

# Team 100 - Deliverable 2 Report

## Updated Deliverable 1 Content

As notified, our group has made a switch in the problem we are solving.

To quickly place some context, our new problem statement is simply defined as:

*There is currently no single place to decide between all online entertainment options.*

To clarify, 'all entertainment options' simply refers to an aim of combining every entertainment option that exists in the online world, but our main focus will be solving the entertainment options that can be accessed with the aforementioned APIs (TV Shows, Movies, Podcasts and Music).

A High Fidelity prototype for our new system can be found here:

<https://www.figma.com/proto/0gXu7e2xBugmbRMLSrjwRE/myLounge-Designs?node-id=46%3A129&scaling=scale-down-width>

## Part 1: Software Architecture

### What external data sources will your system be accessing?

Our external data sources are all from stores that we will access through multiple APIs. The following is a list of the APIs we intend to use and the data they will provide to us. In summary we can treat each of these as the data source for our system since we are not concerned with the actual stores the APIs access:

- TMDB [The Movie Database]
  - Data: TV Shows and Movies information, ranging from:
    - Category lists such as Top Rated, or On Air;
    - Images such as Posters, or Backdrops;
    - Short descriptions about the show/movie;

- Genres that the show/movie falls under;
  - Duration of the show/movie;
  - Trailer links for each show/movie;
  - Reviews.
- Spotify
  - Data: Music and Podcasts information, ranging from:
    - Category lists such as Popular, New Releases, Genres and Moods;
    - Production dates and copyright information;
    - Album/Song/Podcast image covers;
    - Album/Song/Podcast names, and Podcast descriptions;
    - Audio data of chosen item and web player data.
- Utelly
  - Data: URLs to available streaming services for:
    - A searched TV Show or Movie by keyword, and for a defined region (eg AU);
    - A searched TV Show or Movie by IMDB id (if we retrieve this from an IMDB, this could be possibly used).

## **Software Components, Reasoning for Choices**

The software components that we have decided is highlighted by this Architecture diagram:

The categorised reasoning behind these choices are:

### **The Web Application**

- **Frontend**

Choices of Implementation - React.js, CSS

- As a group, we considered our options to be HTML, CSS and JS or React.js and CSS, based on the experience that we have and the steps we were willing to make in learning new methods of implementing a frontend. Our finalised decision of going with React.js and CSS was quite simply due to

our interest in pursuing React, which is new to all of us, and from our understanding, has a great and understandable system that we can use to develop our app's frontend along with knowledge of CSS.

- **Backend and API Controller**

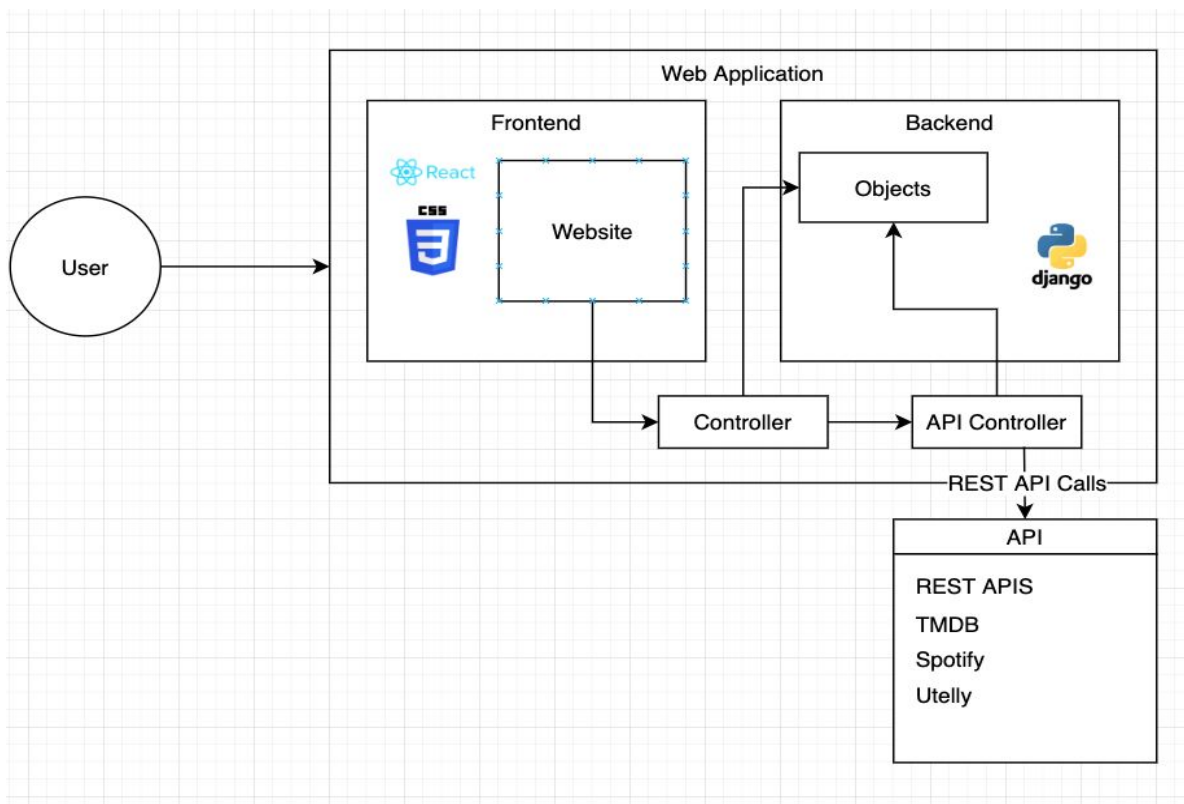
Choice of Implementation - Python and Django

