Software Engineering
Project Group 10
Activity Diagrams

Question 1:

Registration:

- **Actions :**

  1. User Input.
  2. Validate Input.
  3. Create user account.
  4. Send confirmation email.
  5. User confirmation.
  6. Account create.
  7. End Registration.

- **Conditions :**

  1. All the required inputs must be filled .
  2. Email must be valid.
  3. Email should not be already registered.
  4. Password must be satisfying all the required conditions.
  5. Confirmation password and entered password must be matched.
  6. OTP entered by the user must be valid.

🞣 Post Activity:

- ## Actions:

  1. The user initiates the post creation process.
  2. Then it accesses the post creation page.
  3. composes the content of the post.
  4. User writes some content.
  5. selects categories.
  6. attaches files or educational resources.
  7. User reviews and previews the post.
  8. clicks the "Post" button to publish.

- ## Conditions:

  1. User must be logged in to create a post.
  2. Content may undergo moderation before becoming visible.
  3. categories may be required.
  4. Users can see the preview of the post to see what their post will look like.
  5. Users should adhere to copyright and ownership rules.

Homepage:

- **Actions:**

    1. Load Homepage
    2. Display Content
    3. User Navigation
    4. Search Functionality
    5. Interactive Elements

- **Conditions:**

    1. Users should be able to see the posts on their feed.
    2. The features on the homepage should be interactable.
    3. Functions should be understandable enough for the user to use.
    4. Search Features should help take users to their desirable topic or post.

Community:

- **Actions:**

    1. Browse Posts in Community
    2. Read Post from Community
    3. Submit a new Post
    4. Report Inappropriate Content
    5. Perform Functionality on Post (Upvote, Downvote, Comment, share, etc.)
    6. Search for Posts
    7. Enable Notification for Community updates
    8. View Community public Statistics and Rules

9. Join/ Leave Community
10. Moderation Actions
11. Choose Community Type
12. Set Community Rules
13. Select Moderators
14. Configure Community Setting
15. Write Community Descriptions

- **Conditions:**

    1. User must be Logged in to use any functionalities.

    2. To Submit a Post User must have Joined The Community.

    3. The User Must Have Selected a Valid Reason for Inappropriate Content Report.

    4. To get updates via Notification User must join the Community.

    5. If the User is a Moderator, only then they can perform Moderation Actions (Delete Posts, Banned user, etc.)

    6. If a user wants to leave the community, they must first be a part of it.

    7. Community Name Should not be already in use.

⊞ Profile edit:

