



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

## **SPRINT 2 - PLANNING DOCUMENT**

### **Team 6**

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## SPRINT OVERVIEW

### Overview

Our goal for this sprint is to complete the searching capabilities for some of the categories that we aim to deliver to the users along with customizable profile pictures. We also plan to implement our ranking story so that the user will be able to get a more personalised dashboard. For the frontend, we plan to get a lot of the frontend functionalities completed with emphasis on developing reusable components. For the backend, we will be connecting our application to many third-party APIs and give user the option to connect their respective accounts to get better search results. We also plan to tackle uploading images by the users to be used as their profile pictures. In order to achieve these goals, we will be completing the following user stories highlighted below. This sprint would complete a lot of the central functionalities for our application like search and dashboard.

### 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

1. One of the biggest concerns for us going into this 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.
2. 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. Integration will play a major role in this sprint since we need to make sure that both the frontend and the backend will agree in perfect synchronization when interfacing with 3rd party integrations.

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## CURRENT SPRINT DETAILS

### User Story #13

As a user, I should be able to store my profile picture.

#### Task Table

Task No	Description	Hours	Developer
1	Create the UI for the displaying the Profile Picture	2	Shivangi Chand
2	Setup controller in frontend to interact with backend	1	Shivangi Chand
3	Error and exception handling for Frontend	2	Shivangi Chand
4	Unit Tests for Frontend	1	Shivangi Chand
5	Setup controller and presentation layer on the backend for uploading and saving Profile Picture	2	Utkarsh Agarwal
6	Setup persistence layer for storing image metadata	1	Utkarsh Agarwal
7	Setup the mechanism for storing Profile Pictures on the backend	1	Utkarsh Agarwal
8	Setup controller and presentation layer on the backend for retrieving Profile Picture	2	Utkarsh Agarwal
9	Setup the mechanism for retrieving Profile Picture on the backend	1	Utkarsh Agarwal
10	Unit Tests for Backend	2	Utkarsh Agarwal
11	Integrate Frontend and Backend	2	Shivangi Chand, Utkarsh Agarwal

#### Acceptance Criteria

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1. GIVEN: The user is securely logged into the account  
  
WHEN: the user clicks on the account button, followed by edit button  
  
THEN: The user is able to upload a profile picture
  2. GIVEN: The user has stored a profile picture  
  
WHEN: The user is redirected after logging in,  
  
THEN: they are able to view their profile picture on the dashboard
  3. GIVEN: The user attempts to store a profile picture  
  
WHEN: they click on the upload button  
  
THEN: the profile picture is securely sent to the backend for further processing
  4. GIVEN: The user attempts to store a profile picture  
  
WHEN: they click on the upload button  
  
THEN: the profile picture;s metadata is stored in the database

## User Story #14

As a user, I should be able to update my profile picture.

### Task Table

Task No	Description	Hours	Developer
1	Create the UI for the update the Profile Picture	1	Shivangi Chand
2	Setup controller in frontend to interact with backend	1	Shivangi Chand
3	Error and exception handling for Frontend	1	Shivangi Chand
4	Unit Tests for Frontend	1	Shivangi Chand
5	Setup controller and presentation layer on the backend for API endpoint for updating a	2	Utkarsh Agarwal

	profile picture		
6	Setup service layer for translating between presentation and persistent layer	1	Utkarsh Agarwal
7	Implement updating image metadata in the persistence layer for updating a user's profile picture	1	Utkarsh Agarwal
8	Unit Tests for Backend	1	Utkarsh Agarwal
10	Integrate frontend and backend	2	Shivangi Chand, Utkarsh Agarwal

## Acceptance Criteria

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

WHEN: the user clicks on the account button, followed by edit button

THEN: The user is able to update a profile picture
2. GIVEN: The user has updated a profile picture

WHEN: The user is redirected after logging in,

THEN: they are able to view their new profile picture on the dashboard
3. GIVEN: The user attempts to update a profile picture

WHEN: they click on the update button

THEN: the profile picture is securely sent to the backend for further processing
4. GIVEN: The user attempts to update a profile picture

