

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

### **SPRINT 3 - PLANNING DOCUMENT**

### Team 6

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#### **SPRINT OVERVIEW**

#### **Overview**

Our goal for this sprint is to complete the searching capabilities for rest of the categories that we aim to deliver to the users. We also plan to implement our dashboard and trending pages so that the user will be able to get quick links to searches based on their category preferences. For the frontend, we plan to get our frontend UI for dashboard and trending pages completed with emphasis on developing reusable components. For the backend, we will be connecting our application to more third-party APIs and give user the option to connect their respective accounts to get better search results. We also plan to tackle stress testing, regression testing and integration testing in an automated manner. Finally, we want to deliver a secure application with HTTPS enabled. In order to achieve these goals, we will be completing the following user stories highlighted below. This sprint would complete rest of the central functionalities for our application like search, dashboard and trending.

### **Scrum Master**

Utkarsh Agarwal

# **Meeting Schedule**

- Standups Every weekday 9:00 pm 9:15 pm
- Weekly Meetings Every Saturday 10:00 am 1:00 pm

# **Risks and Challenges**

- One of the biggest concerns for us going into the last sprint would be the time that will be consumed to understand and integrate a number of third-party APIs. Since we have a cursory knowledge of these APIs, we will have to account for time that will go into familiarising ourselves with them.
- Another concern is that with new features being implemented, we don't introduce bugs
  for features that have already been implemented. Regression testing will need to be
  given emphasis during this sprint.
- 3. This sprint will include Thanksgiving break in which team members may be travelling. We need to make sure that this doesn't hamper our development process and everyone can work even from their homes.

# **CURRENT SPRINT DETAILS**

# **User Story #26**

As a user, I should be able to connect accounts of online audio content providers to the application.

### Task Table

Task No	Description	Hours	Developer
1	Create UI to connect to all accounts for online audio providers	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 the layers in the frontend	1	Pooja Tewari
5	Setup controller and presentation layer on the backend for API endpoint for connecting user account with audio content providers	1	Amol Moses Jha
6	Setup service layer for translating between presentation and persistent layer	2	Amol Moses Jha
7	Implement storage of connected provider details in the persistence layer for audio content providers	2	Amol Moses Jha
8	Unit Tests for Backend	1	Amol Moses Jha
9	Integrate frontend and backend	2	Pooja Tewari, Amol Moses Jha

### Acceptance Criteria

1. GIVEN: The user is securely logged into the account

WHEN: They want to search terms for online audio content

THEN: They are able to connect to the respective accounts to allow Mine do the search

2. GIVEN: The user wished to connect their respective accounts

WHEN: They search terms for online audio content

THEN: A UI is displayed that allows them to do so

3. GIVEN: The user wishes to connect their respective accounts for online audio content

WHEN: Gives permission to connect their account

THEN: User authentication metadata is stored on persistent storage

# **User Story #27**

As a user, I should be able to get search results for audio content.

Task No	Description	Hours	Developer
1	Create a UI for displaying the results for audio content	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 the frontend	1	Pooja Tewari
5	Setup controller and presentation layer on the backend for API endpoint for searching query in the connect audio content providers.	1	Amol Moses Jha
6	Setup service layer for translating between presentation and persistent layer	2	Amol Moses Jha
7	Implement search table in the persistence layer for storing queries related to audio content	1	Amol Moses Jha
8	Unit Tests for Backend	1	Amol Moses Jha

9	Integrate frontend and backend	2	Pooja Tewari, Amol Moses Jha
			Allioi Moses Jila

1. GIVEN: The user is securely logged into the account

WHEN: They want to search terms for online audio content

THEN: They frontend should interact with the backend, successfully parsing user input

2. GIVEN: The frontend has specified user search terms for audio content

WHEN: The user wants to search terms for audio content

THEN: The backend returns audio content search results interacting successfully with all third party APIs

3. GIVEN: The backend returns search results for audio content

WHEN: The user wants to search terms for online audio content

THEN: The UI components render the search results and their metadata neatly compartmentalized

# **User Story #28**

As a user, I should be able to connect accounts of written content providers to the website.

