**Backend:**

1. Account management class

* Signup method
* Login method
* Logout method
* Track user status (online or offline), updates when user logs out
* Use hashed passwords (e.g., with MessageDigest or java.security).
* Validation by checking email format and making sure every field is filled out

1. User class (possibly add arraylist containing friends usernames)

* userId
* Email
* Username
* Password
* Dateofbirth
* Status

1. Profile Management class

* Profile and cover photo
* Bio
* Password(Hashed storage)
* Save updated user details
* Fetch and serve a list of the user’s own posts with timestamps and any attached images.
* Fetch and serve a list of the user’s friends, including their status (online/offline)

1. Content class (will be superclass for both stories and posts)

* contentId
* authorId
* content (text with optional image)
* timestamp: Creation time
* Automatically delete expired stories from the file-based database

1. Friend Management class

* Suggest friends who are not already in the user's friend list
* Enable receivers to accept or decline requests
* Remove: Ends the friendship but allows users to reappear in friend suggestions
* Display friend statuses (online/offline) in the newsfeed page.
* Block: Prevent interaction, including viewing posts, stories, and statuses
* Suggest friends who are not already in the user's friend list

1. Newsfeed class (fetch and serve)

* Posts and stories from friends
* List of friends, including their statuses (online/offline)
* Friend suggestions.

**Frontend:**

1. Window to choose sign-in or login
2. Signup form to collect and validate user details.
3. Login form with error handling for incorrect credentials
4. Newsfeed page

* Logout button to update the user’s status to offline and close the session
* Display the user’s online/offline status
* Show online/offline status of friends on the newsfeed page(Friend List: Indicate which friends are online or offline)
* Content Creation Area
  + Creating posts with text and optional images
  + Creating stories with similar options
* Posts and Stories: Show recent posts and active stories from friends
* Friend Suggestions: A section to display potential new friends.
* A refresh button to manually reload the page and fetch updates (new posts, stories, friend requests, etc.).

1. Profile Management Page

* Change profile photo and cover photo using an upload feature
* Edit their bio
* Update their password
* Display the user’s posts in a section, showing the content and images
* Display the user’s friends list, indicating their online/offline status

1. Friend management interface

* View and respond to friend requests
* View and manage the friend list
* View and send friend suggestions
* Block or remove friends

**Deadline for delivery is Friday, December 6, 2024, at 11:59 PM.**