WHEN: they click on the update button

THEN: the profile picture is stored in the database

## User Story #15

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

## Task Table

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Task No	Description	Hours	Developer
1	Create the UI for the delete the Profile Picture	1	Shivangi Chand
2	Setup controller in frontend to interact with backend	1	Shivangi Chand
3	Error and exception handling for Frontend	1	Shivangi Chand
4	Unit Tests for Frontend	1	Shivangi Chand
5	Setup controller and presentation layer on the backend for API endpoint for deleting a profile picture	2	Utkarsh Agarwal
6	Setup service layer for translating between presentation and persistent layer	1	Utkarsh Agarwal
7	Implement deleting image metadata in the persistence layer for deleting a user's profile picture	1	Utkarsh Agarwal
8	Unit Tests for Backend	1	Utkarsh Agarwal
11	Integrate frontend and backend	2	Shivangi Chand Utkarsh Agarwal,

## Acceptance Criteria

- GIVEN:** The user is securely logged into the account

**WHEN:** the user clicks on the account button, followed by edit button

**THEN:** The user is able to delete a profile picture
- GIVEN:** The user has deleted a profile picture

**WHEN:** The user is redirected after logging in,

**THEN:** They are able to see that the profile picture has been deleted on the dashboard
- GIVEN:** The user attempts to delete a profile picture

**WHEN:** They click on the update button

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THEN: The profile picture is deleted from the database, and a default user profile picture is shown to them when viewing their profile

## User Story #16

As a user, I should be able to specify one or multiple search terms in the search bar when searching for online media.

### Task Table

Task No	Description	Hours	Developer
1	Create the UI for entering the search terms for searching for media content	2	Pooja Tewari
2	Setup controller in frontend to interact with backend	2	Pooja Tewari
3	Error and exception handling for Frontend	2	Pooja Tewari
4	Unit Tests for Frontend	1	Pooja Tewari
5	Setup controller and presentation layer on the backend for API endpoint to accept, parse and categorize multiple search terms	1	Amol Moses Jha
6	Setup service layer to let the parsed searched terms to interface with different search components	2	Amol Moses Jha
7	Setup persistence layer to store user's searches	1	Amol Moses Jha
8	Implement interactions between the service and persistent layer	1	Amol Moses Jha
9	Unit Tests for Backend	1	Amol Moses Jha
10	Integrate frontend and backend	2	Pooja Tewari, Amol Moses Jha

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## Acceptance Criteria

1. GIVEN: The user is securely logged into their account  
  
WHEN: click on the search tab  
  
THEN: they are able to view the UI for search for online media
2. GIVEN: The user is logged in  
  
WHEN: the user enters the terms to search for online media  
  
THEN: the data is sent to backend for further processing
3. GIVEN: The backend has received the search terms for online content  
  
WHEN: the frontend sends the data securely for processing  
  
THEN: The search terms are successfully parsed, categorized and passed on the correct components for search processing

## User Story #17

As a user, I should be able to obtain relevant search results back, neatly organized into categories.

### Task Table

Task No	Description	Hours	Developer
1	Create UI components for displaying searches for various categories	2	Pooja Tewari
2	Setup controller on the frontend to interact with the backend	2	Pooja Tewari
3	Error and exception handling for the frontend	2	Pooja Tewari
4	Unit tests for the frontend	1	Pooja Tewari
5	Setup architecture for categorized backend components to interface with third-party APIs	2	Amol Moses Jha



6	Setup mechanisms for distributing parsed searched terms to these multiple search components	2	Amol Moses Jha
7	Setup mechanism for merging results returned from search components in the service layer, interfacing and respecting user preferences	2	Amol Moses Jha
8	Setup mechanism for translating merged service layer components into distinct presentation layer search results with added metadata if needed	2	Amol Moses Jha
9	Unit Tests for the backend	1	Amol Moses Jha
10	Integrate frontend and backend	2	Pooja Tewari, Amol Moses Jha

## Acceptance Criteria

- GIVEN:** A logged in user, who has specified search terms

**WHEN:** The backend has parsed, categorized and assimilated the search terms

**THEN:** The backend interacts with different search components to perform searches across different categories
- GIVEN:** A logged in user, who has specified search terms

**WHEN:** Various Backend search components have returned search results

**THEN:** Backend returns the search results, that is neatly categorized.
- GIVEN:** Backend returns the search results

**WHEN:** The user has entered search terms for a category

**THEN:** The user is able to view the result that is neatly categorized

## User Story #18

As a user, I should be able to specify the ranking of content categories returned on the search results page.

