Functional, Non-Functional Requirements & Use Case

Team name: "`qwerty`" LAB3

Members:

1. Danyil Tymchuk
2. Artem Surzhenko

Core Requirements
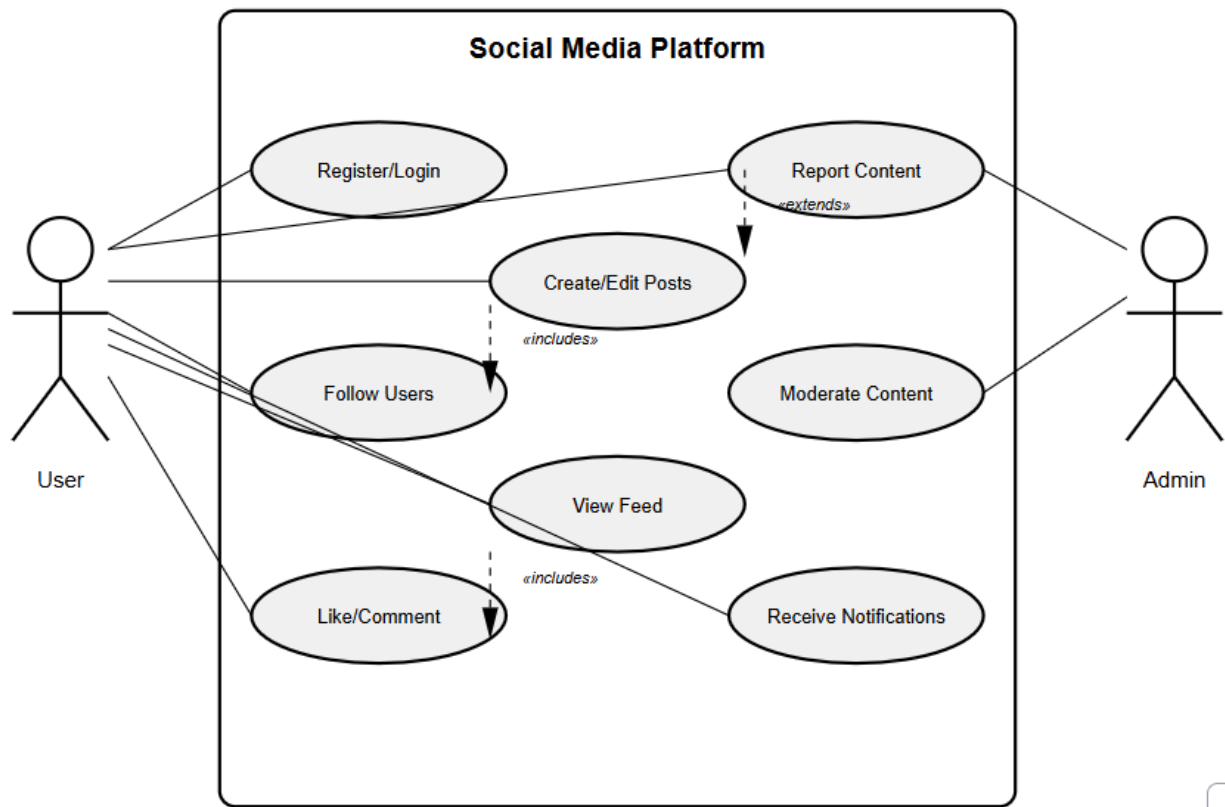
Primary Functional Requirements

1. **User Registration & Authentication**
   - Users must be able to create an account.
   - Authentication.
2. **Post Creation & Interaction**
   - Users can create posts with text, images, and videos.
   - Users should be able to like, comment, and share posts.
3. **Following & Feed Generation**
   - Users should be able to follow/unfollow other users.
4. **Content Moderation & Reporting**
   - ability to remove reported content or suspend accounts.
5. **Trending Topics & Recommendations**
   - Trends

Non-Functional Requirements

1. **Scalability**
2. **Security**
   - authentication
3. **Performance**
   - Implement DB Indexes
4. **Usability**
   - The user interface must be intuitive and accessible for a wide range of users.
5. **Reliability & Availability**
   - Try to create backups

Walkthrough

Social Media Platform Use Case Diagram

Use Case Specifications

Use Case 1: User Registration

Actors: New User **Description:** Allows a new user to create an account. **Preconditions:** The user has access to the sign-up page. **Flow:**

1. User enters username, email, and password.
2. System validates inputs.
3. System stores user information securely.

Use Case 2: Post Creation

Actors: Registered User **Description:** Allows users to create a post with text, images, or videos. **Preconditions:** User is logged in. **Flow:**

1. User clicks the "Create Post" button.
2. User enters post content and uploads optional media.
3. System validates input and uploads content.
4. System stores the post in the database.
5. The post appears in the user's feed.

(Additional use cases will be added, covering liking, commenting, following, and content reporting.)

Webpage Prototypes

- Version 1.0 of the project will be updated to include static web pages representing each functional requirement.
- These pages will be demonstrated to the lecturer for feedback.
- The pages do not need full functionality at this stage but should represent the final design and structure.

GitHub repo: https://github.com/DanyilT/WebDev-Project