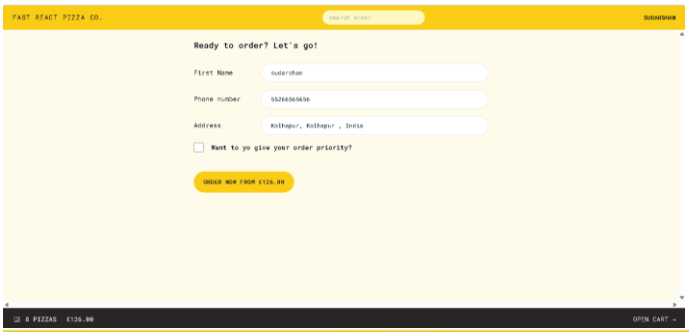
- Track Order (based on mocked API or UI state)

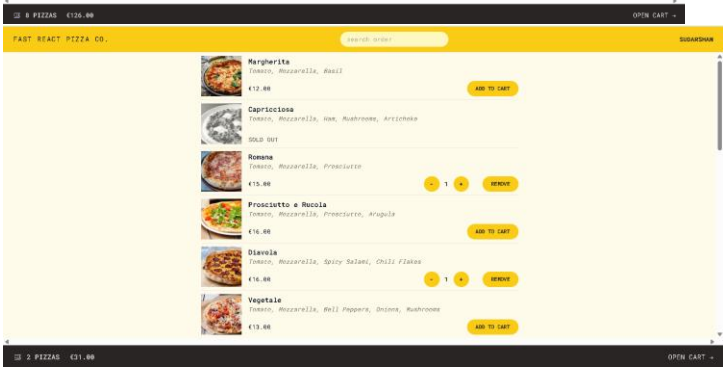
Ui

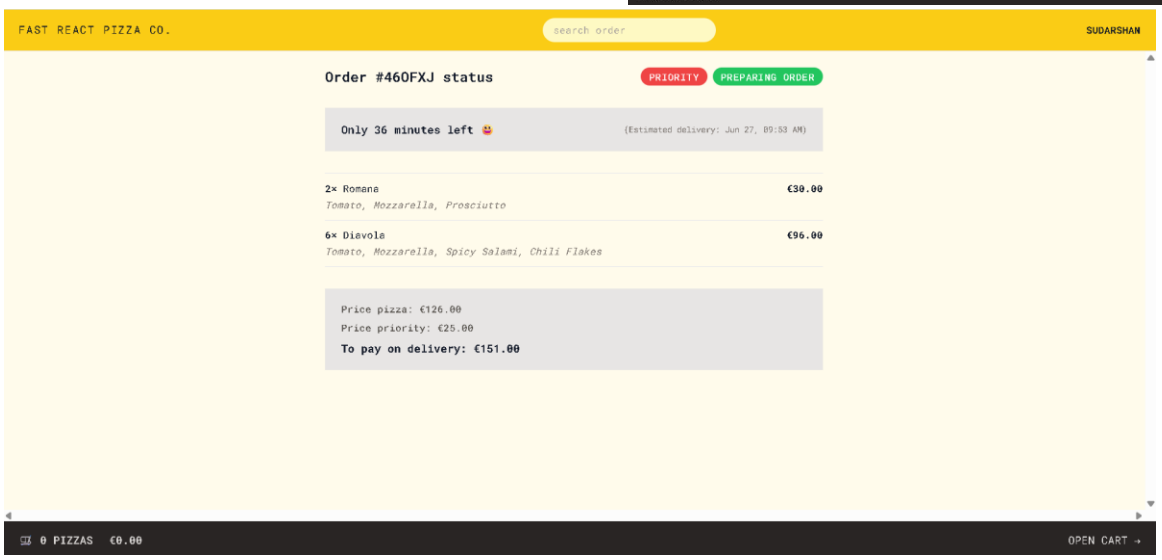



FAST REACT PIZZA CO.
search order
Margherita
Tomato, Mozzarella, Basil
€12.00
ADD TO CART
Capricciosa
Tomato, Mozzarella, Ham, Mushrooms, Artichoke
SOLD OUT
Romana
Tomato, Mozzarella, Prosciutto
€15.00
ADD TO CART
Prosciutto e Rucola
Tomato, Mozzarella, Prosciutto, Arugula
€16.00
ADD TO CART
Diavola
Tomato, Mozzarella, Spicy Salami, Chili Flakes
€16.00
ADD TO CART
Vegetale
Tomato, Mozzarella, Bell Peppers, Onions, Mushrooms
€13.00
ADD TO CART
0 PIZZAS €0.00

