

# A central media hub for all the things *you* love CS 40700 - Senior Design Project

#### **SPRINT 1 - PLANNING DOCUMENT**

#### Team 6

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#### **SPRINT OVERVIEW**

#### **Overview**

Our goal for this Sprint is to complete the initial set up for login, register, successfully creating and updating user account information. In addition, we also aim on completing the authentication process that we will be using to ensure user data protection and privacy. Starting off on the frontend, we plan to get a barebones frame for the whole application setup and working. Everything related to registration and logging in should be completely implemented by the end of this print. For the backend, ee will start off with creating, persisting and working with user entities. We will then work towards providing stellar industry-standard authentication for the whole application and the required endpoints. We also plan to allow users to be able to edit their profiles if needed. In order to achieve these goals, we will be completing the following user stories highlighted below. This sprint would then set the stage for us implementing the main functionality of supporting searches for users.

#### **Scrum Master**

Utkarsh Agarwal

## **Meeting Schedule**

- Standups Every weekday 9:00 pm 9:15 pm
- Weekly Meetings Every Thursday 1:00 pm 2:00 pm

### **Risks and Challenges**

- Being the first sprint, a formidable challenge that we have to overcome is to get acclimated to each others' working style and preferences.
- Maintaining proper communication at all times and working well with others is also something we need to work on in this sprint.
- Our biggest source of risks we face in this sprint is non adherence to requirements set forward as a team by individual developers - we need to make sure that the whole team works towards a single goal, while working with and keeping in mind criteria for code standards, unit testing and more.

#### **CURRENT SPRINT DETAILS**

## **User Story #1**

As a user, I should be able to view the application's main landing page before logging in.

#### Task Table

Task No	Description	Hours	Developer
1	Create the UI for the landing page	3	Pooja Tewari
2	Create buttons for Login and Register	1	Pooja Tewari
3	Setup Look and Feel for application	2	Pooja Tewari
4	Setup Loading spinner for application	2	Pooja Tewari
5	Unit testing for all layers in frontend	1	Pooja Tewari

#### Acceptance Criteria

1. GIVEN: A new user

WHEN: The user navigates to the app's URL,

THEN: User must see landing page

2. GIVEN: A new user

WHEN: The user navigates to the app's URL

THEN: User must be able to click Login and Register

3. GIVEN: A new user

WHEN: Whenever a page takes a long time to load

THEN: User must see loading spinner

As a user, I should be able to create an account.

#### Task Table

Task No	Description	Hours	Developer
1	Create a UI for creating an account	3	Shivangi Chand
2	Create a user model in the frontend	1	Shivangi Chand
3	Setup controller on the frontend to interact with the backend	2	Shivangi Chand
3	Error and exception handling for frontend	1	Shivangi Chand
4	Unit tests for all three layers in the frontend	2	Shivangi Chand
5	Setup controller and presentation layer on the backend for API endpoint for creating a user	1	Amol Moses Jha
6	Setup service layer for translating between presentation and persistent layer	2	Amol Moses Jha
7	Setup persistence layer in the backend for creating user entities	2	Amol Moses Jha
8	Error and exception handling for the backend	1	Amol Moses Jha
9	Unit tests for all the three layers in the backend	2	Amol Moses Jha
10	Integrate frontend and backend	2	Shivangi Chand, Amol Moses Jha

## Acceptance Criteria

1. GIVEN: A new user

WHEN: User navigates to registration page

THEN: User is able to view the registration page.

2. GIVEN: A new user

WHEN: User is browsing the registration page.

THEN: User is able to input fields on the UI to be sent to the backend.

3. GIVEN: A new user

WHEN: User sends a request to for creating a new user.

THEN: The backend should successfully persist the user in the database.

## **User Story #3**

As a user, I should be able to delete my account.

