

Agreement

A social media site that allows users to create and share posts, discuss topics with other users, and follow other users and topics of interest. The site will be designed to be a web and desktop application and easily accessible for users of all technical backgrounds.

Functional requirements

1.0 User registration and login

The site must have a registration and login system to allow users to create and access their accounts. Users should be able to reset their password in case they forget it.

1.1 User profiles

Each user should have a profile page that displays their basic information (e.g. name, profile picture, bio) and their posts, comments, and upvoted/downvoted content. Users should be able to edit their profiles, make posts and customize their privacy settings.

1.2 News feed

The site should have a news feed that displays posts and discussions from other users in a chronological order. Users should be able to upvote/downvote posts, and the most popular posts should be displayed at the top of the news feed.

1.3 Moderation features

Users should be able to report inappropriate content or behavior on the site. Moderators should be able to review reported content and take appropriate action, such as removing or hiding posts/comments.

1.4 Search functionality

The site should have a search function that allows users to search for posts or discussions by keywords, topics, or usernames. Search results should be displayed in a clear and organized manner.

1.5 Following system

Users should be able to follow other users or topics of interest. When a user follows a topic, they should see posts and discussions related to that topic in their news feed.

1.6 Notification system

The site should have a notification system that alerts users of new activity on their posts or in topics they follow. Notifications should be displayed in a clear and organized manner.

Non functional requirements

Performance

The site should be able to handle a large number of users and posts without slowing down or crashing. Load testing should be conducted to ensure the site can handle peak traffic.

Security

The site should have a secure login system and use encryption to protect user data. Measures should be taken to prevent unauthorized access, hacking, or data breaches.

Usability

The site should be user-friendly and easy to navigate, with clear labels and instructions. User testing should be conducted to ensure the site is easy to use for users of all technical backgrounds.

Acceptance criteria

The site will be considered acceptable if it meets the functional and non-functional requirements outlined in this URS document. User testing will be conducted to ensure the site is easy to use and meets user needs. Any bugs or issues discovered during testing will be addressed before launch.

Use cases

Use Case 1: User Login/Signup

Primary Actor: User

Preconditions:

1. User must have access to the social media site.
2. User must have a valid email address and password.

Main success scenario :

1. User accesses the login/signup page of the social media site.
2. If user has an existing account, the user enters their email address and password.
3. System validates the email address and password.

4. If the email address and password are valid, the system logs the user into their account and displays the user's homepage.
5. If the email address and password are invalid, the system displays an error message and prompts the user to re-enter their credentials.
6. If user does not have an existing account, the user clicks on the sign-up button.
7. The system displays a registration form for the user to enter their personal information such as name, email address, password, and other required information.
8. The user fills out the form and submits it.
9. The system validates the information provided by the user and creates a new account for the user.
10. The system logs the user into their account and displays the user's homepage.

Postconditions:

1. User is logged in to their account and can access all the features of the social media site.
2. If user created a new account, their personal information is stored in the system's database.

Use Case 2: User Interactions with Content on a Social Media Site

Actors: User

Preconditions:

1. User is registered and logged in to the social media site
2. User has access to the internet and a device to access the social media site

Main success scenario:

1. User navigates to the home page or subreddit where they want to post, comment, upvote or downvote content.
2. User creates a new post by clicking on the "Create Post" button and fills in the required fields such as title, content, and subreddit.
3. The system validates the input and saves the post to the database, associating it with the user's account and the chosen subreddit.
4. Other users can see the post on the subreddit or their homepage, and can upvote or downvote it.

5. User can also comment on the post by clicking on the "Comment" button and entering their comment in the provided text box.
6. The system validates the comment and saves it to the database, associating it with the user's account and the post.
7. Other users can see the comment and reply to it.
8. User can upvote or downvote a post or comment by clicking on the respective button.
9. The system updates the post or comment's score and ranking based on the user's vote.

Post-Conditions:

1. The post, comment, upvote, or downvote is successfully saved to the database and associated with the user's account.
2. The content is visible to other users on the social media site.
3. The post, comment, upvote, or downvote affects the ranking and visibility of the content on the site.

