# Swe573 Software Development Practice, Spring 2024 Project Final Deliverables Ali Şer Gök

20.05.2024

Project name deployment URL:

Git repository URL: <a href="https://github.com/AliSerGok/SWE573-AliserGok.git">https://github.com/AliSerGok/SWE573-AliserGok.git</a>

Git tag version URL: <a href="https://github.com/AliSerGok/SWE573-AliserGok/releases/tag/v0.9">https://github.com/AliSerGok/SWE573-AliserGok/releases/tag/v0.9</a>

Project demonstration video URL:

https://drive.google.com/file/d/1TvgdNGm0wVFt67LY11EXFkM4tGDAQPSa/view?usp=sharing

### **HONOR CODE**

Related to the submission of all the project deliverables for the Swe573 2024 Spring semester project reported in this report, I declare that:

- I am a student in the Software Engineering MS program at Bogazici University and am registered for Swe573 course during the Spring 2024 semester.
- All the material that I am submitting related to my project (including but not limited to the project repository, the final project report, and supplementary documents) have been exclusively prepared by myself.
- I have prepared this material individually without the assistance of anyone else with the exception of permitted peer assistance which I have explicitly disclosed in this report.

Ali Şer Gök

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### 1. Overview:

### 1.1 Introduction:

"Spiny" is a Community Information System developed using Java Spring Boot, Thymeleaf, and MySQL technologies. It serves as a comprehensive platform for community engagement and information dissemination.

### 1.2 Key Features:

- User Authentication: Secure login and registration system for users.
- Community Interaction: Facilitates communication and collaboration among community members.
- Content Management: Allows users to create, share, and manage various types of content such as posts and events.
- Personalization: Customizable user profiles and preferences.

### 1.3 Technologies Used:

- Java Spring Boot: Provides a robust framework for building web applications.
- Thymeleaf: A modern server-side Java template engine for rendering dynamic content.
- MySQL: A relational database management system for storing application data.

### 1.4 Project Structure:

"Spiny" follows a Model-View-Controller (MVC) architecture:

- Model: Represents the data structure and business logic of the application.
- View: Contains Thymeleaf templates for rendering HTML views.
- Controller: Handles user requests, processes data, and interacts with the database.

### 2. Installation Steps:

### 2.1 Clone the repository:

git clone < https://github.com/AliSerGok/SWE573-AliserGok.git >

### 2.2 Start the MySQL database:

To create the "spiny-database" schema and tables in our database, open and run the sql file named "<u>01-spiny-directory</u>" in the project file.

### 2.3 Connect Database to Java Spring Boot project:

if you run application local please change:

application.properties:

spring.datasource.url=jdbc:mysql://{DATABASE\_URL}/spiny-database spring.datasource.username={USERNAME\_NAME} spring.datasource.password={PASSWORD}

### 2.4 Access the application in browser: <a href="http://localhost:8080/showMyLoginPage">http://localhost:8080/showMyLoginPage</a>

### 3. User manual - How to use system

### **Usernames to log into the system:**

mary, susan, john, michael, emma

### Password:

'fun123' (Bcrypt encryption)

### 3.1 Registration Process:

- 1. Go to the Login Page.
- 2. Click the Register button.
- 3. Fill in the form with your information.
- 4. Click the Register button.

### 3.2 Login Procedures:

- 1. Go to the Login Page.
- 2. Enter your username and password.
- 3. Click the login button.

### 3.3 Community Creation Procedures:

- 1. Go to the Home Page.
- 2. Click on Create Community.
- 3. Enter the community name and description.
- 4. Click the Create button.

### 3.4 Template Creation Procedures:

Within the Community:

- 1. Click on Create Template.
- 2. Enter the template name.
- 3. Select the template fields and enter field names.
- 4. Click the Create button.

### 3.5 Post Creation Procedures:

Within the Community:

- 1. Select a template.
- 2. Go to the Create Post page.
- 3. Fill in the template fields.
- 4. Click the Create Post button.

### 3.6 User Profile Creation Process:

- 1. Go to the Home Page.
- 2. Click the My Profile button.
- 3. On the new page, click the Create Profile button.
- 4. Fill in the form with your information.
- 5. Click the Create button.

### 3.7 Update Community Process:

- 1. Within the Community, click on Update Community.
- 2. Modify the information.
- 3. Click the Update button.

### 3.8 Update User Profile Process:

- 1. Navigate to the user profile.
- 2. Click on the Update User Profile option.
- 3. In the form that appears, update the information.
- 4. Click the Update button

### 3.9 View Created Community Process:

- 1. Go to the Home Page.
- 2. Click on the "View" link next to the listed communities.