## Task Table

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Task No	Description	Hours	Developer
1	Implement UI components for search results to interactively render depending on user categories	3	Shivangi Chand
2	Setup interactions with user model to interface with user preferences	2	Shivangi Chand
3	Unit tests for the frontend	1	Shivangi Chand
5	Setup controller and presentation layer on the backend updating ranking preferences	2	Utkarsh Agarwal
6	Setup service layer for translating between presentation and persistent layer	1	Utkarsh Agarwal
7	Implement storage of new user ranking preference in the persistence layer	1	Utkarsh Agarwal
6	Unit Testing for the backend	2	Utkarsh Agarwal
8	Integrate frontend and backend	2	Shivangi Chand, Utkarsh Agarwal

## Acceptance Criteria

- GIVEN:** The user is securely logged into their account and editing their account

**WHEN:** They want to update user preferences

**THEN:** They are able to specify the ranking of the categories
- GIVEN:** The user has specified ranking for the categories

**WHEN:** The user searches some terms or views trending or the home page

**THEN:** They are able to view the results in that order.
- GIVEN:** The user has not specified the order of ranking for categories

**WHEN:** They are an authenticated user

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THEN: The default ranking is displayed through the UI, and is applied for all subsequent searches until a modified ranking is specified

## User Story #19

As a user, I should be able to remove categories which I don't find meaningful to me.

### Task Table

Task No	Description	Hours	Developer
1	Create UI for the user to display the Categories relevant to them	3	Shivangi Chand
2	Setup controller on the frontend to interact with the backend	1	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 removing categories not relevant to me	1	Amol Moses Jha
6	Setup service layer for translating between presentation and persistent layer	1	Amol Moses Jha
7	Update users entities to remove categories not relevant to me	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 their account

WHEN: the click on the account button, followed by edit

THEN: they are able to specify which categories to remove

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2. GIVEN: The user has specified the preferred categories

WHEN: the user searches some terms or views trending or the home page

THEN: the user is able to view those categories only

3. GIVEN: The user has removed certain categories

WHEN: They edit their preferences

THEN: The only those categories are displayed through the UI which the user has  
aforementioned in subsequent searches

## User Story #20

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

### Task Table

Task No	Description	Hours	Developer
1	Create UI to connect to all accounts for online video providers	1	Shivangi Chand
2	Setup controller on the frontend to interact with the backend	1	Shivangi Chand
3	Error and exception handling for the frontend	1	Shivangi Chand
4	Unit tests for all the layers in the frontend	1	Shivangi Chand
5	Setup controller and presentation layer on the backend for API endpoint for connecting user account with video 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 video content providers	1	Utkarsh Agarwal
8	Unit Tests for Backend	2	Utkarsh Agarwal

9	Integrate frontend and backend	2	Shivangi Chand Utkarsh Agarwal,
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## Acceptance Criteria

- GIVEN:** The user is securely logged into the account

**WHEN:** They want to search terms for online video content

**THEN:** They are able to connect to the respective accounts to allow Mine do the search
- GIVEN:** The user wished to connect their respective accounts

**WHEN:** They search terms for online video content

**THEN:** A UI is displayed that allows them to do so
- GIVEN:** The user wishes to connect their respective accounts for online video content