Use case 3 : Displaying news feed to users

Primary Actor: Registered User

Preconditions:

1. The user is logged in to the social media site.
2. The user has subscribed to at least one topic or subreddit.

Main success scenario:

1. The user requests to view their news feed.
2. The system retrieves the user's subscribed topics and subreddits.
3. The system retrieves the latest content (posts, comments) from each topic and subreddit.
4. The system filters the content based on the user's preferences and settings (e.g. language, etc.).
5. The system displays the filtered content in chronological order, with the most recent posts and comments appearing first.
6. The user can interact with the content by upvoting, downvoting, commenting, or sharing it.

Postconditions:

1. The user can view the latest content from their subscribed topics and subreddits.
2. The user can interact with the content by upvoting, downvoting, commenting, or sharing it.

Use Case 4 : Moderation Features for Users

Primary Actor: Moderators

Goal: To moderate content and user behavior on the social media site.

Preconditions:

1. The user is logged in as a moderator.
2. There are posts and/or comments that have been flagged or reported by other users.

Main success scenario:

1. The moderator logs in to the social media site.
2. The moderator navigates to the moderation dashboard.
3. The moderator reviews flagged posts and comments.
4. The moderator decides whether to remove the post/comment, warn the user, or take other action as appropriate.
5. If the moderator removes the post/comment, the system notifies the user who posted it and provides a reason for the removal.
6. If the moderator warns the user, the system sends a notification to the user explaining the warning and the reason for it.
7. The moderator can view statistics and trends related to flagged content and user behavior on the site.

Alternative Flows:

1. If the moderator determines that no action is necessary, they can choose to ignore the flag and move on to the next item in the moderation queue.
2. If the moderator encounters a particularly difficult case or is unsure how to proceed, they can escalate the issue to a senior moderator or administrator for further review and guidance.

Postconditions:

1. The flagged content has been dealt with appropriately according to the site's moderation policies.
2. The moderator has access to up-to-date statistics and trends related to flagged content and user behavior on the site.

Use Case 5: Search Functionality for Users

Primary Actor: User

Goal in Context: The user wants to search for a specific topic or post on the social media site.

Preconditions:

1. The user is registered and logged in to the social media site.
2. The search functionality is available and accessible to the user.
3. There are posts or topics available to search.

Trigger: The user wants to find a specific post or topic on the social media site.

Main success scenario:

1. The user clicks on the search icon or enters the search term in the search bar.
2. The system displays the search page with options to search for posts or topics.
3. The user enters the search criteria and clicks on the search button.
4. The system searches the database for the relevant posts or topics based on the search criteria.
5. The system displays a list of search results, including relevant posts or topics, that match the search criteria.
6. The user can then click on the specific post or topic to view it.

Alternative Flow:

1. If no search results are found, the system displays a message to the user indicating that there are no results found.

Post-conditions:

1. The search results are displayed to the user.
2. The user can view the selected post or topic.
3. The user can refine the search criteria and search again.

Use Case 6 : Follow Users/Topics

Actors: user

Preconditions:

1. The user is logged in to the social media site

Main success scenario:

1. The user navigates to the profile of a user or a topic of interest.
2. The user clicks the "Follow" button on the profile or topic page.
3. The system adds the user or topic to the user's list of followed users or topics.
4. The system displays a confirmation message to the user.

Alternate Flows:

1. If the user is already following the user or topic, the system displays a message indicating that the user is already following them.

Postconditions:

1. The user is now following the selected user or topic, and updates related to that user or topic will appear in the user's news feed.

Use case 7 : Notification system for a user

Actors: user

Description:

The notification system allows a user to be notified of new activity on their posts or in topics they follow on the social media site. The system monitors the user's activities and sends notifications when new activities occur.

Preconditions:

1. The user has an account on the social media site.
2. The user has turned on notification settings for new activities.
3. There are new activities on the user's posts or in the topics they follow.

Main success scenario:

1. The notification system monitors the user's activities on the social media site.
2. When new activities occur on the user's posts or in the topics they follow, the system sends notifications to the user.
3. The user receives the notification on their device.
4. The user can click on the notification to view the new activity.

Alternative flows:

1. If the user has turned off notification settings for new activities, the system will not send any notifications to the user.
2. If there are no new activities on the user's posts or in the topics they follow, the system will not send any notifications to the user.