- **Actions:**

    1. Retrieve user data
    2. Display user data
    3. User input
    4. Update profile data
    5. Save changes

- **Conditions:**

    1. User must be logged in
    2. Validation
    3. Data update successful
    4. Data update failed

⊞ Search Activity

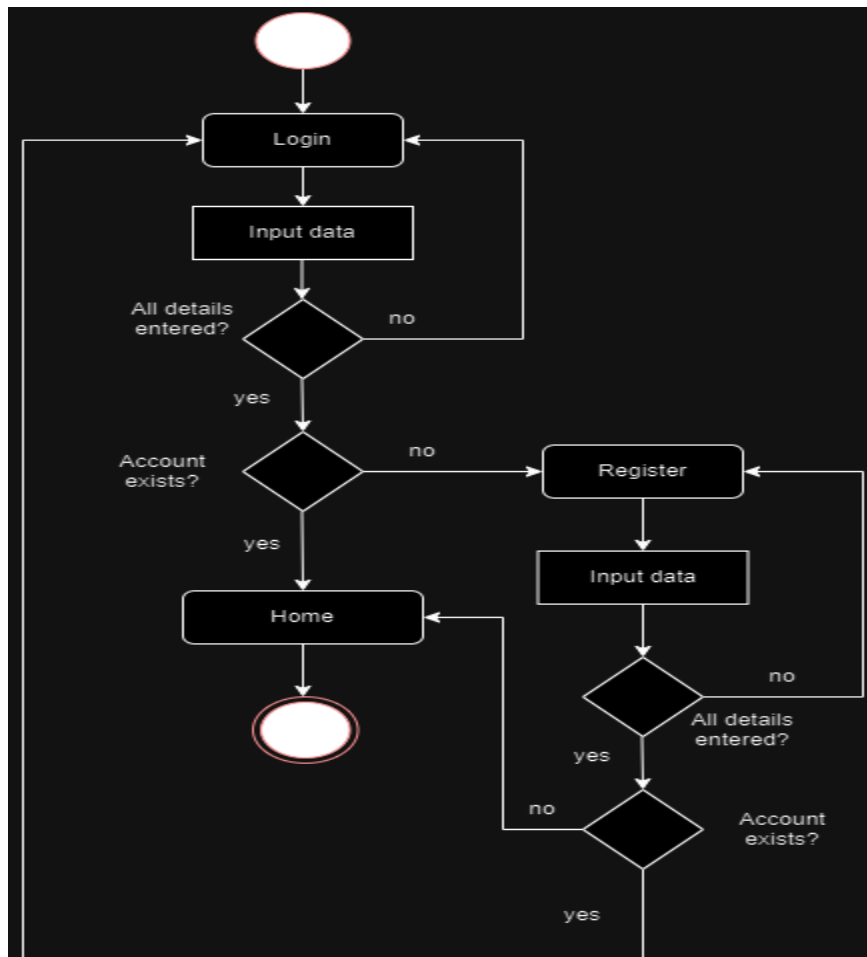- **Actions:**