FAST REACT PIZZA CO.
search order
← Back to menu
Your cart,sudarshan
2× Romana
€30.00
REMOVE
6× Diavola
€96.00
REMOVE
ORDER PIZZAS
CLEAR CART

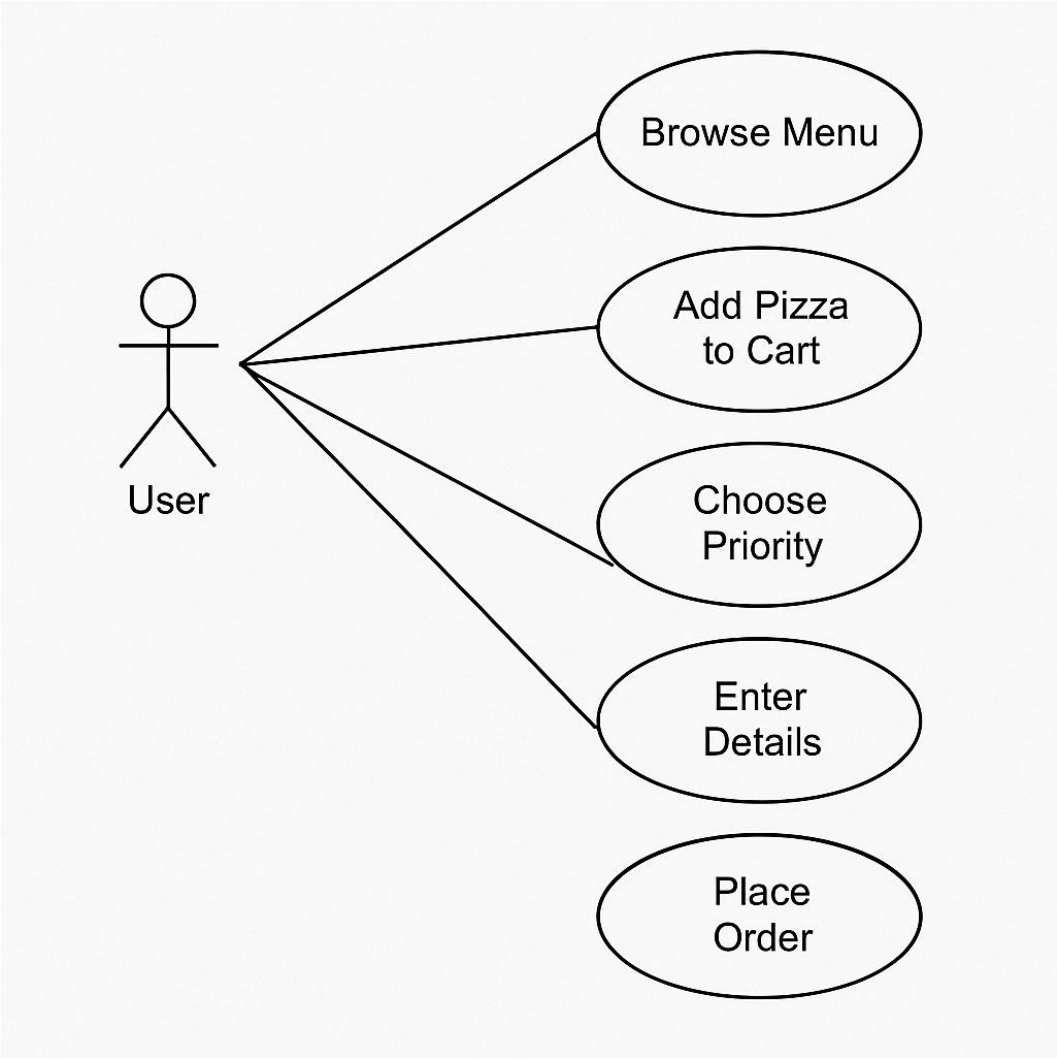

FAST REACT PIZZA CO.
search order
SUDARSHAN
Ready to order? Let's go!
First Name
sudarshan
Phone number
5526565656
Address
Kolhapur, Kolhapur , India
Want to yo give your order priority?
ORDER NOW FROM €126.00
8 PIZZAS €126.00
OPEN CART →