Task No	Description	Hours	Developer
1	Create a UI for creating an account	3	Shivangi Chand
2	Setup controller on the frontend to interact with the backend	2	Shivangi Chand
3	Error and exception handling for frontend	1	Shivangi Chand
4	Unit tests for all three layers in the frontend	2	Shivangi Chand
5	Setup controller and presentation layer on the backend for API endpoint for creating a user	1	Amol Moses Jha
6	Setup service layer for translating between presentation and persistent layer	2	Amol Moses Jha
7	Setup persistence layer in the backend for creating user entities	2	Amol Moses Jha
8	Error and exception handling for the backend	1	Amol Moses Jha
9	Setup authentication and protection for the endpoint for creating a user	1	Utkarsh Agarwal
10	Unit tests for all the three layers in the backend	2	Amol Moses Jha

11 Integrate frontend and backend	2	Shivangi Chand, Amol Moses Jha
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1. GIVEN: A logged in user

WHEN: User is viewing profile page

THEN: User is able to view delete option.

2. GIVEN: A logged in user

WHEN: User clicks the delete profile option for the first time.

THEN: User is able to view "Are you sure?" option

3. GIVEN: A logged in user

WHEN: The user confirms that they want to delete their profile and therefore sends a request to the backend for deleting their profile

THEN: The backend should successfully delete the user entity in the database.

## **User Story #4**

As a user, I should be able to verify my email when I create an account.

Task No	Description	Hours	Developer
1	Create a UI for verifying emails	2	Pooja Tewari
2	Setup controller on the frontend to interact with the backend	1	Pooja Tewari
3	Error and exception handling for the frontend	1	Pooja Tewari
4	Unit tests for all layers in the frontend	2	Pooja Tewari
5	Setup controller and presentation layer on the backend for API endpoint for email verification for a user	1	Amol Moses Jha

6	Setup service layer for email verification	2	Amol Moses Jha
7	Setup persistent layer to store verification tokens	2	Amol Moses Jha
8	Error and exception handling for the backend	1	Amol Moses Jha
9	Unit tests for all the three layers in the backend	2	Amol Moses Jha
10	Integrate frontend and backend	2	Pooja Tewari, Amol Moses Jha

1. GIVEN: A new, unverified user

WHEN: User registers a new account

THEN: User must receive an email for email verification

2. GIVEN: A new, unverified user

WHEN: User verifies their account

THEN: User is successfully verified and persisted in the database.

3. GIVEN: A new, unverified User

WHEN: User tries to login using their credentials

THEN: User must not be able to login

4. GIVEN: A new, unverified User

WHEN: User has received an email verification link via email

THEN: User has 24 hours to verify their email before the verification link expires.

5. GIVEN: A verified users

WHEN: User tries to login

THEN: User is able to login successfully

## User Story #5

As a user, I should be able to login into my account.

#### Task Table

Task No	Description	Hours	Developer
1	Create a UI for logging into accounts	2	Pooja Tewari
2	Setup controller on the frontend to interact with the backend	1	Pooja Tewari
3	Error and exception handling for the frontend	1	Pooja Tewari
4	Unit tests for all three layers in the frontend	2	Pooja Tewari
5	Setup controller and presentation layer on the backend for API endpoint for user login	2	Utkarsh Agarwal
6	Setup service layer for translating between presentation and persistent layer	2	Utkarsh Agarwal
7	Query persistent layer for verifying user credentials	1	Utkarsh Agarwal
8	Error and exception handling for the backend	1	Utkarsh Agarwal
9	Setup authentication and protection for the endpoint for creating a user	3	Utkarsh Agarwal
10	Unit tests for all the layers in the backend	2	Utkarsh Agarwal
11	Integrate frontend and backend	2	Pooja Tewari, Utkarsh Agarwal

## Acceptance Criteria

1. GIVEN: An existing user

WHEN: User navigates to login page

THEN: User can see login page.

2. GIVEN: An existing, valid user

WHEN: User attempts to login

THEN: User is able to successfully login.

3. GIVEN: An invalid user

WHEN: Invalid user attempts to login.

THEN: User is not able to login.

## **User Story #6**

As a user, I should be able to logout of my account.