    1. User Input
    2. Validate Input
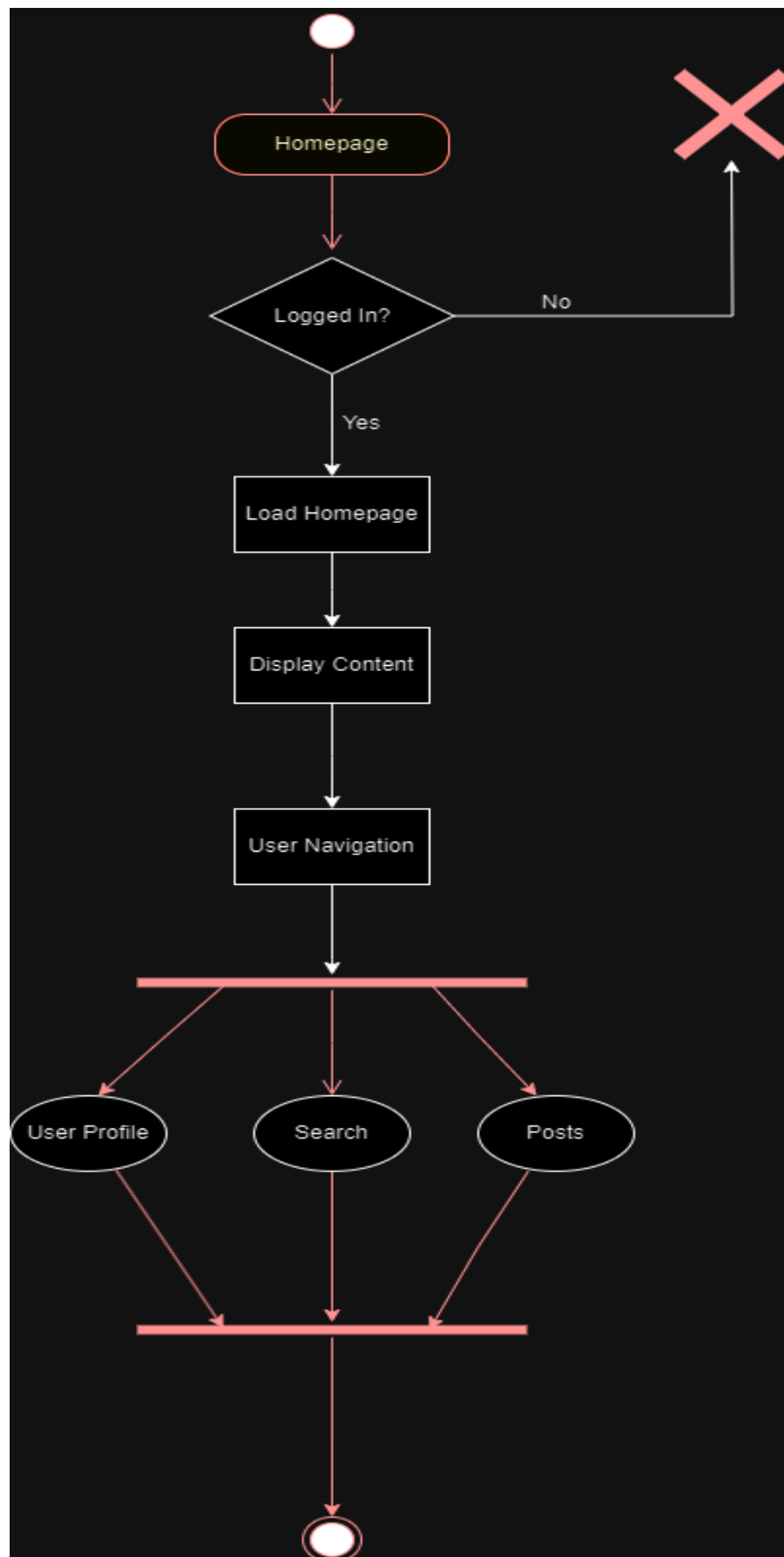   3. Search results
    4. Display results

- **Conditions:**

    1. User must be logged in
    2. User input must be valid
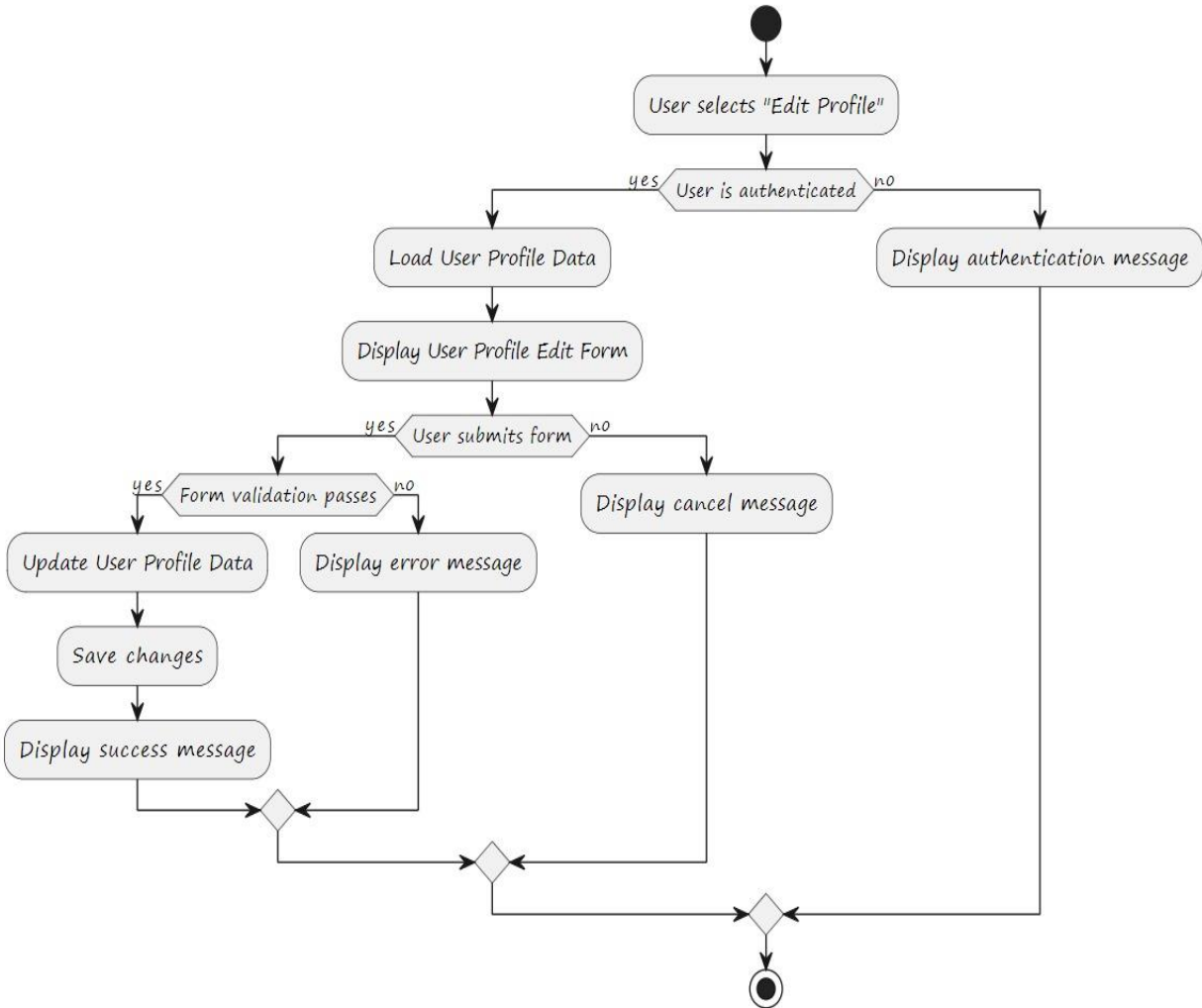   3. There should be results for display

