

HOME

OVERVIEW

DEMO

SE PRACTICES &
FUTURE SP

OpenJIO

Team Fivver

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OPENJIO



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| What is OpenJio?

OpenJio is a social networking platform for sports enthusiasts. It allows users to create open invitations of self-initiated activities to the public or join sports activities happening in their locality/ city.

OpenJio is a mobile based web-app that provides users with a 'smart way' to stay fit, deal with boredom, and build tight knit relationships through their favorite sporting activities.



| Features and requirements

1. Organize Activities

The app allows users to organize activities, which are categorized into sports, hangouts, etc.

2. Explore Activities

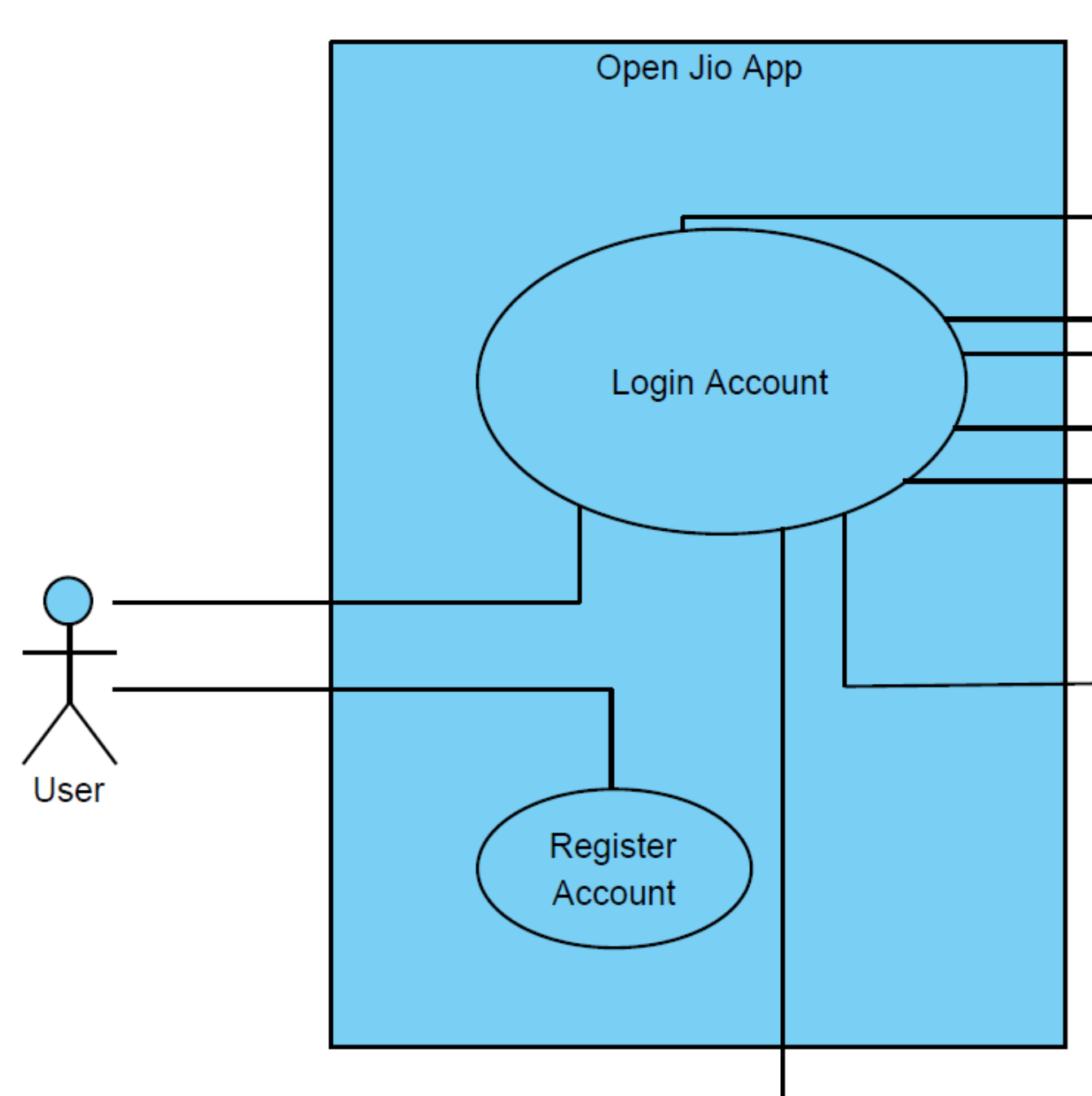
Users can search for activities to join by category, location and time. Upcoming activities in their vicinity will also be automatically recommended to them.