Task No	Description	Hours	Developer
1	Create UI to connect to all accounts for online written providers	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 the layers in the frontend	1	Pooja Tewari

5	Setup controller and presentation layer on the backend for API endpoint for connecting user account with written content providers	2	Utkarsh Agarwal
6	Setup service layer for translating between presentation and persistent layer	1	Utkarsh Agarwal
7	Implement storage of connected provider details in the persistence layer for written content providers	1	Utkarsh Agarwal
8	Unit Tests for Backend	1	Utkarsh Agarwal
9	Integrate frontend and backend	2	Pooja Tewari, Utkarsh Agarwal

1. GIVEN: The user is securely logged into the account

WHEN: They want to search terms for online written content

THEN: They are able to connect to the respective accounts to allow Mine do the search

2. GIVEN: The user wished to connect their respective accounts

WHEN: They search terms for online written content

THEN: A UI is displayed that allows them to do so

3. GIVEN: The user wishes to connect their respective accounts for online written content

WHEN: Gives permission to connect their account

THEN: User authentication metadata is stored on persistent storage

# User Story #29

As a user, I should be able to get search results for written content.

Task No	Description	Hours	Developer
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1	Create a UI for displaying the results for written content	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 the frontend	1	Pooja Tewari
5	Setup controller and presentation layer on the backend for API endpoint for searching query in the connect written content providers.	2	Utkarsh Agarwal
6	Setup service layer for translating between presentation and persistent layer	1	Utkarsh Agarwal
7	Implement search table in the persistence layer for storing queries related to written content	1	Utkarsh Agarwal
8	Unit Tests for Backend	1	Utkarsh Agarwal
9	Integrate frontend and backend	2	Pooja Tewari, Utkarsh Agarwal

1. GIVEN: The user is securely logged into the account

WHEN: They want to search terms for online written content

THEN: They frontend should interact with the backend, successfully parsing user input

2. GIVEN: The frontend has specified user search terms for written content

WHEN: The user wants to search terms for written content

THEN: The backend returns written content search results interacting successfully with all third party APIs

3. GIVEN: The backend returns search results for written content

WHEN: The user wants to search terms for online written content

THEN: The UI components render the search results and their metadata neatly compartmentalized

# User Story #30

As a user, I should be able to connect accounts of events data providers to the website.

### Task Table

Task No	Description	Hours	Developer
1	Create UI to connect to all accounts for event data providers	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 the layers in the frontend	1	Pooja Tewari
5	Setup controller and presentation layer on the backend for API endpoint for connecting user account with event data providers	2	Utkarsh Agarwal
6	Setup service layer for translating between presentation and persistent layer	1	Utkarsh Agarwal
7	Implement storage of connected provider details in the persistence layer for event data providers	1	Utkarsh Agarwal
8	Unit Tests for Backend	1	Utkarsh Agarwal
9	Integrate frontend and backend	2	Pooja Tewari, Utkarsh Agarwal

# Acceptance Criteria

1. GIVEN: The user is securely logged into the account

WHEN: They want to search terms for event information

THEN: They are able to connect to the respective accounts to allow Mine do the search

2. GIVEN: The user wished to connect their respective accounts

WHEN: They search terms for event information

THEN: A UI is displayed that allows them to do so

3. GIVEN: The user wishes to connect their respective accounts for event information

WHEN: Gives permission to connect their account

THEN: User authentication metadata is stored on persistent storage

## **User Story #31**

As a user, I should be able to get search results for events near me.

Task No	Description	Hours	Developer
1	Create a UI for displaying the results for events	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 the frontend	1	Pooja Tewari
5	Setup controller and presentation layer on the backend for API endpoint for searching query in the connect event information providers.	2	Utkarsh Agarwal
6	Setup service layer for translating between presentation and persistent layer	1	Utkarsh Agarwal
7	Implement search table in the persistence layer for storing queries related to event information	1	Utkarsh Agarwal
8	Unit Tests for Backend	1	Utkarsh Agarwal

9	Integrate frontend and backend	2	Pooja Tewari, Utkarsh Agarwal
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1. GIVEN: The user is securely logged into the account

WHEN: They want to search terms for events

THEN: They frontend should interact with the backend, successfully parsing user input

2. GIVEN: The frontend has specified user search terms for events

WHEN: The user wants to search terms for events

THEN: The backend returns event search results interacting successfully with all third party APIs

3. GIVEN: The backend returns search results for events

WHEN: The user wants to search terms for events

THEN: The UI components render the search results and their metadata neatly compartmentalized

# User Story #32

As a user, I should be able to browse my previous search terms.