Question 2:

Login-register Activity diagram

Home-Page Activity diagram

```
                    ( )

              ┌──────────────┐                          ╲   ╱
              │  Homepage    │                           ╲ ╱
              └──────────────┘                            ╳
                     │                                   ╱ ╲
                     ▼                                  ╱   ╲
                  ╱──────╲                               ▲
                 ╱ Logged ╲            No                │
                 ╲  In?    ╲───────────────────────────┘
                  ╲──────╱
                     │ Yes
                     ▼
              ┌──────────────┐
              │ Load Homepage│
              └──────────────┘
                     │
                     ▼
              ┌──────────────┐
              │Display Content│
              └──────────────┘
                     │
                     ▼
              ┌──────────────┐
              │User Navigation│
              └──────────────┘
                     │
                     ▼
      ━━━━━━━━━━━━━━━━━━━━━━━━━━━━
       ╱           │           ╲
      ▼            ▼            ▼
  ╱────────╲   ╱────────╲   ╱────────╲
 │User Profile│ │ Search │ │ Posts  │
  ╲────────╱   ╲────────╱   ╲────────╱
      ╲           │           ╱
       ▼          ▼          ▼
      ━━━━━━━━━━━━━━━━━━━━━━━━━━━━
                  │
                  ▼
                 (⊙)
```

Edit profile Activity diagram

User selects "Edit Profile"