3. Friends

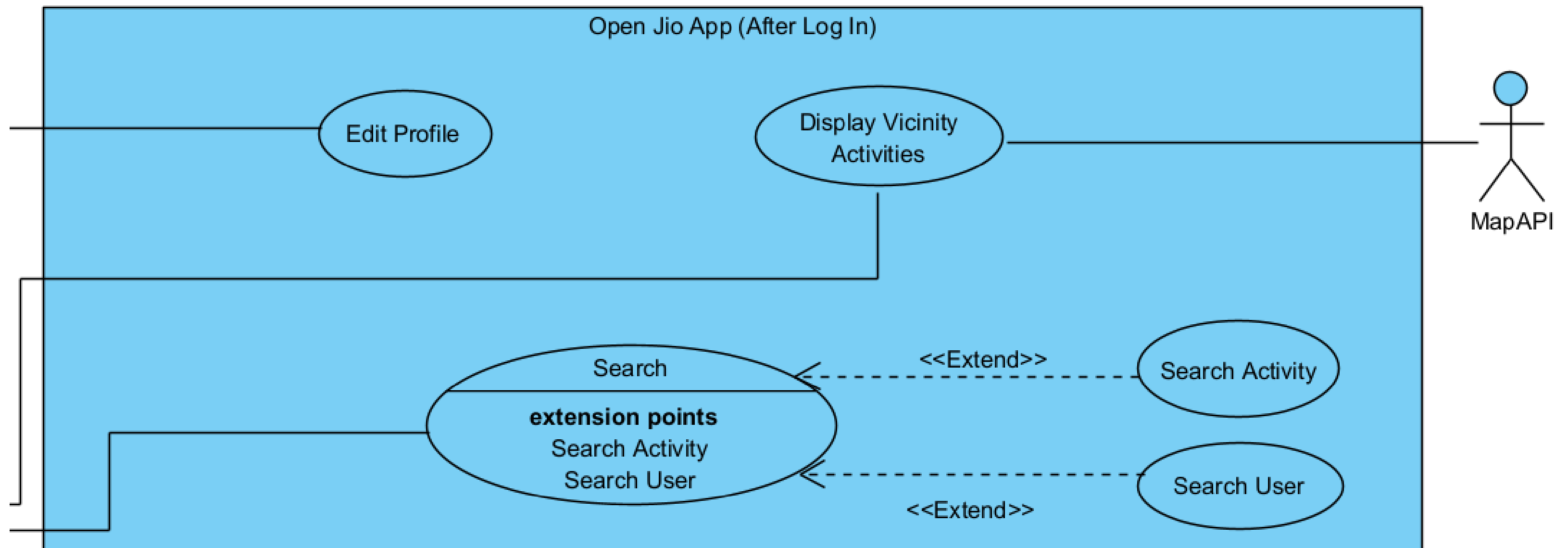
Users can add other users as friends, allowing them to chat and view what activities their friends are participating in.