Task No	Description	Hours	Developer
1	Create a UI for displaying the previous search terms	1	Pooja Tewari
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 the frontend	1	Shivangi Chand

5	Setup controller and presentation layer on the backend for API endpoint for previous searches of user	1	Amol Moses Jha
6	Setup service layer for translating between presentation and persistent layer	2	Amol Moses Jha
7	Implement storage of search statistics in the persistence layer for previous searches of user	1	Amol Moses Jha
8	Unit Tests for Backend	1	Amol Moses Jha
9	Integrate frontend and backend	2	Shivangi Chand, Amol Moses Jha

1. GIVEN: The user is securely logged into the account

WHEN: They want to look at their previous searches

THEN: The frontend should display their previous searches

2. GIVEN: User wants to get previous searches from API

WHEN: User sends Postman request with JWT token

THEN: User gets proper response with previous searches

3. GIVEN: User wants to see previous searches

WHEN: The user goes onto the home page with previous searches

THEN: The number of searches displayed is the same as specified by user under preferences

4. GIVEN: User wants to see previous searches

WHEN: The user goes onto the home page with previous searches

THEN: Only the categories specified by the user under preferences are displayed

# **User Story #33**

As a user, I should be able to see other trending searches.

### Task Table

Task No	Description	Hours	Developer
1	Create a UI for displaying the trending search terms	1	Pooja Tewari
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 the frontend	1	Shivangi Chand
5	Setup controller and presentation layer on the backend for API endpoint for trending searches	1	Amol Moses Jha
6	Setup service layer for translating between presentation and persistent layer	2	Amol Moses Jha
7	Implement storage of search statistics in the persistence layer for most trending searches	1	Amol Moses Jha
8	Unit Tests for Backend	1	Amol Moses Jha
9	Integrate frontend and backend	2	Shivangi Chand, Amol Moses Jha

### Acceptance Criteria

1. GIVEN: The user is securely logged into the account

WHEN: They want to look at trending searches

THEN: The frontend should displays trending searches

2. GIVEN: User wants to get trending searches from API

WHEN: User sends Postman request with JWT token

THEN: User gets proper response with trending searches

3. GIVEN: User wants to see trending searches

WHEN: The user goes onto the trending page with trending searches

THEN: The number of searches displayed is the same as specified by user under preferences

4. GIVEN: User wants to see trending searches

WHEN: The user goes onto the trending page with trending searches

THEN: Only the categories specified by the user under preferences are displayed

## **User Story #34**

As a user, I should be able to see my most frequent searches.

Task No	Description	Hours	Developer
1	Create a UI for displaying the frequent search terms	1	Pooja Tewari
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 the frontend	1	Shivangi Chand
5	Setup controller and presentation layer on the backend for API endpoint for most frequent searches of user	1	Amol Moses Jha
6	Setup service layer for translating between presentation and persistent layer	2	Amol Moses Jha
7	Implement storage of search statistics in the persistence layer for most frequent searches of user	1	Amol Moses Jha
8	Unit Tests for Backend	1	Amol Moses Jha
9	Integrate frontend and backend	2	Shivangi Chand,

	Amol Moses Jha
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1. GIVEN: The user is securely logged into the account

WHEN: They want to look at their frequent searches

THEN: The frontend should display their frequent searches

2. GIVEN: User wants to get frequent searches from API

WHEN: User sends Postman request with JWT token

THEN: User gets proper response with frequent searches

3. GIVEN: User wants to see their frequent searches

WHEN: The user goes onto the home page with frequent searches

THEN: The number of searches displayed is the same as specified by user under preferences

4. GIVEN: User wants to see frequent searches

WHEN: The user goes onto the home page with frequent searches

THEN: Only the categories specified by the user under preferences are displayed

# **User Story #35**

As a user, I would like to connect to developers in order to provide meaningful feedback.