#### Task Table

Task No	Description	Hours	Developer
1	Create UI for a logout button	1	Shivangi Chand
2	Setup controller on the frontend to interact with the backend	2	Pooja Tewari
3	Error and exception handling for the frontend	1	Pooja Tewari
4	Unit tests for all the layers in the frontend	2	Pooja Tewari
5	Implement backend authentication and session handling to successfully logout a user from the application.	2	Utkarsh Agarwal
6	Exception and error handling for backend.	1	Utkarsh Agarwal
7	Unit tests for all the layers in the backend	1	Utkarsh Agarwal
8	Integrate frontend and backend	2	Pooja Tewari, Utkarsh Agarwal

## Acceptance Criteria

1. GIVEN: A logged in user

WHEN: The user clicks their profile picture

THEN: A user should see logout button in a dropdown menu.

2. GIVEN: A logged in user

WHEN: The user clicks logout button

THEN: They should be able to successfully logout of the application.

3. GIVEN: A user logs out successfully

WHEN: The app reloads

THEN: User should be redirected to the main landing page.

## **User Story #7**

As a user, I should have an option to login using my Google account.

Task No	Description	Hours	Developer
1	Setup UI elements to allow users to login via Google	1	Pooja Tewari
2	Setup UI elements to allow user to Register via Google	1	Shivangi Chand
3	Setup authentication strategies using Google's authentication mechanism on the frontend	2	Pooja Tewari
4	Unit tests for all the layers in the frontend	2	Pooja Tewari
5	Setup persistent layer for creating Google user	1	Amol Moses Jha
6	Setup controller and presentation layer on the backend for API endpoint for user login	1	Utkarsh Agarwal
7	Setup service layer for translating between presentation and persistent layer	1	Utkarsh Agarwal
8	Setup authentication strategies using Google's authentication mechanism on the backend	3	Utkarsh Agarwal

9	Unit testing for all the layers in the backend	1	Utkarsh Agarwal
10	Integrate frontend and backend	2	Pooja Tewari, Utkarsh Agarwal

1. GIVEN: User wants to register or login

WHEN: They are on register or login page

THEN: They should be able to see Google button

2. GIVEN: User wants to register using Google

WHEN: User goes through Google's register process

THEN: The backend should successfully persist the user in the database

3. GIVEN: User wants to login using Google

WHEN: User goes through Google's login process

THEN: User is able to successfully login.

## **User Story #8**

As a user, I should have an option to login using my Facebook account.

Task No	Description	Hours	Developer
1	Setup UI elements to allow users to login via Facebook	1	Pooja Tewari
2	Setup UI elements to allow user to Register via Facebook	1	Shivangi Chand
3	Setup authentication strategies using Facebook's authentication mechanism on the frontend	2	Pooja Tewari
4	Unit tests for all the layers in the frontend	2	Pooja Tewari

5	Setup persistent layer for creating Facebook user	1	Amol Moses Jha
6	Setup controller and presentation layer on the backend for API endpoint for user login	1	Utkarsh Agarwal
7	Setup service layer for translating between presentation and persistent layer	2	Utkarsh Agarwal
8	Setup authentication strategies using Facebook's authentication mechanism on the backend	З	Utkarsh Agarwal
9	Unit testing for all the layers in the backend	1	Utkarsh Agarwal
10	Integrate frontend and backend	2	Pooja Tewari, Utkarsh Agarwal

1. GIVEN: User wants to register or login

WHEN: They are on register or login page

THEN: They should be able to see Facebook button

2. GIVEN: User wants to register using Facebook

WHEN: User goes through Facebook's register process

THEN: The backend should successfully persist the user in the database

3. GIVEN: User wants to login using Facebook

WHEN: User goes through Facebook's login process

THEN: User is able to successfully login

## **User Story #9**

As a user, I should be able to view my profile page.