### 3.10 View All Communities Process:

- 1. Go to the Home Page.
- 2. Check the "Communities" checkbox in the basic search form.
- 3. Click the Search button. All communities in the application will be listed.

### 3.11 View All User Profiles Process:

- 1. Go to the Home Page.
- 2. Check the "Users" checkbox in the basic search form.
- 3. Click the Search button. All users in the application will be listed.

### 3.12 Search Specific Community Process:

- 1. Go to the Home Page.
- 2. Check the "Communities" checkbox in the basic search form.
- 3. Enter the keyword in the search field.
- 4. Click the Search button. Communities matching the keyword will be listed.

### 3.13 Search Specific User Process:

- 1. Go to the Home Page.
- 2. Check the "Users" checkbox in the basic search form.
- 3. Enter the keyword in the search field.
- 4. Click the Search button. Users matching the keyword will be listed.

### 3.14 Advanced Search for Posts Within a Community:

- 1. Go to the Community Page.
- 2. Use the advanced search form to select the criteria you want to search for.
- 3. Enter the keyword.
- 4. Click the Search button.

### 4. Software Requirements Specification

### 4.1 Community creation and moderation

- R-1. WHEN a user decides to create a group, the system shall allow the creator to specify a group name, provide a description, upload a group photo, and determine the visibility settings for the group. (not completed)
- R-2. WHEN a user decides to create a community, the system shall enable the user to create a private or public community. (not completed)
- R-3. WHERE the user creates a community, the system shall designate the owner as the default moderator of the community. (completed)
- R-4. WHEN the owner decides to delegate moderation, the system shall allow the owner to assign moderator roles. (not completed)
- R-5. WHEN the owner decides to transfer ownership, the system shall enable the owner to transfer the ownership of the community to another user. (not completed)
- R-6. WHEN an owner decides to leave a community, the owner shall transfer the community to another user. (not completed)
- R-7. WHERE the system permits, a community shall have multiple owners. (not completed)
- R-8. The system shall display the description of the community on the community page. (completed)
- R-9. The system shall display the number of members on the community page. (completed)
- R-10. WHEN a community is created, the system shall automatically assign a default post type to the community. (completed)
- R-11. WHERE the owner initiates post settings, the system shall allow the owner to decide the type of posts created by members. (not completed)
- R-12. WHEN a moderator decides to edit the group information, the system shall allow the creator to modify the created group name, description, group photo, and visibility settings. (completed)
- R-13. WHEN an owner decides to edit the group information, the system shall allow the creator to modify the created group name, description, group photo, and visibility settings. (completed)
- R-14. WHEN a user decides to create a group, the system shall allow the creator to specify a group name, provide a description, upload a group photo, and determine the visibility settings for the group. (completed)

- R-15. WHEN an owner decides to leave a community, the owner shall transfer the community to another user. (not completed)
- R-16. WHEN a moderator receives requests to join the community, the system shall enable the moderator to admit or reject the requests. (not completed)
- R-17. WHEN a moderator decides to delete a post, the system shall allow the moderator to delete posts. (completed)
- R-18. WHEN a moderator decides to invite a user to the group, the system shall allow the moderator to send an invitation to the specified user. (not completed)
- R-19. WHEN a moderator decides to remove a member from the group, the system shall allow the moderator to remove the member from the group. (not completed)
- R-20. WHEN a moderator decides to view followers of the group, the system shall allow the moderator to see the list of followers and perform searches within this list. (completed)
- R-21. WHEN the owner decides to remove moderators, the system shall allow the owner to remove moderators from the group. (not completed)

### 4.2 User Relationships and Interactions

- R-22. Members shall be able to see the names of other members. (completed)
- R-23. WHEN a user chooses to engage or subscribe, the system shall enable the user to join any group. (completed)
- R-24. WHERE the system allows different roles, users shall have various roles with distinct privileges. (completed)
- R-25. WHEN a post is made in communities/groups that the user is a member of, the system shall notify the user by sending a notification. (not completed)
- R-26. WHEN a friend of the user makes a post, the system shall notify the user by sending a notification. (not completed)
- R-27. WHEN a user decides to follow another user, the system shall enable the user to follow the other user. (not completed)
- R-28. WHEN a user decides to view activities of followed users, the system shall display the activities of the other user they are following. (not completed)
- R-29. WHEN a user decides to view followers, the system shall allow the user to see the list of followers and perform searches within this list. (completed)