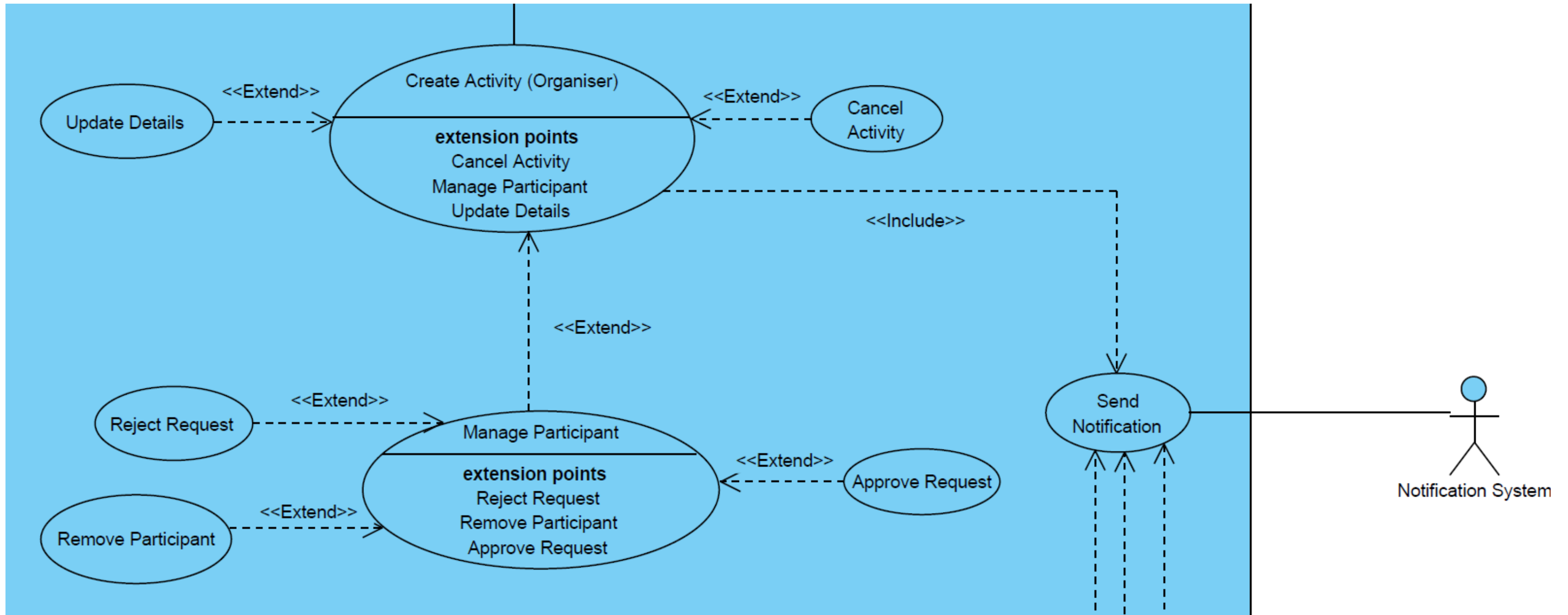
Use-Case Diagram



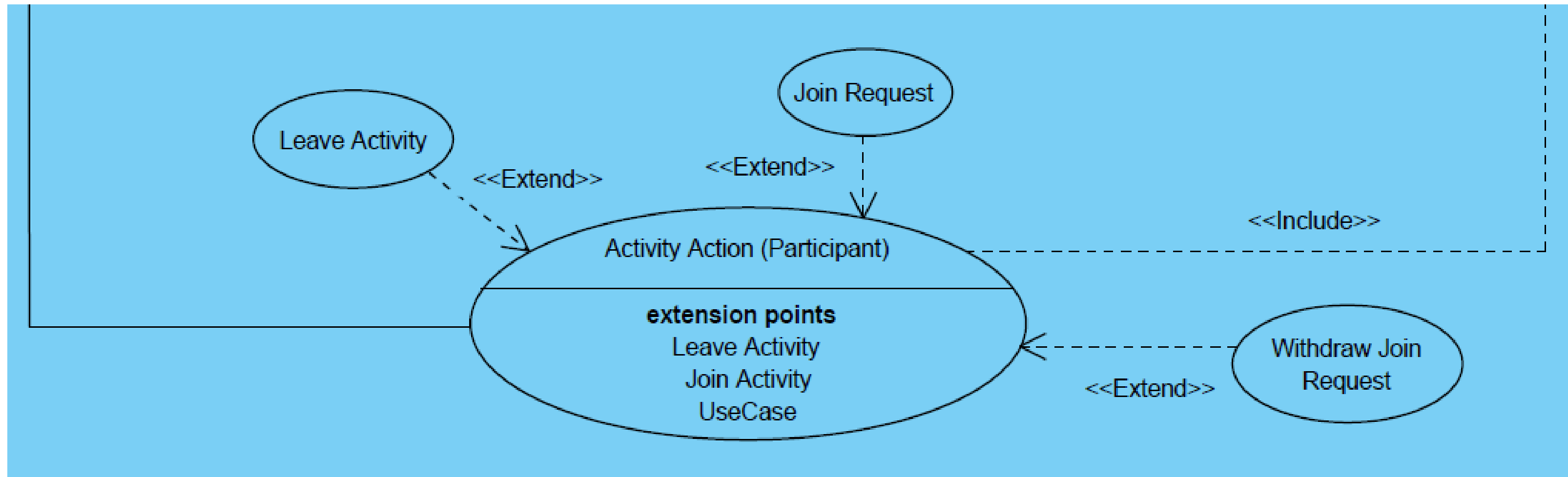
Use-Case Diagram



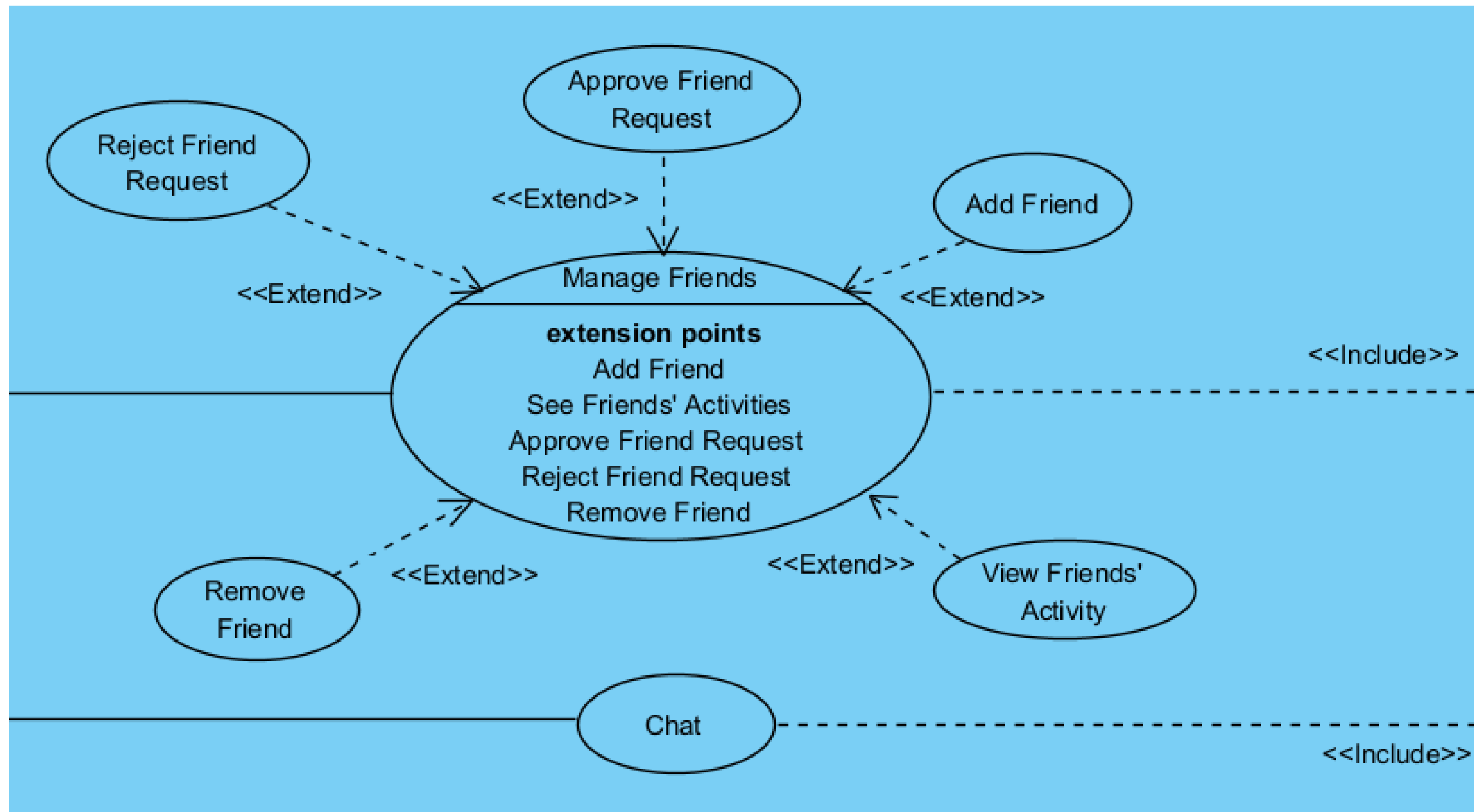
Use-Case Diagram



Use-Case Diagram



Use-Case Diagram



OPENJIO

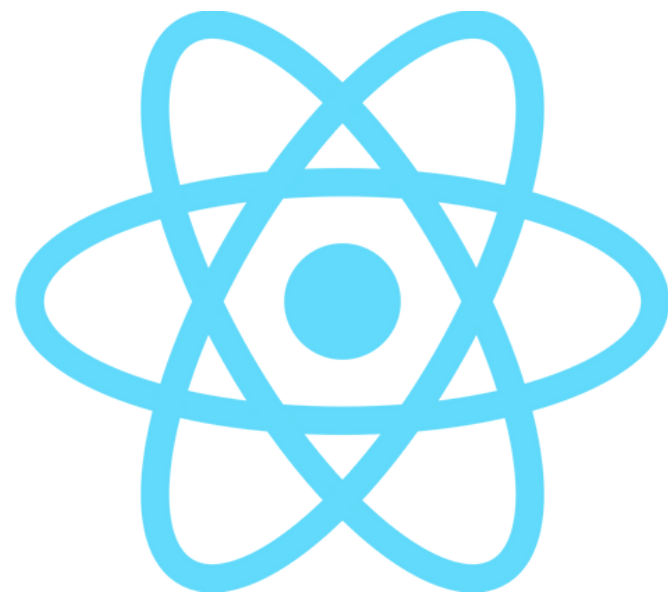
HOME

OVERVIEW

