



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

## **SPRINT 2 - RETROSPECTIVE**

### **Team 6**

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## WHAT WENT WELL?

Sprint 2 was overall a successful sprint for our team as we were able to complete all the user stories that we had planned to complete for this sprint on time. For this particular sprint, our main goal was to finish the profile picture, search categories preferences functionalities and in addition to that also the search page itself for getting suggestions on movies, TV series, and videos. We were able to complete the search features as per expectation with the use of Youtube, Vimeo, Dailymotion, TMDb and TVMaze APIs. Being able to complete everything as per our expectations as a team made this sprint a satisfying one for us as a team.

Another aspect which made this a successful sprint was being able to deploy our application using Digital Ocean. Being able to deploy it as per our expectations allows anyone to access the application on “minapp.tech.” This makes our application at par with any industry-standard application as it is officially online for anyone to access.

We were also able to refactor our backend and frontend during this sprint, which was important for us as developers. Having organized code is important as when applications get bigger and more user stories are added, application code can get messy and cause unnecessary complexities going further on. This was important for us to achieve and we are glad that we did because now we have code that is well structured and cleanly put together for us to continue working with.

Lastly, we worked a lot on maintaining good communication with each other because this time of the semester naturally gets tough as midterms and assignments in other classes can really build up. We kept each other updated on whatever was going on academically outside of this class so that everyone was aware of when who is free and who is not. With this, we were able to adjust accordingly for deciding meeting timings and working through the sprint overall.

All in all, it was a successful sprint, and we will continue to take forward these particular aspects with us for the future sprint.

## User Story #13

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

**Completed:** This user story involved both frontend and backend work. On the frontend, the UI was created as a continuation of the ‘Account’ page that was made in the previous sprint. The backend was able to successfully store the picture as well and upon uploading the picture, the user’s picture is successfully displayed. The story was successfully tested on both the frontend and the backend.

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## User Story #14

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

**Completed:** This user story also involved the frontend and the backend. On the frontend, the UI was pretty much the same thing as User Story#13. On the backend, the database had to replace any stored profile picture with the new profile picture. This story was successfully tested and completed on both the frontend and the backend.

## User Story #15

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

**Completed:** The user story ties in with the last two user stories. The UI was the same on the frontend, it's just that upon deletion of the profile picture, the UI goes back to displaying the default image (outline of a headshot). On the backend, upon sending the deletion request, the database was successfully updated to contain the default for the profile picture. There were no significant challenges for these profile picture related user stories and all were successfully tested and completed.

## 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.

**Completed:** This story was fairly simple on the frontend. The UI was used from the Sprint 1, with integration being the main thing here for the frontend. The story was again tested and completed as a user can successfully time in one or more search terms and get relevant results back.

## User Story #17

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

**Completed:** This user story was a big one and took time as the frontend had to really think about how to implement the UI for this and on the backend the results had to be sent neatly in an organized fashion. The frontend used an initial approach of just having each result be an item of an unordered list of the categories. The backend was the challenge here as the team had to spend time on getting the APIs to work properly and using the appropriate APIs as well. All in all the story was unit tested well and successfully finished.

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## User Story #18

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

**Completed:** This user story took place on the 'Accounts' page. It took some time to figure out the UI for this but in the end was implemented well and integrated well with the backend which successfully saved the preference ranking in the database. The story was unit tested well on both the frontend and the backend.

## User Story #19

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

**Completion:** This user story tied in with the previous user story and all in all was implemented in a way where on the backend, the rankings given were saved and the removed ones were not. The UI here was in continuation from the last user story. The user story was tested on the frontend and the backend both.

## User Story #20

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

**Completed:** This story was also completed on the backend. Upon selecting a search result, the user is able to go to say Youtube, for example, and use his/her account to watch the content that was recommended by Mine.

## User Story #21

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

**Completed:** This user story was tied in with the user story #17. The UI with the list items being the search results and the categories being unordered list was used. On the backend, the APIs for YouTube, Dailymotion, and Vimeo were used to obtain the results and sent to the frontend to be displayed. The story was unit tested well.

## User Story #22

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

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**Completed:** This story was tied in with User Story #20 and implemented in the same fashion, where a result can be clicked on and it would take you to the appropriate website for the content. It was unit tested well.

## User Story #23

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

**Completed:** This user story was tied in with the user story #21. The UI with the list items being the search results and the categories being unordered list was used. On the backend, the API for TMDB was used to obtain the results and sent to the frontend to be displayed. The story was unit tested well.

## User Story #24

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

**Completed:** This story was tied in with User Story #20, 22 and implemented in the same fashion, where a result can be clicked on and it would take you to the appropriate website for the content. It was unit tested well.

## User Story #25

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

**Completed:** This user story was tied in with the user story #21 and 23. The UI with the list items being the search results and the categories being unordered list was used. On the backend, the API for TVMaze was used to obtain the results and sent to the frontend to be displayed. The story was unit tested well.

## WHAT DID NOT GO WELL?

As discussed in the previous section, our priorities went well for us as a team during this sprint, however, there are always things that do not go well and during this past sprint, we specifically struggled a bit with setting hard internal deadlines for delivering development, improving unit testing, and further refining the UI.

The biggest thing that we as a team definitely did not do well was setting internal deadlines for development. Though we were on par with communication, a lot of development that happened was not in as organized of a fashion as we would have liked for it to be. When hard deadlines are

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not set, it is very easy for a lot of the development to get pushed over to the last minute, which is what happened to us. Even though we successfully finished everything, we definitely were in stress due to certain important parts of the coding happening last minute.

Another thing that did not go well was our goal of wanting to improve unit testing. Currently we do have automated testing fully on the backend, however, on the frontend we are still continuing to only test manually according to our manual testing document. We did aim from last time that we will develop automated testing for the frontend as well, however, were not so successful in doing so.

Lastly, we also aimed to refine the UI further for our application from the last sprint. Though our current UI is definitely up to par with industry standards, we definitely did aim to change it further so it would look cleaner and sleeker from the last sprint.

## **HOW TO IMPROVE?**

We aim to improve everything that didn't go well in addition to also work to continue on maintaining the aspects that really did go well for us.

Specifically, we will first focus on setting hard development deadlines for ourselves throughout the sprint so that nothing is being done last minute, so that stress can be avoided along with the risk of incompleteness or compromise of quality. This is definitely of utmost importance to us as a team and something which will be a top priority for us during this sprint in terms of what to improve.

Next on our priorities list is creating automated tests on the frontend. So far through our research we have discussed using Selenium, Cypress, and Jest. With further discussion on this topic before we begin our sprint, we will decide what framework our team will use and then implement automated tests on the frontend. We will also be adding more unit tests on the backend that can be run in an automated manner.

Lastly, we will definitely refine the UI before we present our Sprint 3 product. Our goal will be to discuss and see on what parts of the application UI has not been standardized and where it can be made cleaner. We will continue to use Bootstrap like we have been since the beginning as well as of course apply our own creativity so that the final Sprint 3 product can be up to par with our expectations.