R-30. WHEN a user decides to unfollow a friend who is following them, the system shall allow the user to remove the friend from their followers list. (not completed)

### 4.3 User Profile and Transactions

- R-31. WHEN a user decides to create a profile, the system shall allow the user to provide information, including a nickname, age, city, description, and gender. (completed)
- R-32. WHEN a user decides to update their profile, the system shall allow the user to upload a profile photo. (completed)
- R-33. WHEN a user decides to edit their profile, the system shall allow the user to change their profile information. (completed)
- R-34. WHEN a user decides to provide information about themselves, the system shall enable the user to write about themselves in their profile. (completed)
- R-35. WHEN a user decides to log out, the system shall allow the user to exit the system. (completed)
- R-36. WHEN a user attempts to create or update their nickname, the system shall enforce uniqueness, ensuring that each user's nickname is unique. (completed)
- R-37. WHEN a user decides to create or update their email, the system shall enforce uniqueness, ensuring that each user's email is unique. (completed)

### 4.4 Content Creation and Processes

- R-38. WHEN users are in a community page, the system shall allow them to create posts in the community page. (completed)
- R-39. WHEN users are in a community home page, the system shall allow them to create posts in the home page. (not completed)
- R-40. WHEN a user decides to share content, the system shall allow the user to choose from existing post templates and share content based on the selected template. (completed)
- R-41. WHERE a user decides to filter search results, the system shall provide the option to categorize the results into distinct categories such as users, groups, and posts. (completed)
- R-42. The system shall provide a basic post type for all communities. (completed)
- R-43. WHEN the user decides to filter content, the system shall allow filtering by keyword, post type, and date. (completed)
- R-44. The system shall include a reporting system. (not completed)

R-45. WHEN a user decides to delete his/her comment, the system shall allow the user to delete his/her comment. (completed)

R-46. WHEN a user decides to edit his/her comment, the system shall allow the user to edit his/her comment. (not completed)

R-47. WHEN a user decides to delete his/her post, the system shall allow the user to delete his/her post. (completed)

R-48. WHEN a user decides to edit his/her post, the system shall allow the user to edit his/her post. (not completed)

R-49. WHEN a user decides to like a post, the system shall allow the user to express liking for the post. (completed)

R-50. WHEN a user decides to comment on a post, the system shall enable the user to add comments to the post. (not completed)

### 4.5 Search and Filtering Procedures

R-51. WHEN a user decides to search for content, the system shall enable the user to search by typing keywords. ( completed)

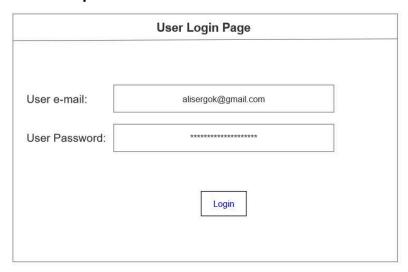
R-52. WHEN a user decides to search for content, the system shall enable the user to use filtering features. (completed)

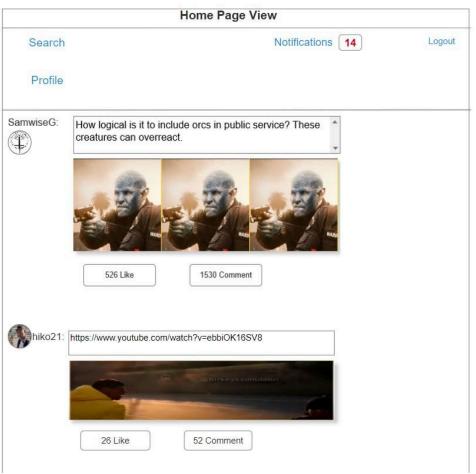
R-53. WHEN a user decides to log out, the system shall allow the user to exit the system. (completed)

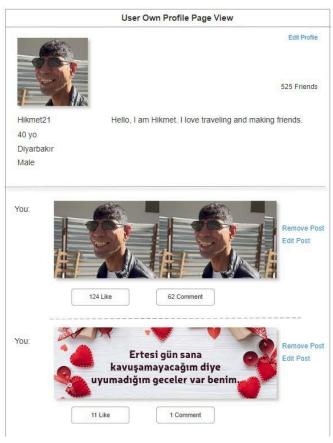
R-54. The user shall be able to see recent updates and posts. (completed)