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Tech Solutions



REACTJS
FRONTEND



FIREBASE
BACKEND

Cool Tech Features

HOME

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Showing 2 activities

Poker



Jayden
03/11/2022, 21:15:00



Water polo



Jayden
04/11/2022, 17:00:00



24/7

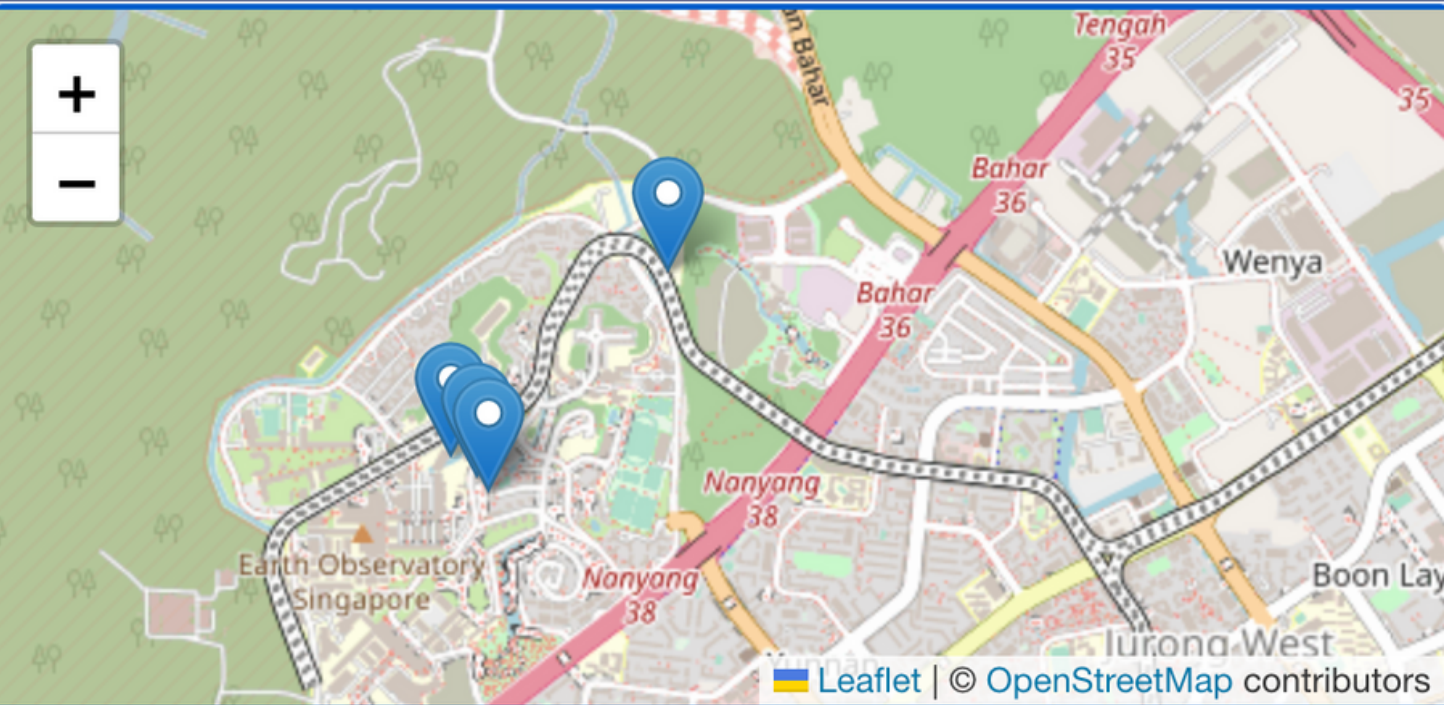