Task No	Description	Hours	Developer
1	Create a UI for displaying the feedback form to user	1	Pooja Tewari
2	Setup controller on the frontend to interact with the backend	2	Shivangi Chand
3	Error and exception handling for the frontend	2	Shivangi Chand

4	Unit tests for the frontend	1	Shivangi Chand

1. GIVEN: User wants to service feedback

WHEN: User clicks Contact Us

THEN: Feedback form appears

2. GIVEN: User wants to submit feedback

WHEN: User clicks Submit button

THEN: Email is sent to mineapp email with the feedback

3. GIVEN: User wants to cancel feedback

WHEN: User clicks Cancel button

THEN: Feedback form is closed without sending email

# **User Story #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.

Task No	Description	Hours	Developer
1	Create the automated test cases for Frontend using the manual testing docs.	4	Shivangi Chand
2	Create regression tests for Frontend	6	Shivangi Chand, Pooja Tewari
3	Create automated test cases for Backend	6	Utkarsh Agarwal, Amol Moses Jha
4	Create regression tests for Backend	6	Utkarsh Agarwal, Amol Moses Jha
5	Create integration tests for Frontend and	9	Shivangi Chand,

Backend	Utkarsh Agarwal,
	Amol Moses Jha

1. GIVEN: A developer wants to run the frontend tests

WHEN: A developer is accessing the frontend code base

THEN: They are able to run the suite of automated unit tests for the frontend easily.

2. GIVEN: A developer wants to run the backend tests

WHEN: A developer accesses the backend code base

THEN: They are able to run the suite of automated unit tests for the backend easily.

3. GIVEN: A developer wants to run functional tests across the frontend and backend

WHEN: A developer accesses the project's code base

THEN: They are able to run the suite of automated functional tests for the project easily.

# **User Story #37**

As a user, I would like to use a secure application using https.

Task No	Description	Hours	Developer
1	Setup controller on the frontend to interact with the backend using https	4	Shivangi Chand
2	Error and exception handling for the frontend	2	Shivangi Chand
3	Unit tests for the frontend	2	Shivangi Chand
4	Get an ssl certificate for making backend https	2	Utkarsh Agarwal
5	Convert backend to https	2	Utkarsh Agarwal
6	Unit tests for the backend	2	Utkarsh Agarwal

7	Integrate frontend and backend	4	Shivangi Chand, Utkarsh Agarwal
			Utkarsh Agarwai

1. GIVEN: User wants to connect to application securely

WHEN: User tries connecting with HTTPS

THEN: User is able to use all the functionalities in the application

2. GIVEN: User wants to connect to application unsecurely

WHEN: User tries connecting with HTTP

THEN: User is not able to use any of the functionalities in the application

3. GIVEN: User wants to use API securely

WHEN: User access the API endpoints from Postman using HTTPS

THEN: User is able to use all the functionalities in the application

4. GIVEN: User wants to use API unsecurely

WHEN: User access the API endpoints from Postman using HTTP

THEN: User is not able to use any of the functionalities in the application

# **User Story #38**

If time permits, as a user, I would like the user to select the APIs he wants to search from.

Task No	Description	Hours	Developer
1	Create a UI for displaying API options	1	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 the frontend	1	Shivangi Chand
5	Setup controller and presentation layer on the backend for API endpoint for giving API options	1	Utkarsh Agarwal
6	Setup service layer for translating between presentation and persistent layer	2	Utkarsh Agarwal
7	Implement storage of API options in the persistence layer for most trending searches	1	Utkarsh Agarwal
8	Unit Tests for Backend	1	Utkarsh Agarwal
9	Integrate frontend and backend	2	Shivangi Chand, Utkarsh Agarwal

1. GIVEN: Category has only 1 api

WHEN: User is editing apis

THEN: Api deselection is disabled

2. GIVEN: Category has more than 1 api

WHEN: User tries to deselect all of them

THEN: User is prompted error message to select at least one

3. GIVEN: User has selected/removed some apis from a category

WHEN: User searches in that category

THEN: Only apis selected by user are shown

# **HOURS TABLE**

Developer	Hours
Utkarsh Agarwal	47
Amol Moses Jha	40
Pooja Tewari	43
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. As a user, I would like to use a secure application using https.
- 38. If time permits, as a user, I would like the user to select the APIs he wants to search from.
- 39. 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.
- 40. If time permits, as a user, I should be able to see snippets of my previous searches.
- 41. If time permits, as a user, I should be able to see snippets of my most frequent searches.
- 42. If time permits, as a user, I should be able to see snippets of trending searches.