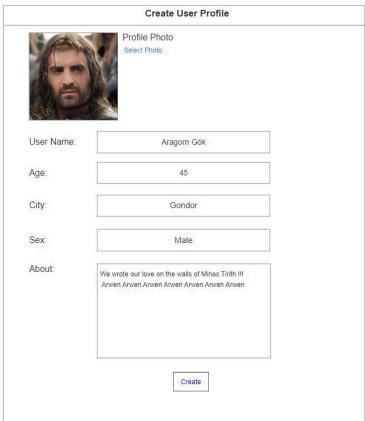
# 6. Design documents

# 6.1 Mockups

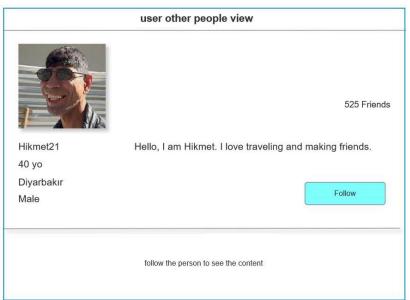


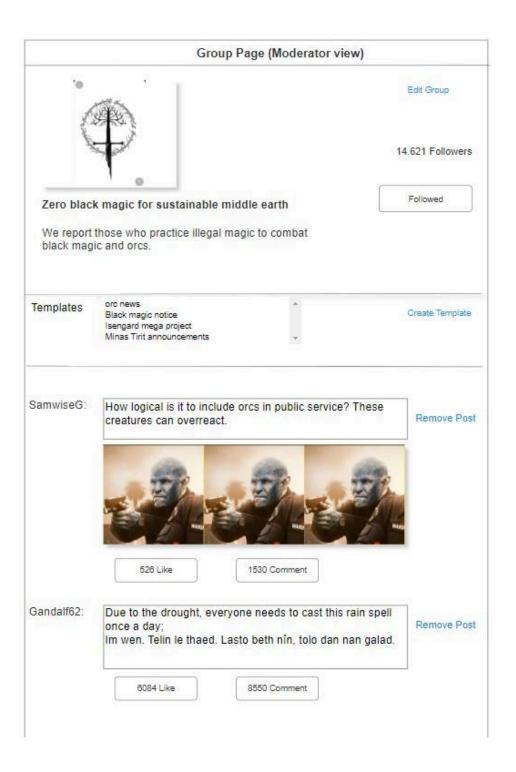


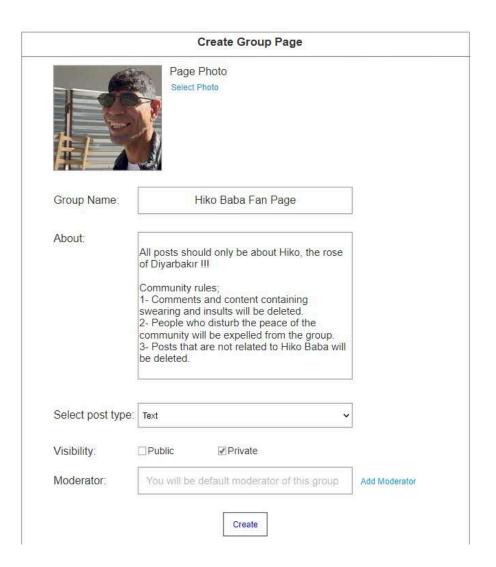


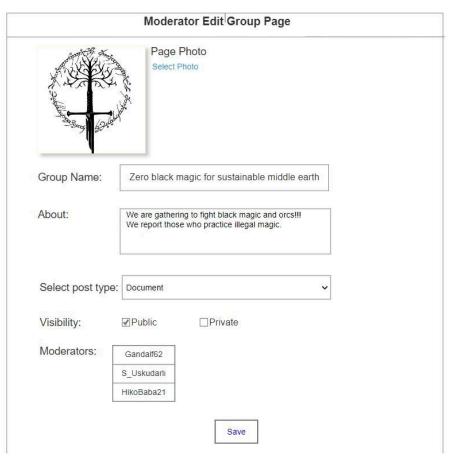


# Edit User Profile Profile Photo Select Photo Vito Corleone Age: 28 City: Sicily Gender: Male About: Hi II I am software engineer and it is my swe573 project Save