Real time updates



Search



By Activity



Showing 4 activities



100%

Marked activities on map

HOME

OVERVIEW

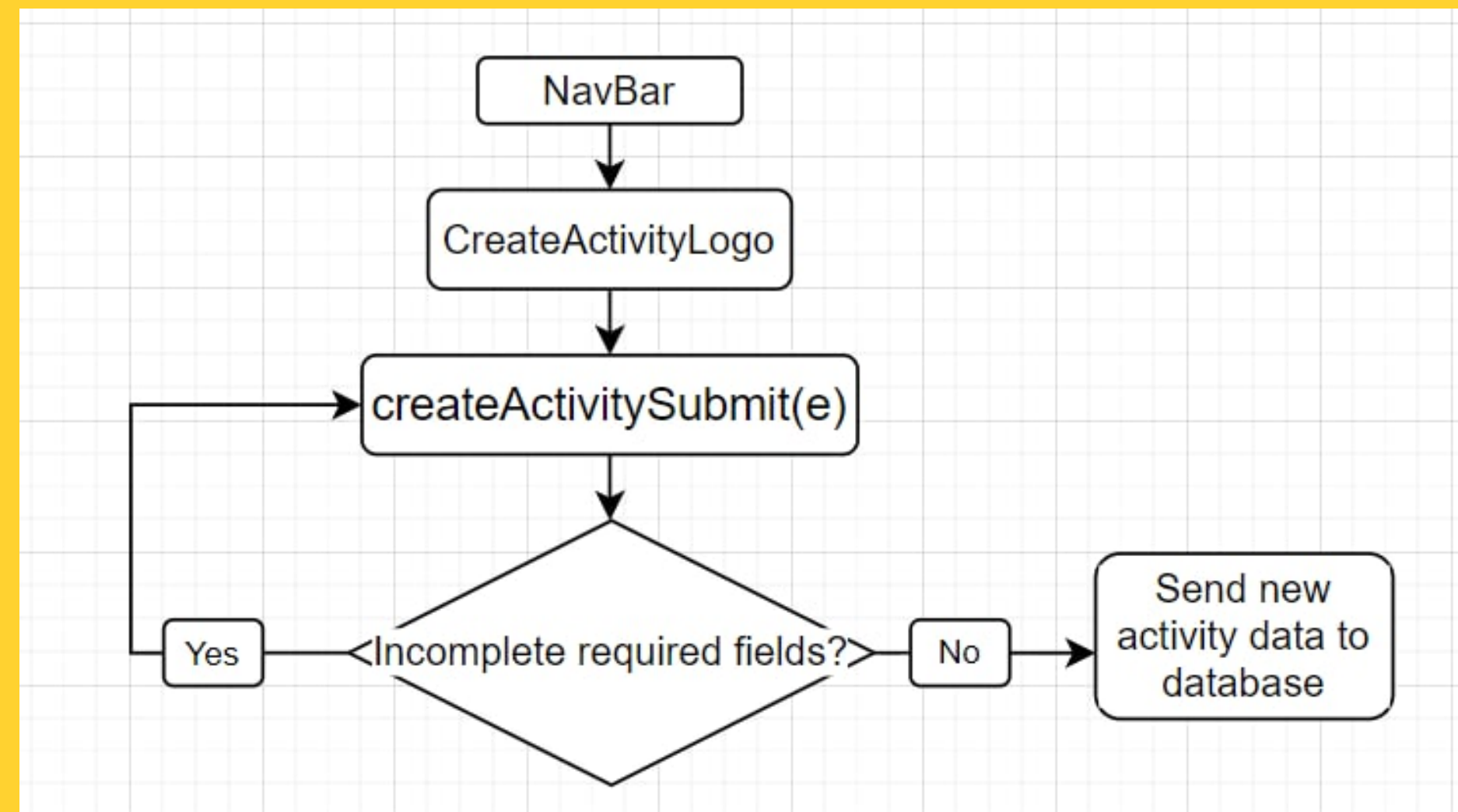
DEMO

SE PRACTICES &
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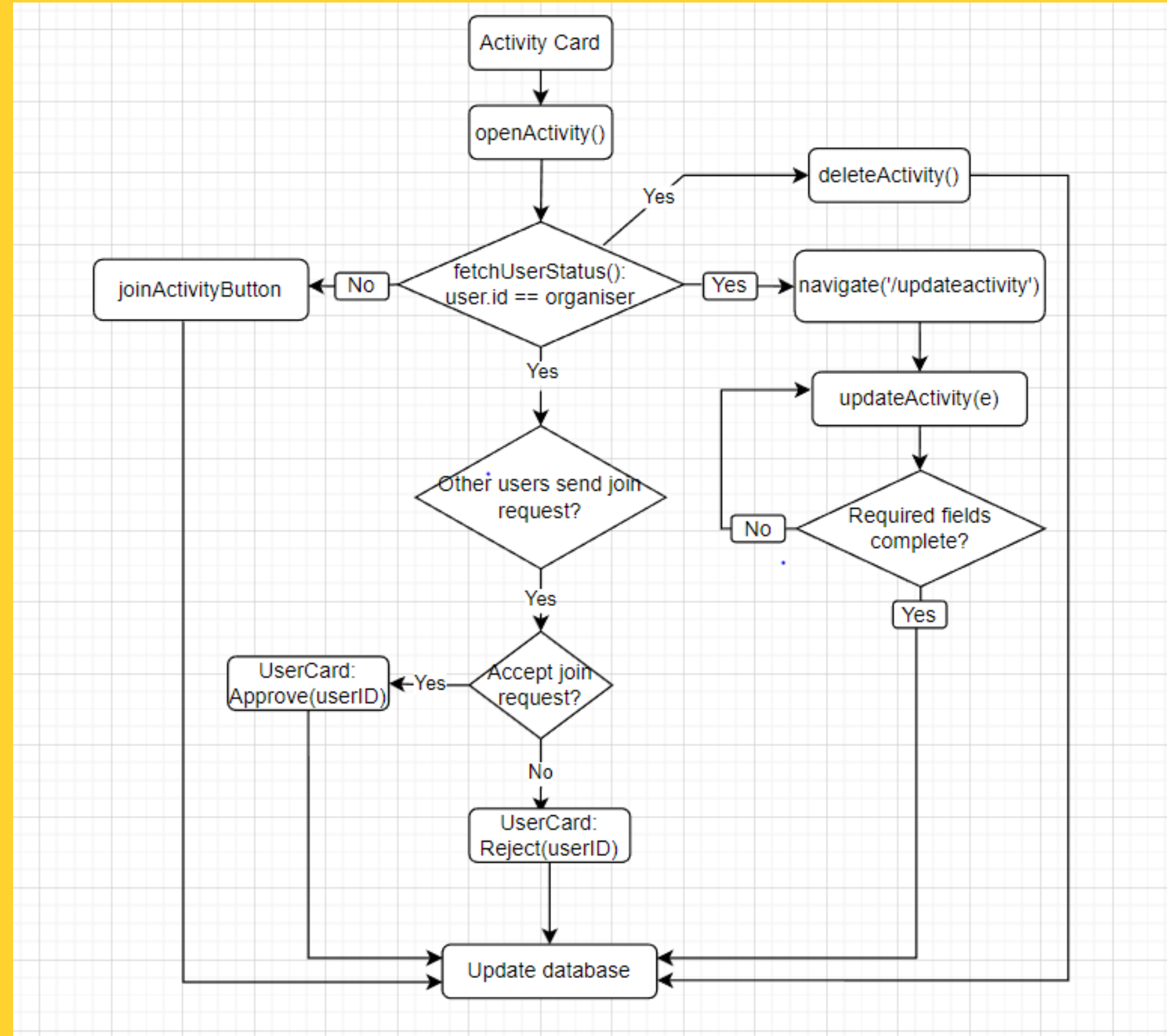
DEMONSTRATION