User is authenticated

yes — Load User Profile Data

no — Display authentication message

Display User Profile Edit Form

User submits form

yes — Form validation passes

no — Display cancel message

Form validation passes

yes — Update User Profile Data

no — Display error message

Save changes

Display success message
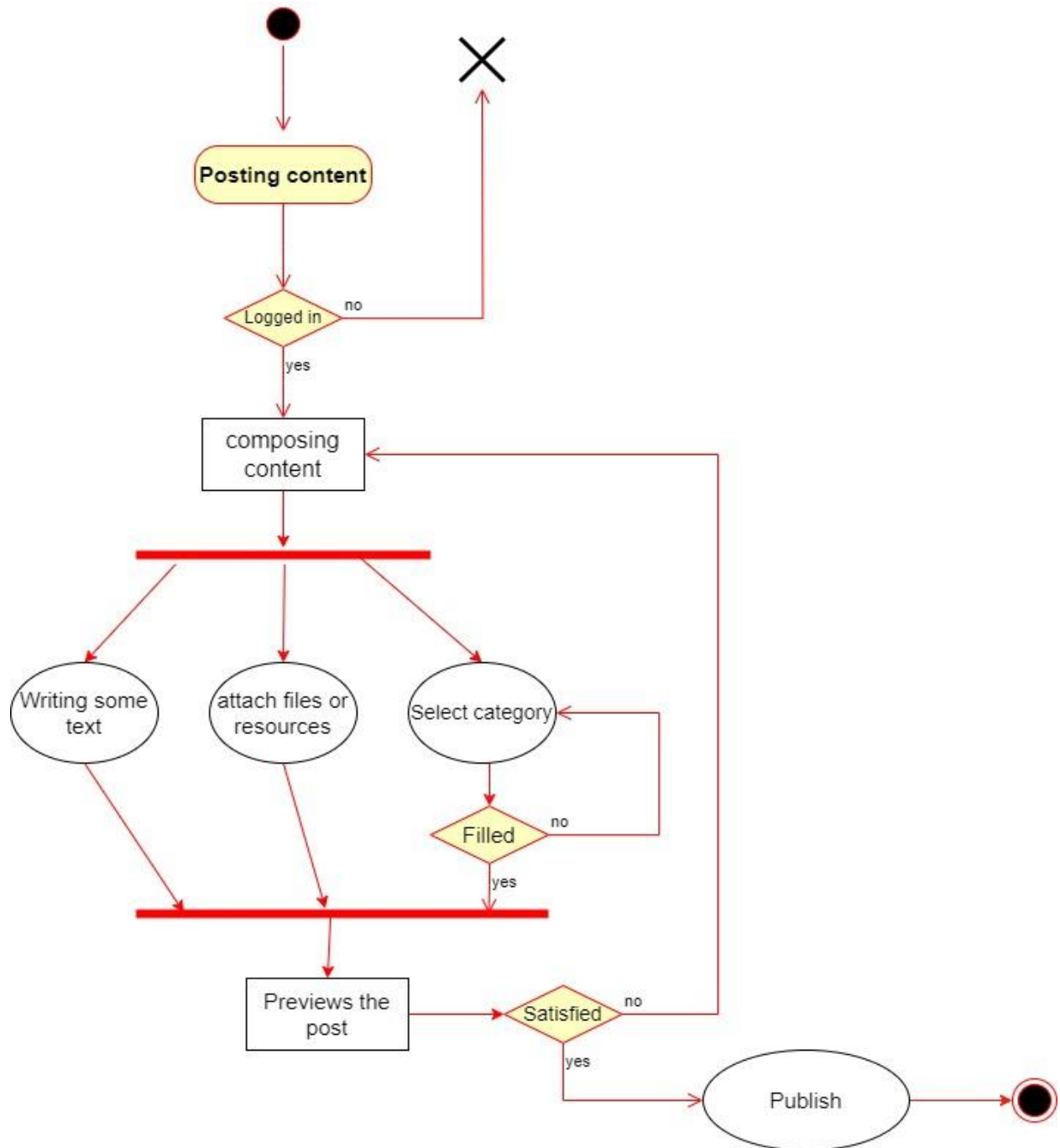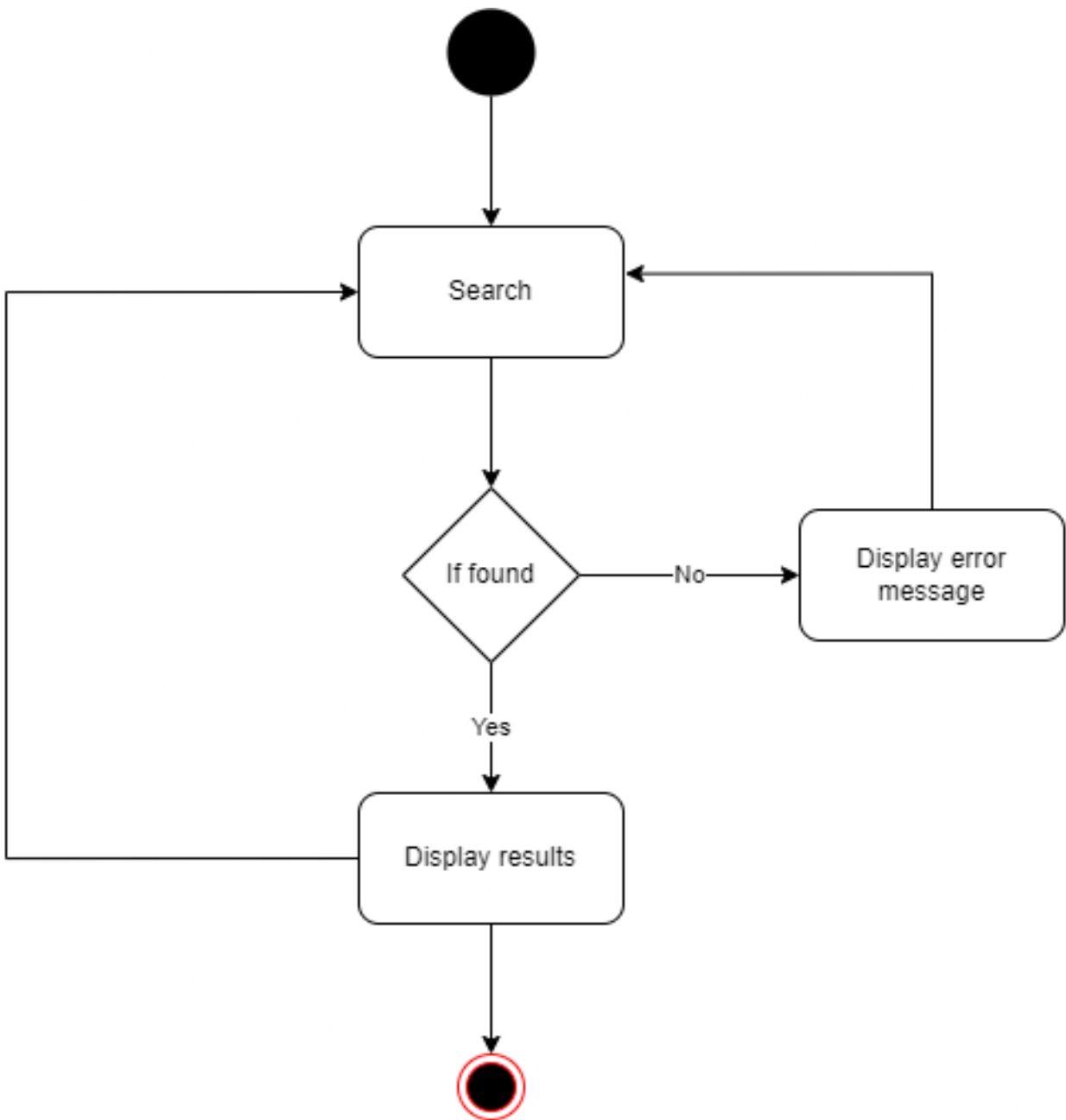