FAST REACT PIZZA CO.
search order
SUDARSHAN
Margherita
Tomato, Mozzarella, Basil
€12.00
ADD TO CART
Capricciosa
Tomato, Mozzarella, Ham, Mushrooms, Artichoke
SOLD OUT
Romana
Tomato, Mozzarella, Prosciutto
€15.00
1
REMOVE
Prosciutto e Rucola
Tomato, Mozzarella, Prosciutto, Arugula
€16.00
ADD TO CART
Diavola
Tomato, Mozzarella, Spicy Salami, Chili Flakes
€16.00
1
REMOVE
Vegetale
Tomato, Mozzarella, Bell Peppers, Onions, Mushrooms
€13.00
ADD TO CART
2 PIZZAS €31.00
OPEN CART →

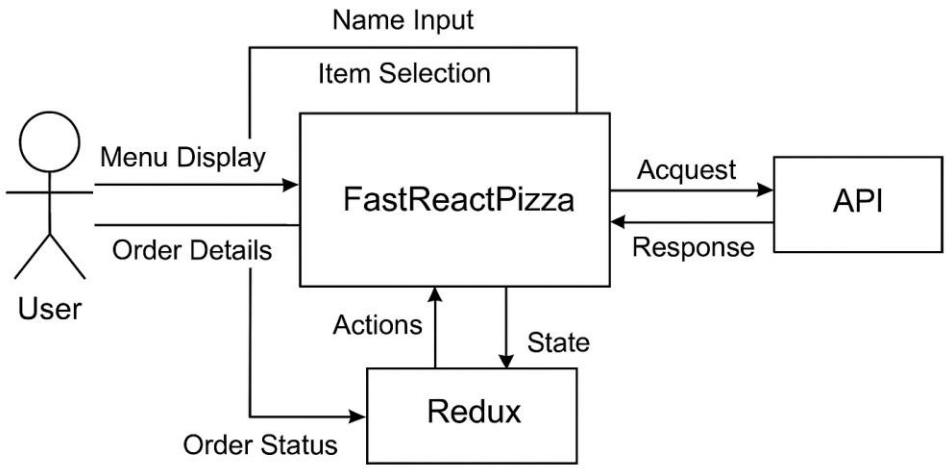

FAST REACT PIZZA CO.
search order
SUDARSHAN
Order #460FXJ status
PRIORITY
PREPARING ORDER
Only 36 minutes left 😃
(Estimated delivery: Jun 27, 09:53 AM)
2× Romana
€30.00
Tomato, Mozzarella, Prosciutto
6× Diavola
€96.00
Tomato, Mozzarella, Spicy Salami, Chili Flakes
Price pizza: €126.00
Price priority: €25.00
To pay on delivery: €151.00
0 PIZZAS €0.00
OPEN CART →