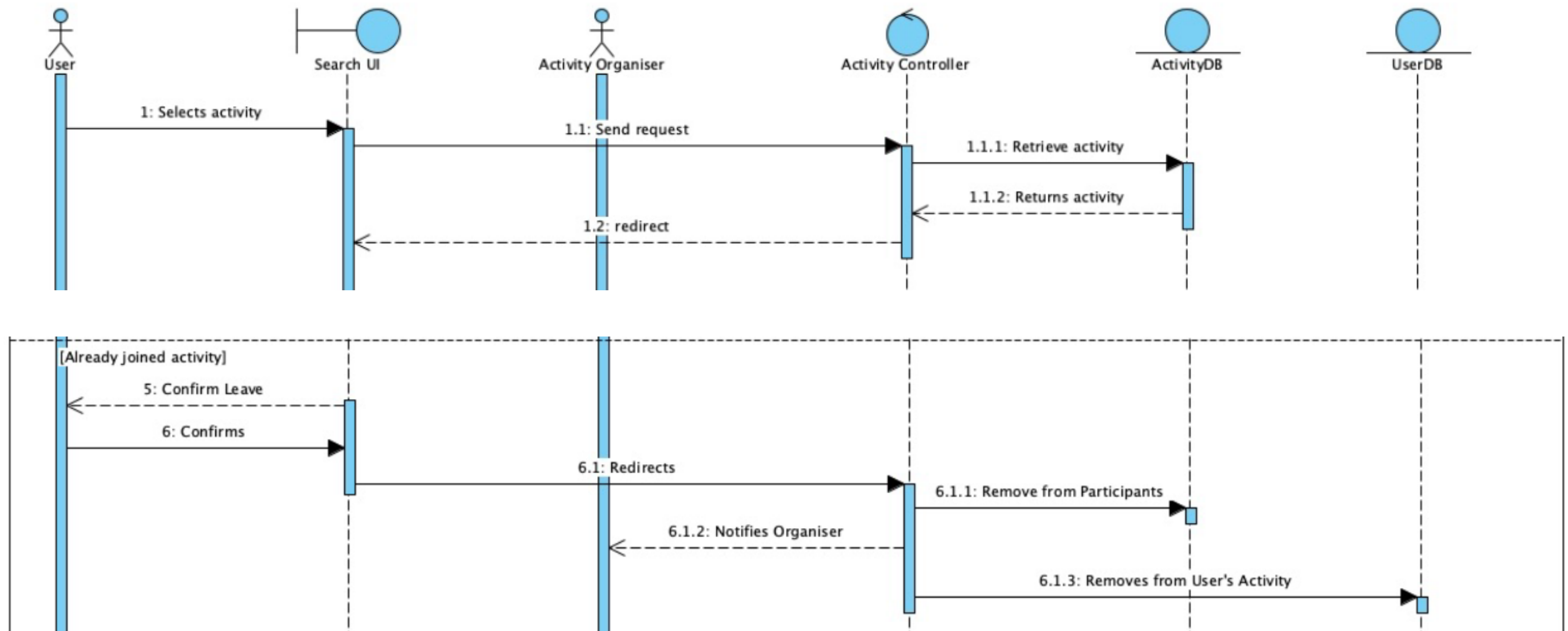
ActivityController Control Flow - Create Activity



ActivityController Control Flow - Update/Join/Cancel Activity and Approve/ Reject join request



Sequence Diagram: Join & Leave Activity



REUSABILITY

ReactJS - Component-based Framework in JavaScript.

MyProfileUI

```
<div className='content'>
  <Link to='/editprofile'><button id='edit'>Edit profile</button></Link>
  <Link to='/friend'><button id='friend'>Friend list</button></Link>
  <Link to='/myactivity'><button id='activities'>Saved activities</button></Link>
  <Link to='/mychat'><button id='chat'>Chat list</button></Link>
  <button id='Logout' onClick={signOut}>Logout</button>
</div>
<NavBar />
</div>
```

HomeUI

```
time={activity.time}
rerender={() => fetchActivities()}
saved = {activity.saved}
/>
)}
<div className='space'></div>
<NavBar />
</div>
```

Code Once, Multiple Usage

```
import './index.css'
import { memo } from 'react'
import { Link } from 'react-router-dom'
import HomeLogo from '../Images/HomeLogo'
import MyActivityLogo from '../Images/MyActivityLogo'
import CreateActivityLogo from '../Images/CreateActivityLogo'
import ProfileLogo from '../Images/ProfileLogo'

const NavBar = () => {
  return (
    <div className='NavBar'>
      <Link to='/home'><HomeLogo /></Link>
      <Link to='/myactivity'><MyActivityLogo /></Link>
      <Link to='/createactivity'><CreateActivityLogo /></Link>
      <Link to='/profile'><ProfileLogo /></Link>
    </div>
  )
}

export default memo(NavBar)
```


