



**Knight Foundation
School of Computing
and Information Sciences**

YumFIU

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Product Owner: Michael Mullin, FIU Embrace

Instructor: Dr. Masoud Sadjadi, FIU

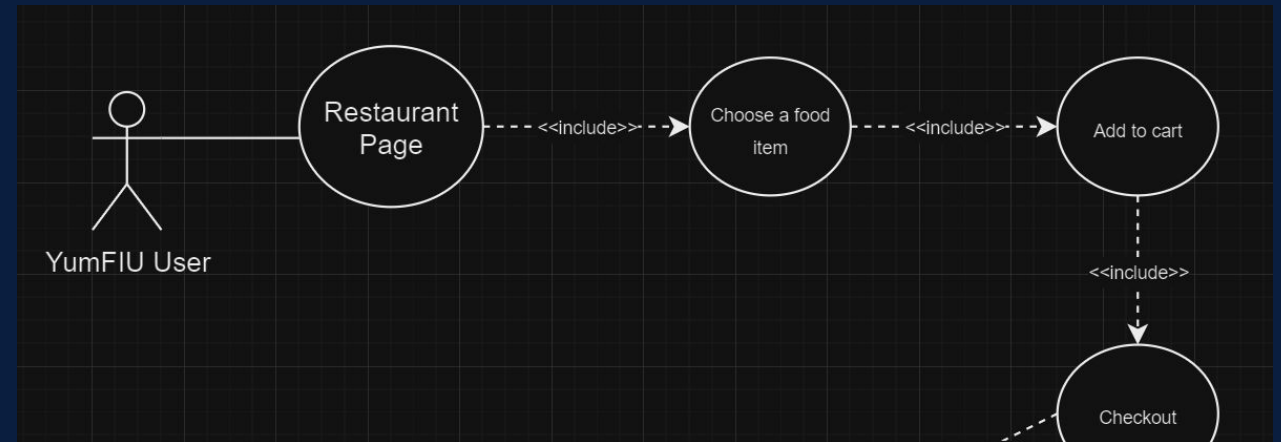
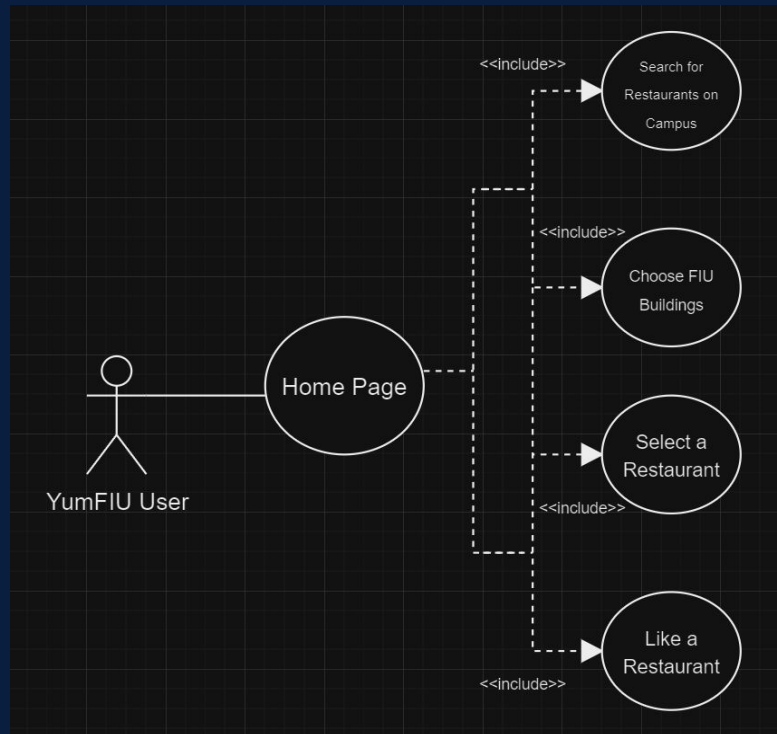