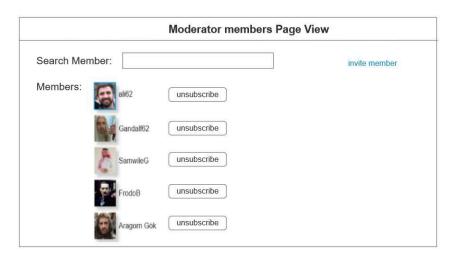


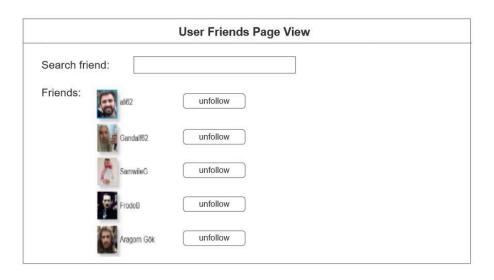


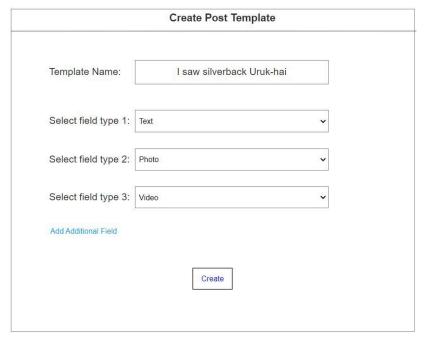






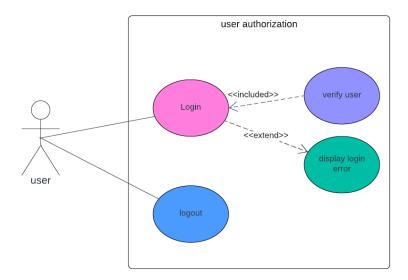


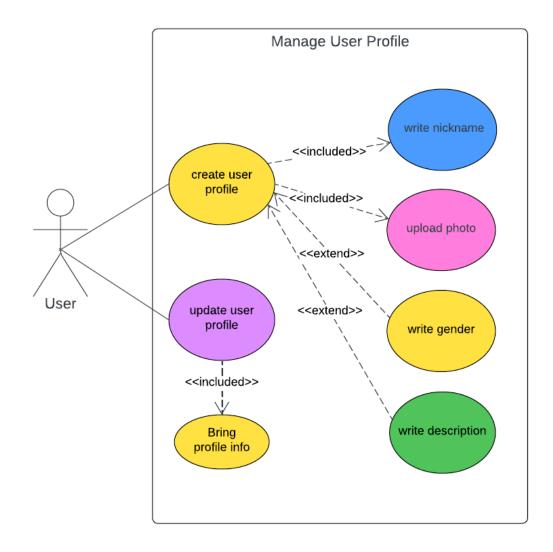


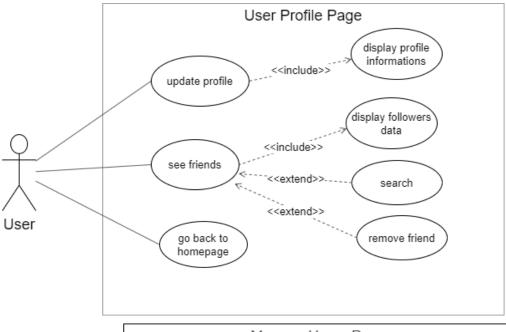