TRACEABILITY

From and To Requirement

Requirement

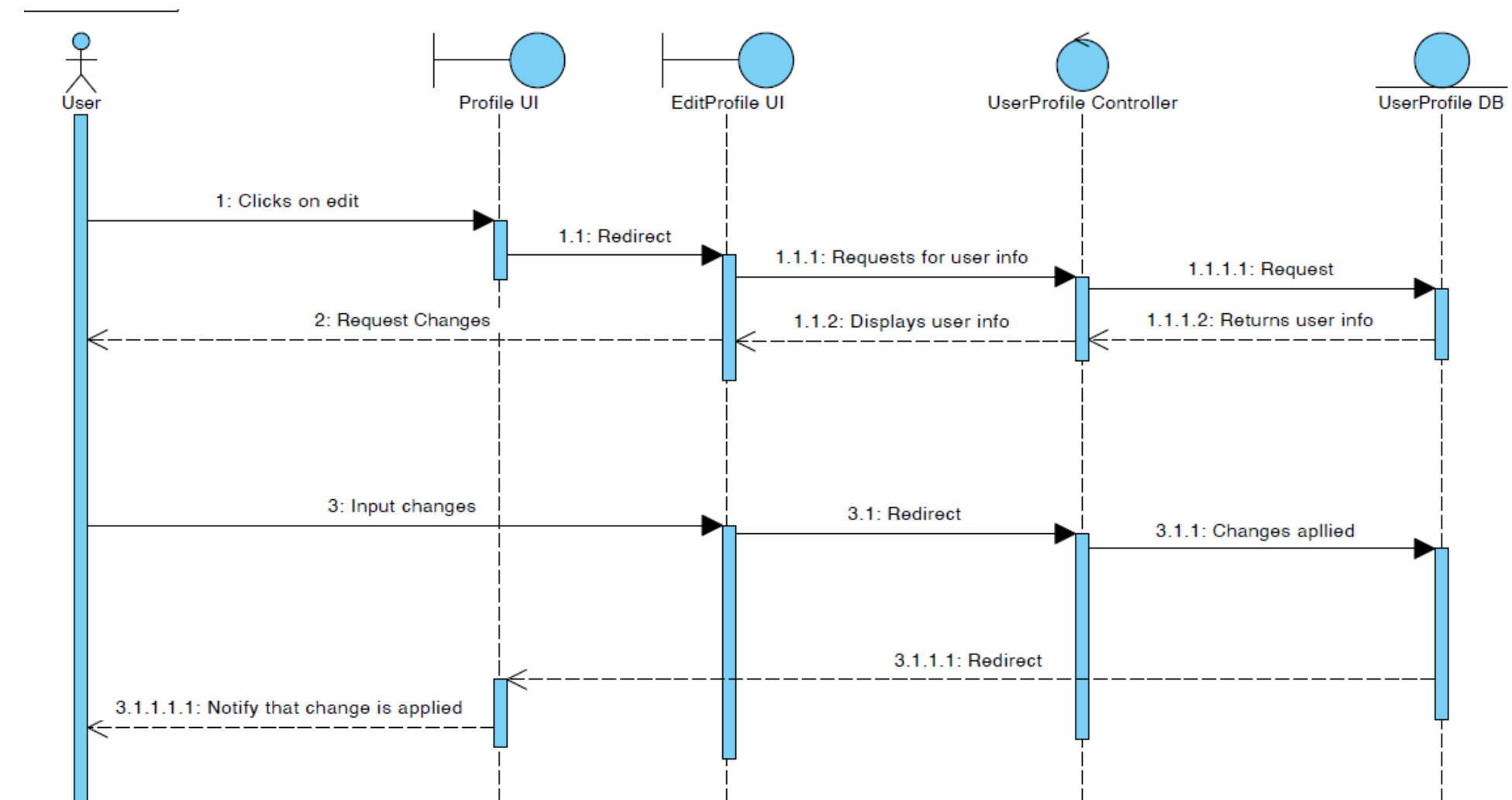
Edit Profile

Description: The app must allow the current user to edit the information displayed in their own profile page.

Input: Profile photo, username, name and/ or description.

Output: Profile information updated.

Design



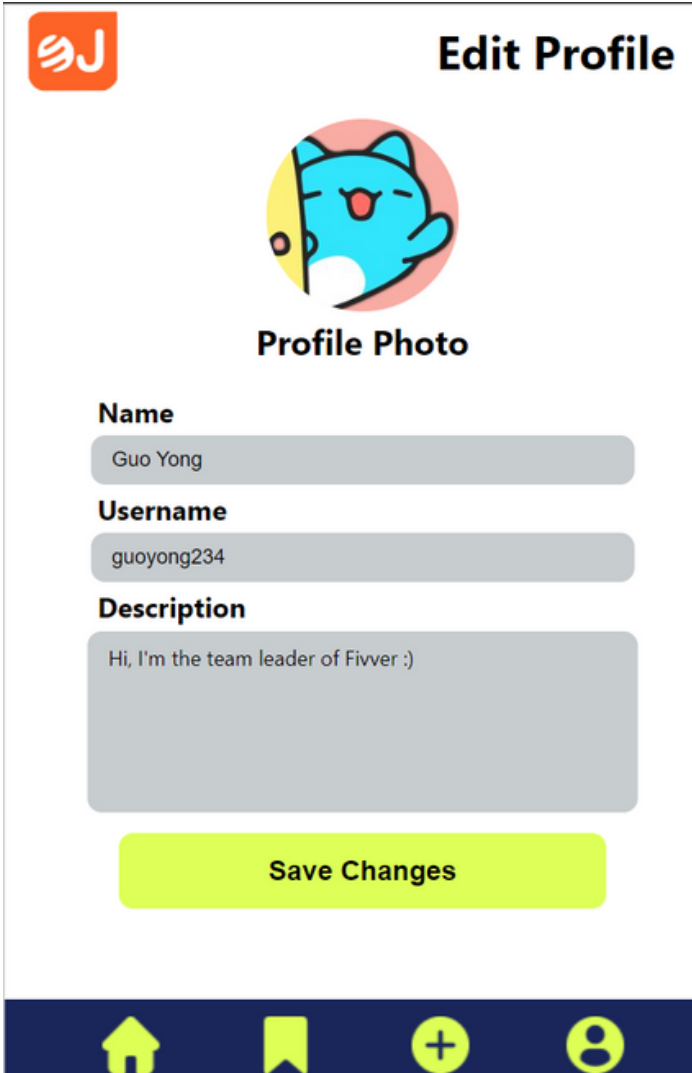
TRACEABILITY

From and To Requirement Across SDLC

Implementation

Testing

```
const EditProfileUI = () => {  
  const user = auth.currentUser  
  const navigate = useNavigate();  
  const fetched = useRef(false)  
  
  const [profile, setProfile] = useState({  
    name: '',  
    username: '',  
    description: ''  
  })  
  
  const [imageUrl, setImageURL] = useState('')  
  const [file, setFile] = useState('')  
  
  // Upload picture into database and update profile  
  const uploadPhoto = async (docRef, name) => {  
    const metadata = {  
      contentType: 'image/jpeg'  
    };  
    const pic_name = new Date().getTime().toString();  
    const storageRef = ref(storage, pic_name);  
    await uploadBytesAndMetadata(storageRef, file, metadata);  
    const imageUrl = `https://firebasestorage.googleapis.com/v1/b/${firebaseStorageBucket}/o/${pic_name}?alt=media`;  
    setProfile({  
      ...profile,  
      imageUrl: imageUrl  
    });  
  };  
  
  const saveChanges = () => {  
    setProfile({  
      ...profile,  
      name: name,  
      username: username,  
      description: description  
    });  
    navigate('/profile');  
  };  
}
```