Problem Definition

- FIU Embrace is a university supported center focusing to establish research incentives and foster collaboration across the university to develop data-driven solutions for differently abled adults and students. With FIU being such a large school with a substantial student population, differently abled students find it hard to enter crowded campus restaurants to order food and utilize services. Our PO is seeking a delivery app for Embrace students to order food and get orders delivered by Embrace employees
- This app could also potentially serve as FIU's own pickup and delivery food app for FIU restaurants and the entire student body in future iterations
- There is currently no application in place for this service
- This will be the start of a multiple semester long project, meant to kickstart this initiative and create the template for the design, accessibility functions, core logic, front-end engineering, and restaurant data utilization for the application moving forward



Use Cases



User Stories

Key Story

Restaurant Categories / Filter Bar

Allows the user to view categories based on FIU buildings to filter for restaurants
Filter bar is horizontally scrollable



All Stories

- Header Tabs
- Search Bar
- **Restaurant Categories / Filter Bar**
- Restaurant Items
- Yelp Data
- Google Places API Data
- Bottom Tabs
- About
- Menu Items
- Dynamic App Use
- Navigation
- Checkboxes
- View Cart
- Redux
- Modal



Verification

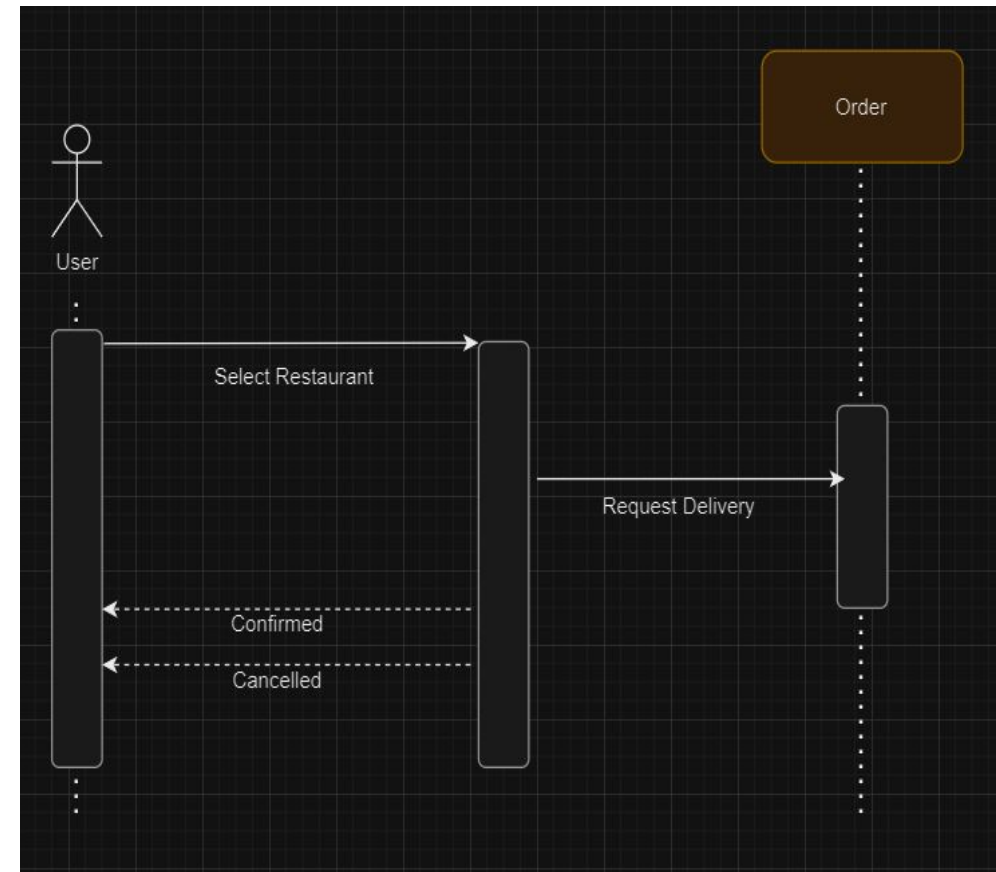
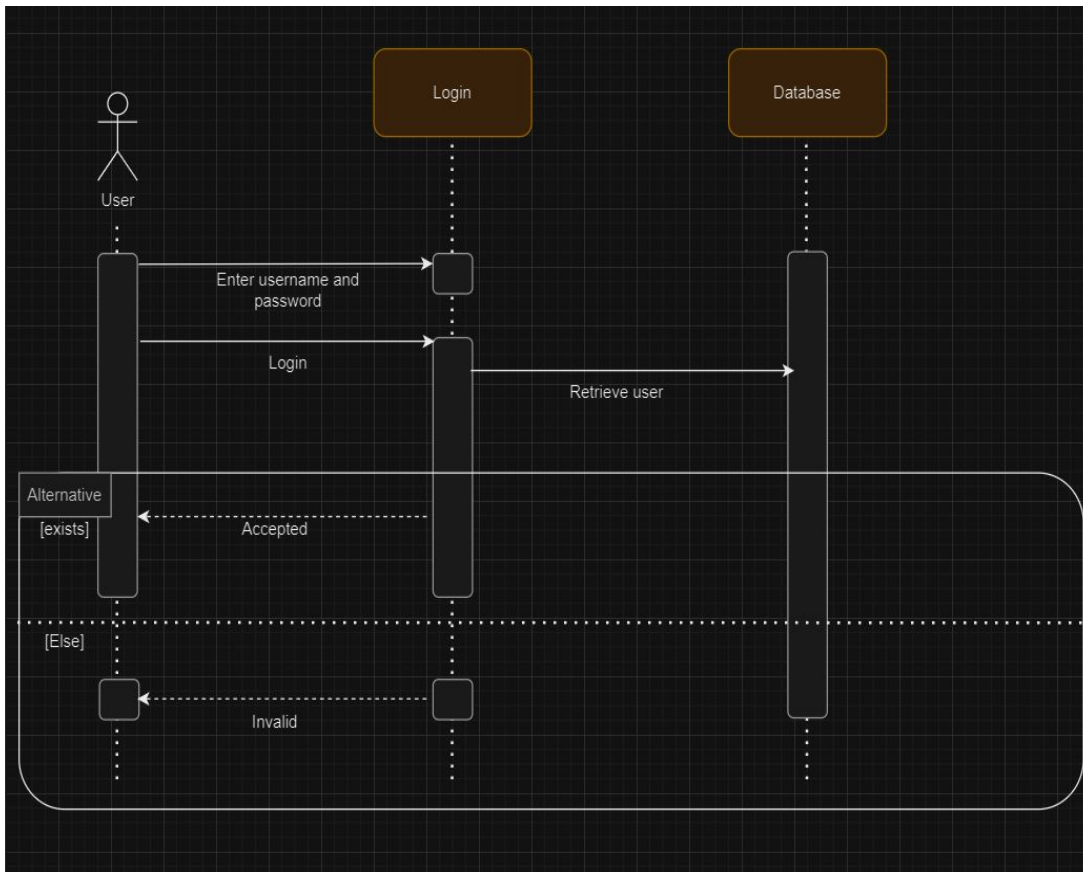
System Test Case: Campus Building Filter