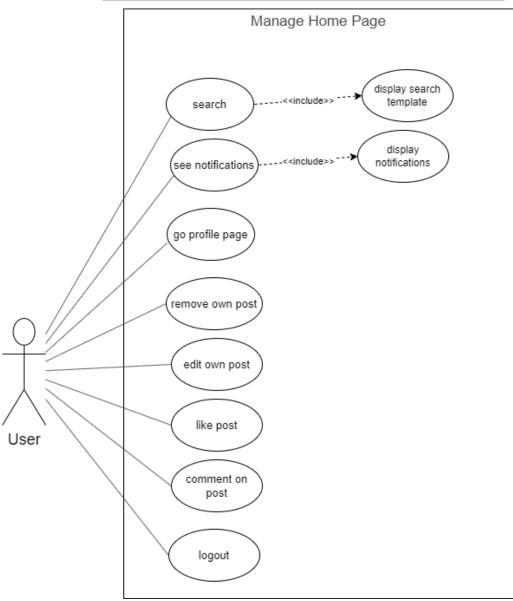


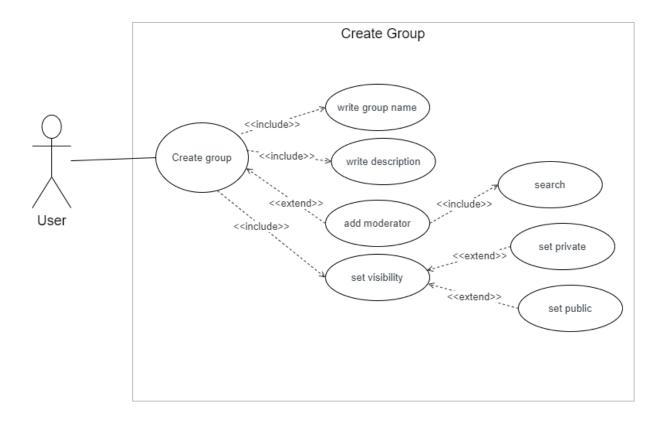
# 6.2 Use Case Diagrams

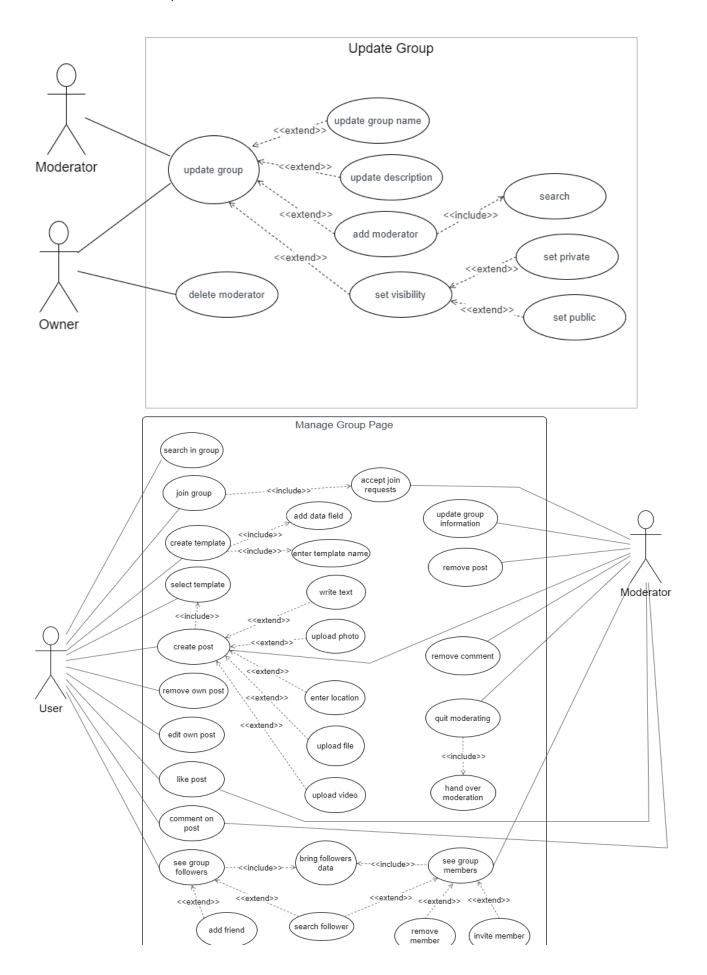


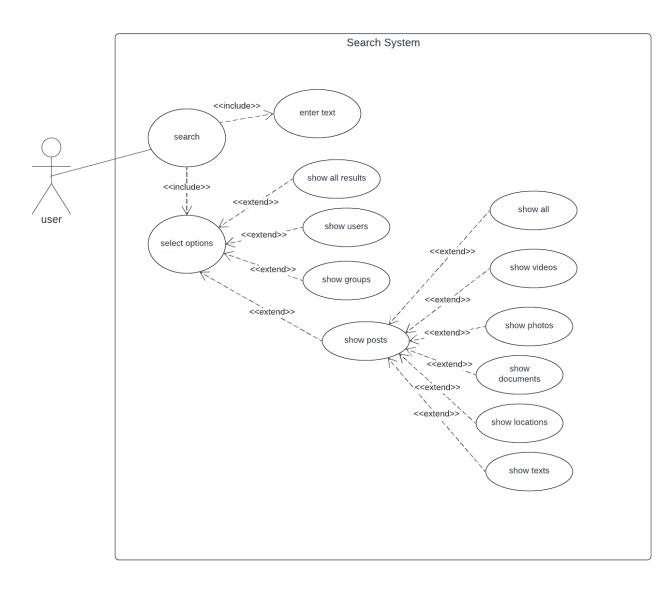




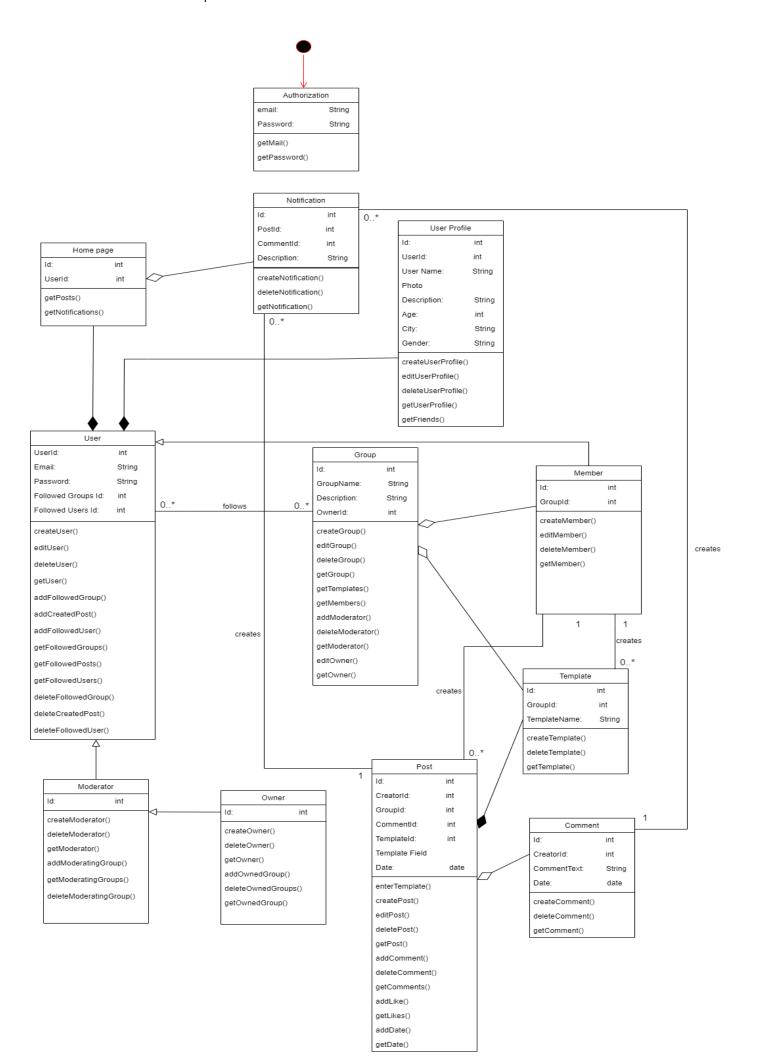




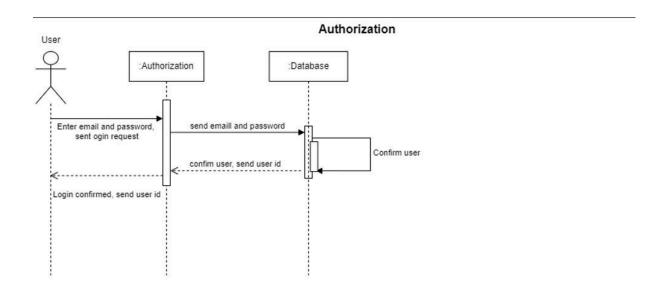