Task No	Description	Hours	Developer
1	Create a UI for viewing Profile	3	Shivangi Chand
2	Setup controller on the frontend to interact with the backend	2	Shivangi Chand
3	Error and exception handling for the frontend	1	Shivangi Chand
4	Unit tests for all three layers in the frontend	2	Shivangi Chand
5	Setup controller and presentation layer on the backend for API endpoint for getting user details	1	Amol Moses Jha
6	Setup service layer for translating between presentation and persistent layer	2	Amol Moses Jha
7	Implement interactions with the persistent layer to retrieve user details.	2	Amol Moses Jha
8	Error and exception handling for the backend.	1	Amol Moses Jha
9	Setup authentication and protection for the endpoint for viewing user profile page	1	Utkarsh Agarwal
9	Unit tests for all layers in the backend	2	Amol Moses Jha
10	Integrate frontend and backend	2	Shivangi Chand, Amol Moses Jha

1. GIVEN: The user wants to view the Profile

WHEN: The user clicks on the profile icon

THEN: The user will be able to view their profile information

2. GIVEN: The user requests for the Profile Page

WHEN: The user clicks on the Profile icon

THEN: The correct profile information is visible to the user

3. GIVEN: The user has not changed their preferences

WHEN: The user views their profile page

THEN: The default preference settings is visible to the user

# User Story #10

As a user, I should be able to change aspects about my profile - including my name, password, email, category preferences and number of previous searches - when on my profile page.

Task No	Description	Hours	Developer
1	Create UI for allowing users to edit profile	3	Shivangi Chand
2	Setup controller on the frontend to interact with the backend.	2	Shivangi Chand
3	Error and exception handling on the frontend	1	Shivangi Chand
4	Unit tests for the frontend	2	Shivangi Chand
5	Setup controller and presentation layer on the backend for API endpoint for updating user details	1	Amol Moses Jha
6	Setup service layer for translating between presentation and persistent layer	2	Amol Moses Jha
7	Implement interactions with the persistent layer to update user details.	2	Amol Moses Jha
8	Error and exception handling for the backend.	1	Amol Moses Jha
9	Unit tests for all layers in the backend	2	Amol Moses Jha
10	Setup authentication and protection for the endpoint for updating user details	2	Utkarsh Agarwal
11	Integrate frontend and backend	2	Shivangi Chand, Amol Moses Jha

1. GIVEN: A logged in User

WHEN: User clicks on option to edit profile information

THEN: User is able to edit profile information on profile fields in the various frontend components.

2. GIVEN: A logged in User

WHEN: User clicks submit button to edit profile information with updated values

THEN: User is able to successfully update their details.

3. GIVEN: A logged in User

WHEN: User requests a submit to edit their profile information, the frontend makes a request to the backend to edit their details.

THEN: The backend is able to persist the edited details successfully.

## **User Story #11**

As a user, I should be able to reset my password in case I cannot remember my password.

Task No	Description	Hours	Developer
1	Create UI for Forgot Password	2	Pooja Tewari
2	Setup controller on the frontend to interact with the backend.	1	Pooja Tewari
3	Error and exception handling on the frontend	1	Pooja Tewari
4	Unit tests for the frontend	2	Pooja Tewari
5	Setup controller and presentation layer on the backend for API endpoint for forgot password	1	Utkarsh Agarwal
6	Setup service layer for translating between presentation and persistent layer	2	Utkarsh Agarwal
7	Implement interactions with the persistent layer to reset user password.	1	Utkarsh Agarwal

8	Error and exception handling for the backend.	1	Utkarsh Agarwal
9	Unit tests for all layers in the backend	3	Utkarsh Agarwal
10	Integrate frontend and backend	2	Pooja Tewari, Utkarsh Agarwal

1. GIVEN: User forgot password

WHEN: User clicks Forgot Password

THEN: User should see Forgot Password page

2. GIVEN: User is in Forgot Password interface

WHEN: User enters their email

THEN: They receive email for setting new password

3. GIVEN: User has opted for Forgot Password

WHEN: User has received password reset link via email

THEN: User has 24 hours to reset their password before the link expires.