User Story: Filter restaurants by FIU building

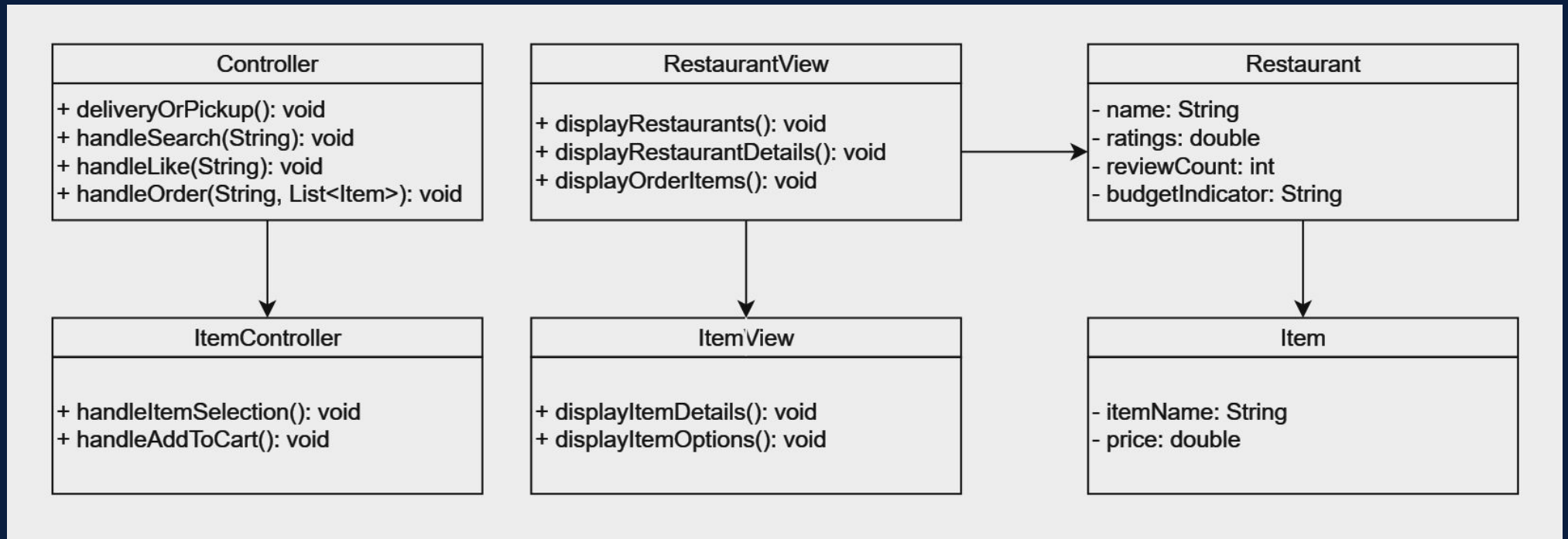
Purpose: Implement horizontal sliding bar with FIU buildings to allow users to filter restaurants