Tags Activity diagram
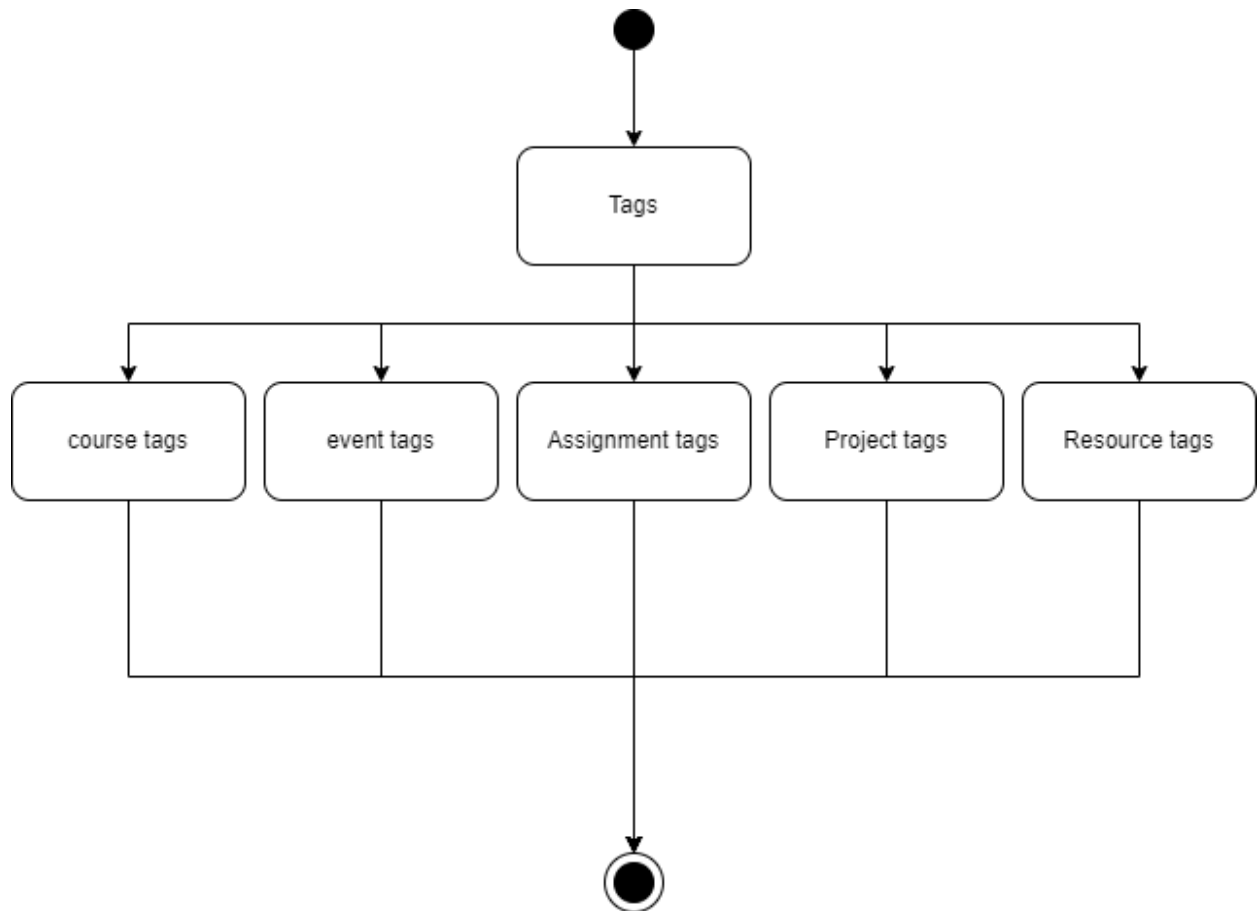
Posting activity diagram

Search Activity Activity diagram

Community Activity diagram

Community Exists?
No → Create Community
Yes → Visit Community Homepage

Create Community
├─ community Name
├─ community Type
└─ community Rules

Configure community settings

Write community description

Review And Confirm

Visit Community Homepage

Chooses =

["ReadPost"] → Read Posts
["Report"] → Report Inappropriate Content
["SubmitPost"] → Submit a new Post
["Browse"] → Browse Posts
["React"] → React on Post

["Moderator"] → Moderation Actions
["Search"] → Search for Posts
["Join/Leave"] → Join / Leave Community
["Notification"] → Enable Notification for updates

Wants To exist from Community Homepage
Yes
No