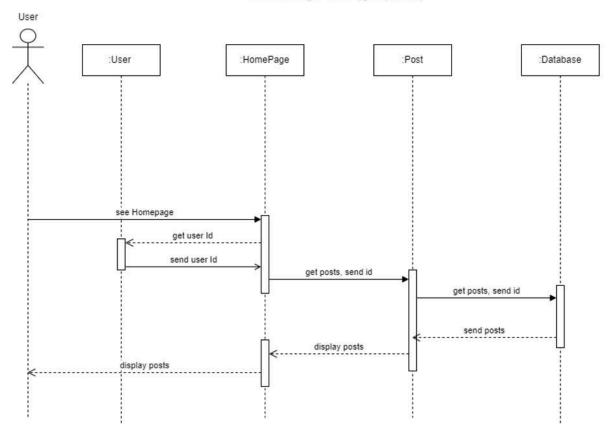
# 6.3 Class Diagrams

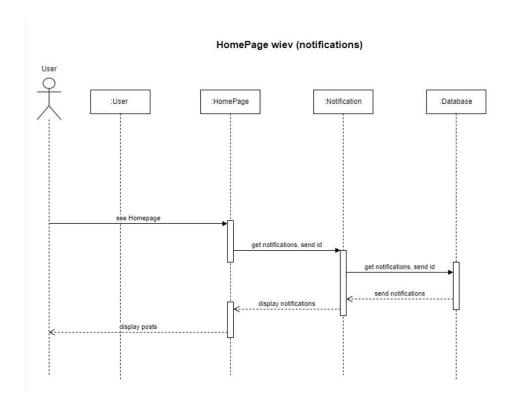


# 6.4 Sequence Diagrams

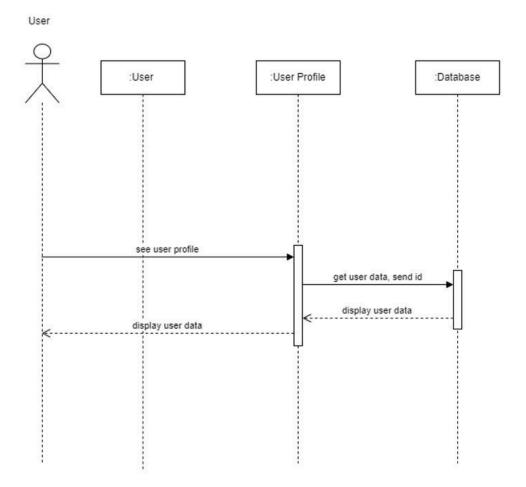


### HomePage wiev (get posts)

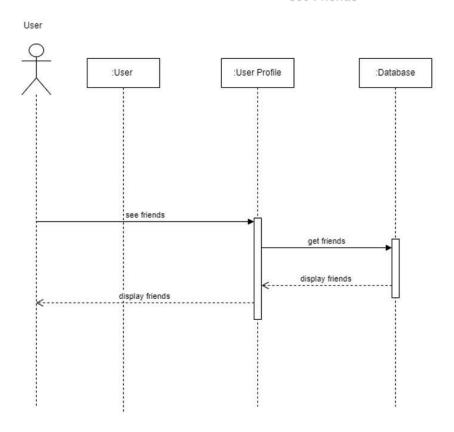




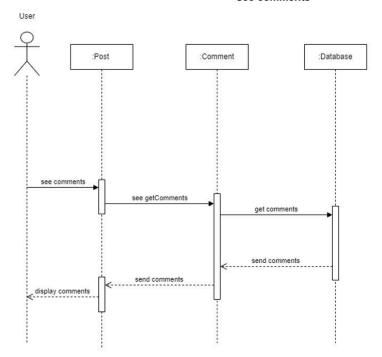