Pre-Conditions	Open the YumFIU app and choose either delivery or pickup		
Expected Results	User should be able to filter for restaurants on campus by FIU building		
Actual Result	User should be able to filter for restaurants on campus by FIU building		
Status	Pass		

Sequence Diagrams



System Design: Architecture





System Design: Deployment

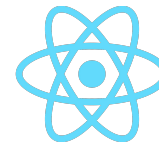
Requirements

- Mac Computer
- Latest version of Xcode, MacOS, and iOS SDK
- Node v18.17.1 or newer
- Git



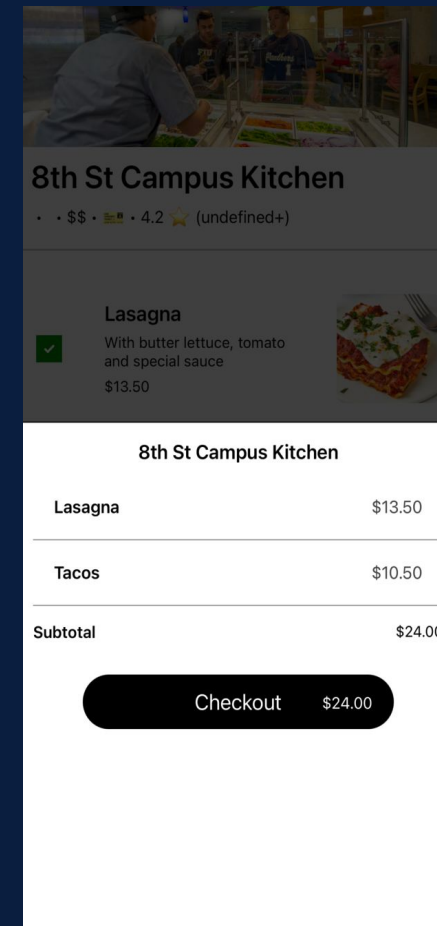
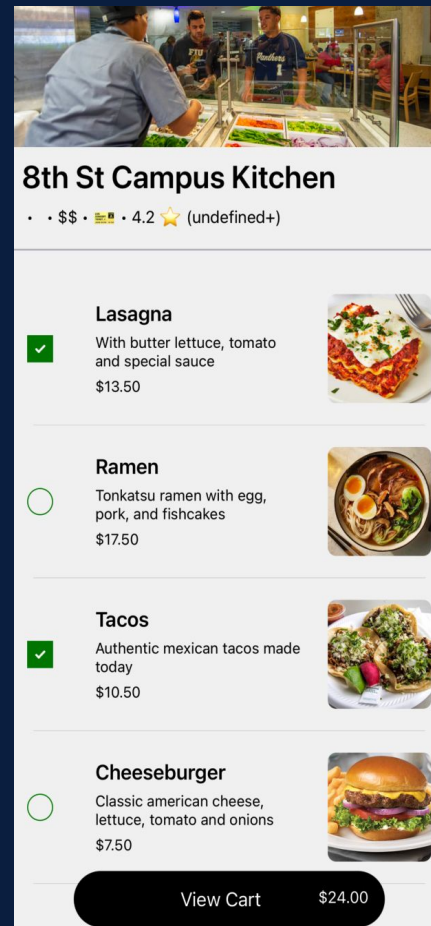
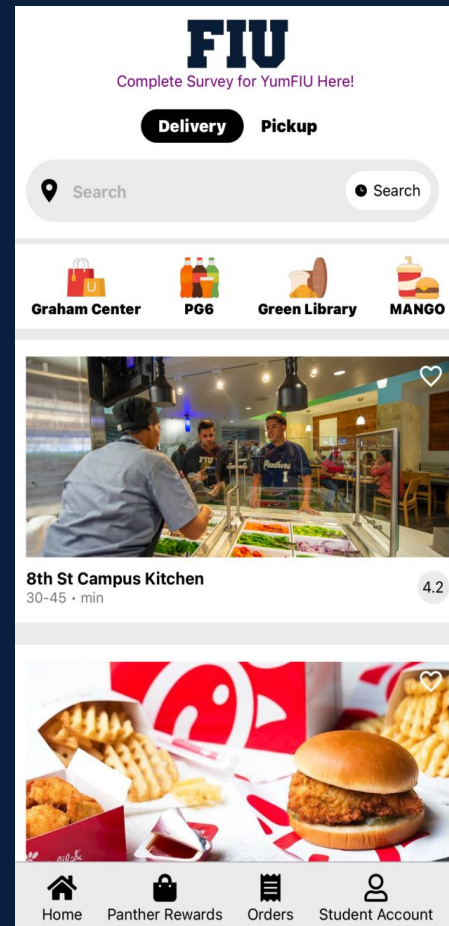
Technologies