3. UML Diagrams

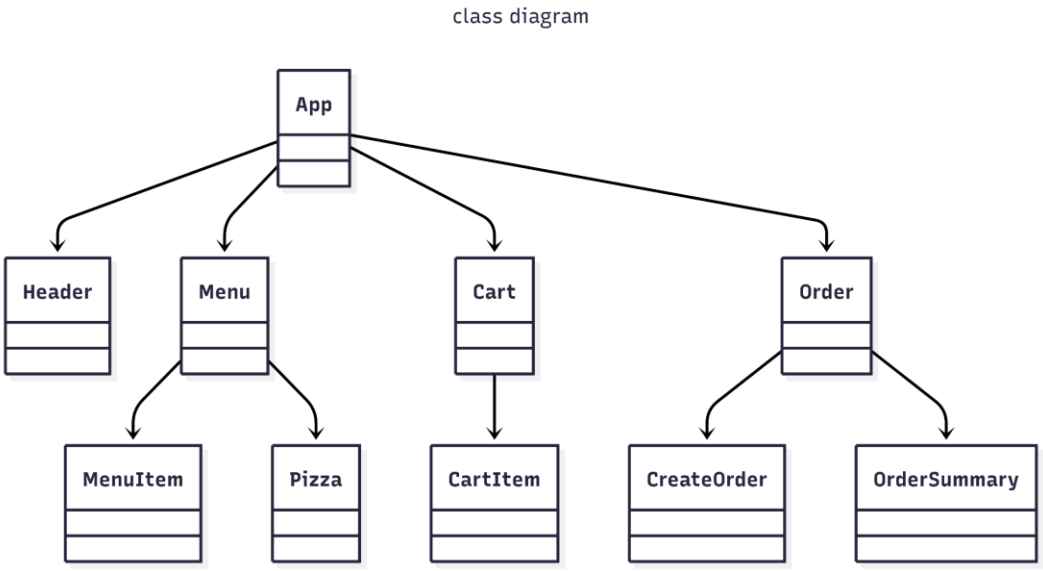
3.1 Use Case Diagram



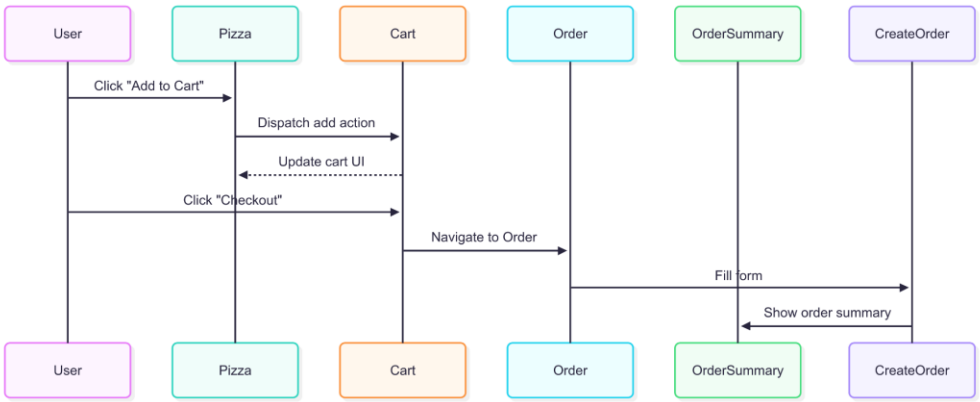
3.2 Data Flow Diagram (DFD)