## **User Story #12**

As a user, after logging in, I should be able to view the front page - which would serve as the central page for displaying the search bar, the search results and my various preferred categories for displaying the search results in.

Task No	Description	Hours	Developer
1	Create UI for Home	2	Shivangi Chand
2	Create UI for Search	2	Shivangi Chand
3	Create UI for Trending	1	Shivangi Chand

4	Unit Test Frontend	1	Shivangi Chand

1. GIVEN: The User wants to view the Home page

WHEN: The user navigates to Home

THEN: The home page should be visible to the user

2. GIVEN: The user is logged in successfully

WHEN: the user enters the credentials

THEN: the home page should be visible to the user

3. GIVEN: The user wants to view the trending searches

WHEN: the clicks on the trending the tab

THEN: the trending page should be visible to the user

4. GIVEN: The user wants to search something

WHEN: the user clicks the search tab

THEN: the search page is visible to the user

## **HOURS TABLE**

Developer	Hours
Utkarsh Agarwal	46
Amol Moses Jha	47
Pooja Tewari	45
Shivangi Chand	46

#### **BACKLOG**

- 1. As a user, I should be able to view the application's main landing page before logging in.
- 2. As a user, I should be able to create an account.
- 3. As a user, I should be able to delete my account.
- 4. As a user, I should be able to verify my email when I create an account.
- 5. As a user, I should be able to login into my account.
- 6. As a user, I should be able to logout of my account.
- 7. As a user, I should have an option to login using my Google account.
- 8. As a user, I should have an option to login using my Facebook account.
- 9. As a user, I should be able to view my profile page.
- 10. As a user, I should be able to change aspects about my profile including my name, password, email, category preferences and number of previous searches when on my profile page.
- As a user, I should be able to reset my password in case I cannot remember my password.
- 12. As a user, after logging in, I should be able to view the front page which would serve as the central page for displaying the search bar, the search results and my various preferred categories for displaying the search results in.
- 13. As a user, I should be able to store my profile picture.
- 14. As a user, I should be able to update my profile picture.
- 15. As a user, I should be able to delete my profile picture.
- 16. As a user, I should be able to specify one or multiple search terms in the search bar when searching for online media.
- 17. As a user, I should be able to obtain relevant search results back, neatly organized into categories.
- 18. As a user, I should be able to specify the ranking of content categories returned on the search results page.
- 19. As a user, I should be able to remove categories which I don't find meaningful to me.
- 20. As a user, I should be able to connect my accounts of online video content providers to the application.
- 21. As a user, I should be able to get search results for video content.
- 22. As a user, I should be able to connect my accounts of online movie services providers to the application.
- 23. As a user, I should be able to get search results for movies.
- 24. As a user, I should be able to connect my accounts of online TV content providers to the application.
- 25. As a user, I should be able to get search results for TV series.

- 26. As a user, I should be able to connect accounts of online audio content providers to the application.
- 27. As a user, I should be able to get search results for audio content.
- 28. As a user, I should be able to connect accounts of written content providers to the website.
- 29. As a user, I should be able to get search results for written content.
- 30. As a user, I should be able to connect accounts of events data providers to the website.
- 31. As a user, I should be able to get search results for events near me.
- 32. As a user, I should be able to browse my previous search terms.
- 33. As a user, I should be able to see other trending searches.
- 34. As a user, I should be able to see my most frequent searches.
- 35. As a user, I would like to connect to developers in order to provide meaningful feedback.
- 36. As a developer, I would want the project to be very well tested, with great coverage ensured by a healthy mix of unit, integration, regression and functional tests.
- 37. If time permits, as a user, I should be able to get ratings for online content in the search results to better aid me in making a decision.
- 38. If time permits, as a user, I should be able to see snippets of my previous searches.
- 39. If time permits, as a user, I should be able to see snippets of my most frequent searches.
- 40. If time permits, as a user, I should be able to see snippets of trending searches.