**WHEN:** The user gives permission to connect their account

**THEN:** User authentication metadata is stored on persistent storage

## User Story #21

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

## Task Table

Task No	Description	Hours	Developer
1	Create a UI for displaying the results for video content	2	Pooja Tewari
2	Setup controller on the frontend to interact with the backend	2	Pooja Tewari
3	Unit tests for the frontend	1	Pooja Tewari
4	Setup controller and presentation layer on the backend for API endpoint for searching query in the connect video providers.	2	Utkarsh Agarwal
5	Setup service layer for translating between	1	Utkarsh Agarwal

	presentation and persistent layer		
6	Implement search entities in the persistence layer for storing queries related to video content	1	Utkarsh Agarwal
7	Unit Tests for Backend	2	Utkarsh Agarwal
8	Integrate frontend and backend	2	Pooja Tewari, Utkarsh Agarwal

### Acceptance Criteria

- GIVEN:** The user is securely logged into the account

**WHEN:** They want to search terms for online video content

**THEN:** They frontend should interact with the backend, successfully parsing user input
- GIVEN:** The frontend has specified user search terms for video content

**WHEN:** The user wants to search terms for online video content

**THEN:** The backend returns video content search results interacting successfully with all third party APIs
- GIVEN:** The backend returns search results for video content

**WHEN:** The user wants to search terms for online video content

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

### User Story #22

As a user, I should be able to connect my accounts of online movie services providers to the application.

#### Task Table

Task No	Description	Hours	Developer
1	Create UI to connect to all accounts for online	1	Shivangi Chand

	movie providers		
2	Setup controller on the frontend to interact with the backend	1	Shivangi Chand
3	Error and exception handling for the frontend	1	Shivangi Chand
4	Unit tests for all the layers in the frontend	1	Shivangi Chand
5	Setup controller and presentation layer on the backend for API endpoint for connecting user account with movie content providers	1	Amol Moses Jha
6	Setup service layer for translating between presentation and persistent layer	1	Amol Moses Jha
7	Implement connected provider details in the persistence layer for a movie content	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 search terms for online movie 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 movie content

THEN: A UI is displayed that allows them to do so
3. GIVEN: The user wishes to connect their respective accounts for online movie content

WHEN: Gives permission to connect their account

THEN: User authentication metadata is stored on persistent storage

## User Story #23

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

### Task Table

Task No	Description	Hours	Developer
1	Create a UI for displaying the results for movies	2	Pooja Tewari
2	Setup controller on the frontend to interact with the backend	2	Pooja Tewari
3	Error and exception handling for the frontend	2	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 movie content providers.	1	Amol Moses Jha
6	Setup service layer for translating between presentation and persistent layer	1	Amol Moses Jha
7	Implement search table in the persistence layer for storing queries related to movie 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

### Acceptance Criteria

- GIVEN: The user is securely logged into the account

WHEN: They want to search terms for online video content

THEN: They frontend should interact with the backend, successfully parsing user input
- GIVEN: The frontend has specified user search terms for movies

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



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

3. GIVEN: The backend returns search results for movies

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

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

## User Story #24

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

### Task Table

Task No	Description	Hours	Developer
1	Create UI to connect to all accounts for TV series providers	2	Pooja Tewari
2	Setup controller on the frontend to interact with the backend	2	Pooja Tewari
3	Error and exception handling for the frontend	1	Shivangi Chand
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 TV series content providers	1	Amol Moses Jha
6	Setup service layer for translating between presentation and persistent layer	1	Amol Moses Jha
7	Implement connected provider details in the persistence layer for a TV series content	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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## Acceptance Criteria

1. GIVEN: The user is securely logged into the account  
  
WHEN: They want to search terms for online TV 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 TV content  
  
THEN: A UI is displayed that allows them to do so
3. GIVEN: The user wishes to connect their respective accounts for online TV content  
  
WHEN: Gives permission to connect their account  
  
THEN: User authentication metadata is stored on the backend

## User Story #25

As a user, I should be able to get search results for TV series.

### Task Table

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

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7	Unit Tests for Backend	1	Amol Moses Jha
8	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 TV content

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

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

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

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

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

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

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

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## HOURS TABLE

Developer	Hours
Utkarsh Agarwal	43
Amol Moses Jha	42
Pooja Tewari	41
Shivangi Chand	43

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## 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.
11. 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.

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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.