3.3 Class Diagram

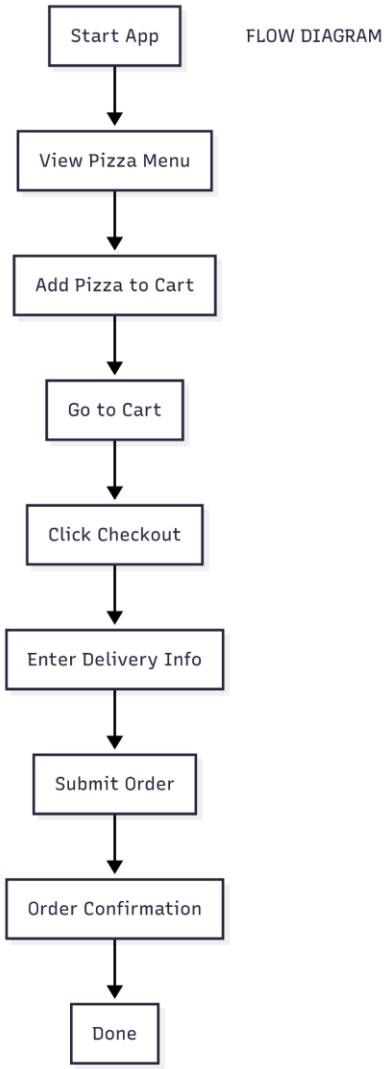


3.4 Sequence Diagram: Add to Cart

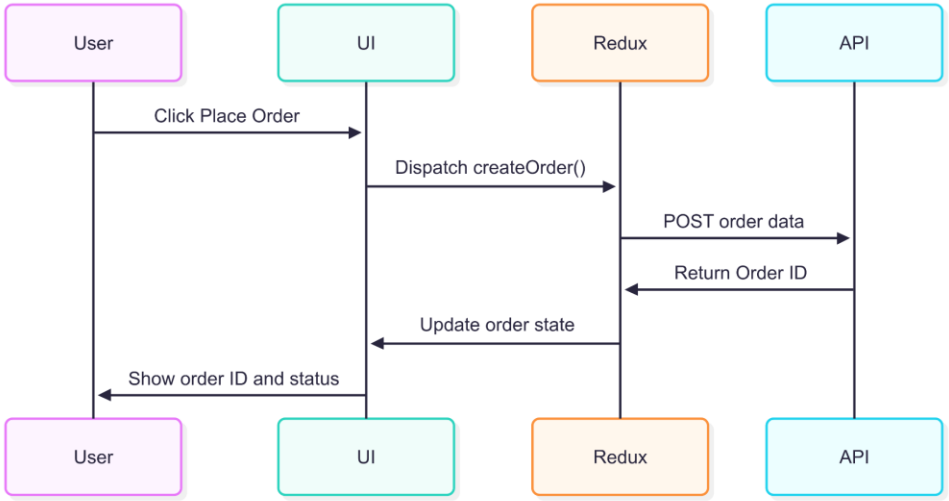


3.5

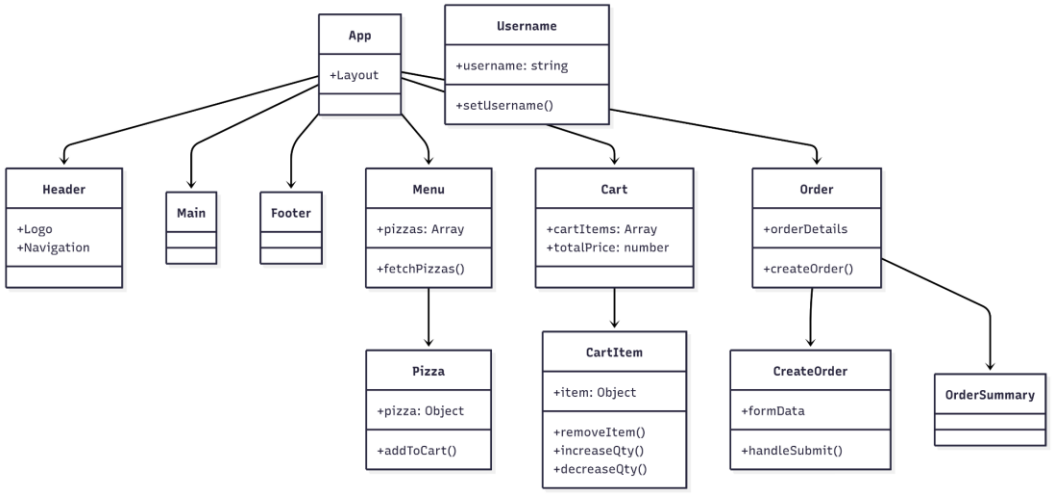
Sequence Diagram: Place Order



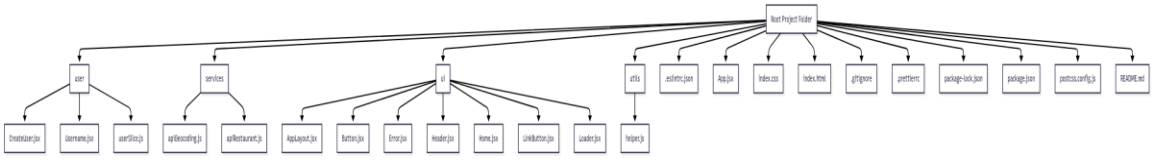
3.6 User Flow Diagram



3.7 Component Level Class Diagram



3.8 Redux Slice Interaction Diagram



4. Technologies Used

- ReactJS

- Redux Toolkit

- Vite

- Tailwind CSS / CSS Modules

- React Router

- Custom Hooks

5. 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.

6. 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.

7. Capstone Project Enhancements

- Data Flow Diagram (DFD)

- UML Diagrams

- Database Schema (if backend is added)

- Test cases or test plan

- Deployment process (Netlify, Vercel, or manual setup)

8. 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.