### See User Profile



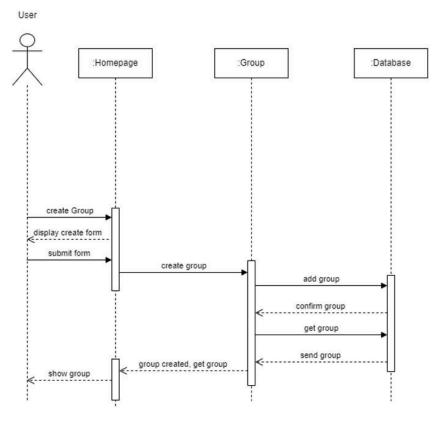
### See Friends

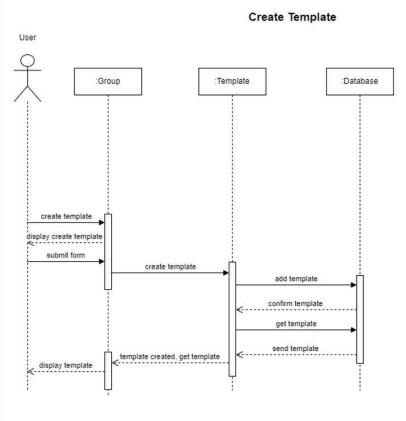


### See comments

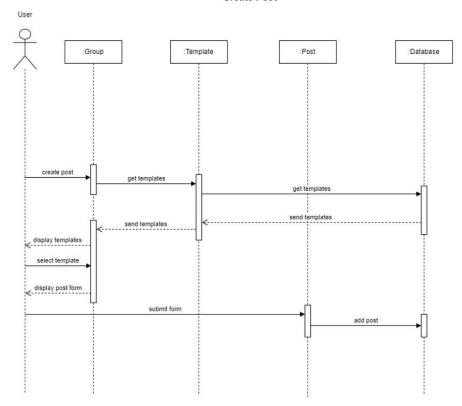


### **Create Group**





### Create Post



### Group Page(See Posts)