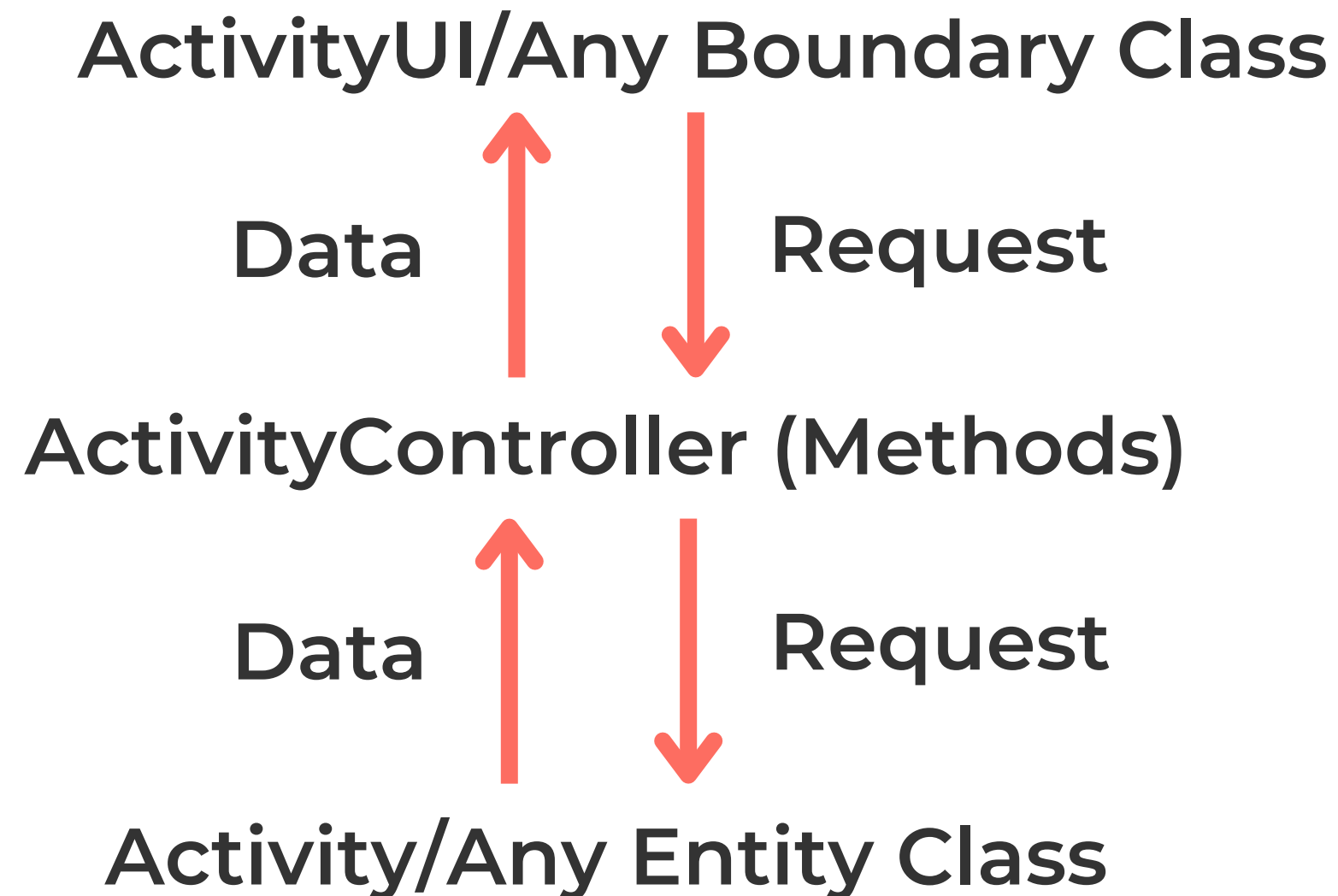
A mobile application screen titled "Edit Profile". At the top left is a logo with the letters "SJ" in white on an orange square. Below the logo is a circular profile picture of a blue cat with a red collar. To the right of the photo is the text "Edit Profile". Below the photo is a text input field labeled "Name" containing "Guo Yong". Below that is another text input field labeled "Username" containing "guoyong234". Below that is a text area labeled "Description" containing "Hi, I'm the team leader of Fivver :)". At the bottom of the form is a yellow button labeled "Save Changes". At the very bottom of the screen is a dark blue navigation bar with four icons: a house, a bookmark, a plus sign, and a person.

14. Functionality: Edit Profile

b. Specific cases:

Test ID	Test Case	Expected Result	Actual Result
13.1	Input: 1. Username: Julie123 → EMPTY	The system prompts the user to enter missing field	The system prompts the user to enter missing field
13.2	Input: 2. Username: Julie123 → Julie12345	When user views 'My Profile', updated fields are displayed	When user views 'My Profile', updated fields are displayed

EXTENSIBILITY



Boundary ⇔ Control ⇔ Entity

```
/**
 * ActivityController class managing all activity-related actions
 */
class ActivityController{
    /**
     * Fetch the activity info by activity ID
     * @param {String} activityID The activity ID
     */
    async fetchActivityInfo(activityID){
        // Implementation
    }

    /**
     * The action that can be done by a user on an activity
     * @param {String} type The type of action:
     * Approve, reject, remove participant for organiser and
     * join, withdraw join request, leave for participant
     * @param {String} activityID The activity ID
     * @param {String} userID The user ID
     */
    async activityAction(type, activityID, userID){
        // Implementation
    }
}
```



OpenJIO

Team Fivver

Thank You!