- React Native and JavaScript
- Expo
- Redux
- Yelp API
- Google Places API
- NextCloud





Screenshots





Main Algorithm

```
export default function Home({navigation}) {  
  const [restaurantData, setRestaurantData] = useState([]);  
  const [city, setCity] = useState('');  
  const [activeTab, setActiveTab] = useState("Delivery");  
  
  const getRestaurantsFromYelp = () => {  
    // Nearby FIU Restaurants  
    const yelpUrl = `https://api.yelp.com/v3/businesses/search?term=restaurants&location=${city}`;  
  }  
  
  const apiOptions = {  
    headers: {  
      Authorization: `Bearer ${YELP_API_KEY}`,  
    },  
  };  
  
  return fetch(yelpUrl, apiOptions)  
    .then((res) => res.json())  
    .then((json) => {  
      const yelpRestaurants = json.businesses.filter((business) =>  
        business.transactions.includes(activeTab.toLowerCase())  
      );  
      setRestaurantData(yelpRestaurants);  
    });  
}  
  
useEffect(() => {  
  getRestaurantsFromYelp();  
}, [city, activeTab]);
```

Retrieving and Delivering
Yelp Data for FIU
Restaurants





Test Case Example

```
let cartReducer = (state = defaultState, action) => {  
  switch (action.type) {  
    case "ADD_TO_CART": {  
      let newState = { ...state };  
      if (action.payload.checkBoxValue) {  
        newState.selectedItems = {  
          items: [...newState.selectedItems.items, action.payload],  
          restaurantName: action.payload.restaurantName,  
        };  
      } else {  
        newState.selectedItems = {  
          items: [...newState.selectedItems.items.filter(  
            (item) => item.title !== action.payload.title  
          )],  
          restaurantName: action.payload.restaurantName,  
        };  
      }  
    }  
  }  
}
```

Check to Ensure
Redux is Integrated
Properly for States

Student Contributions

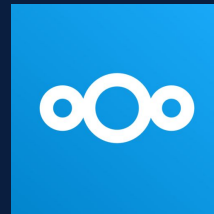
Nicholas de Souza

- App Navigation
- Google Places API Integration
- Restaurant Like Feature



Mohammad Qureshi

- Front End Development
- Filter Feature
- NextCloud Integration



Daniel Ortiz

- Yelp API Data Communications
- Redux Addition





Summary

Thank you!

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