- As a group, we were aware that NodeJS and Django are among many of the several options to setting up a backend system. Our choice of using python as the backend programming language was largely due to our group's shared experience of it (from COMP1531, for example). The choice of Django as a web framework, over alternatives like Flask, was due to the fact that it has a more robust set of features.

## The APIs

Choices - TMDB, Spotify, Utelly

- Reasons for choosing these APIs are:
  - a. They work and give us what we need
  - b. They all have a very readable and understandable documentation.



## **Final Implementation Machine Requirements**

Currently, our implementation supports all main desktop/laptop systems such as Windows, macOS, Linux etc., while supporting the mobile platform are still under consideration. The only requirements for a user, in the deployment of this product, would be that they have access to an internet browser and an internet connection.

## **Summary of key benefits/achievements of our choices**

All reasons, along with their key benefits and achievements for our main choices, are highlighted above. To further summarise, the overall picture is that the choices we have made are based on confidence in language, and also interest in learning a new framework that is highly respected, and along with our API choices we believe this architecture will achieve our goal of solving the problem statement outlined at the top.

## **Part 2: Initial Software Design**

### **Updated User Stories**

The following is the new set of Requirements, Features and User stories. We have made one sequence diagram for each user story, and after all the stories are links to the full sequence diagrams on diagrams.net (formerly draw.io):

### **Requirement 1**

*As a user, I can find various entertainment options in one place so I can save time when looking for something to do.*

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### **Feature 1.1**

As a user, I can use myLounge to search for any TV Show, Movie, Podcast or Music so I can find specifically what I can watch/listen to.

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### **User Story and Scenario Description 1.1.1**

As a: User

So that: I can view or listen to a specific item I am looking for

I want to: Search for a specific TV Show, Movie, Podcast or Music by its title or song name.

GIVEN I am on the home page

AND I know the name of the show/movie/podcast/album I want to consume

WHEN I enter the title in the search bar

THEN I should see a list of relevant media

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### **User Story and Scenario Description 1.1.2**

As a: User

So that: I can find items without knowing their exact title

I want to: search for TV Shows, Movies, Podcasts and/or Music by keywords (directors, artists, actors, etc)

GIVEN I am on the home page

AND I want to find all content authored/directed by/written by a certain person

WHEN I enter that person's name into the search bar

THEN the most relevant content they are associated with should be accessible to me

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### **Feature 1.2**

As a user, I can view a wide selection of entertainment options so I can decide on something to entertain myself with.

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### **User Story and Scenario Description 1.2.1**

As a: User

So that: I can decide on a TV Show or Movie I want to watch

I want to: View a wide selection of entertainment options to watch

GIVEN I am on the home page

AND I do not know what to watch, but I do know I want to WATCH something

WHEN I select the WATCH option

AND I navigate down the page

THEN I should be able to see a list of suggested/popular content to watch

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### **User Story and Scenario Description 1.2.2**

As a: User

So that: I can decide on a Podcast or Song I want to listen to

I want to: View a wide selection of entertainment options to listen to

GIVEN I am on the home page

AND I want to listen to some podcasts or music

WHEN I select the LISTEN option

AND I navigate down the page

THEN I should be able to see a list of popular and suggested podcasts, playlists and albums

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### **Feature 1.3**

As a user, I can view entertainment options by categories so I can find things I would like.

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### **User Story and Scenario Description 1.3.1**

As a: User

So that: I can only watch and/or listen to the entertainment options that are currently top trending

I want to: View top trending entertainment options

GIVEN I have selected "I want to WATCH" on the myLounge starting page

WHEN I scroll down the page

THEN I should see the "Top Trending" category with list of top trending movies and TV shows

AND I should be able to navigate through the list using the arrow buttons on the left and right

WHEN I select "I want to LISTEN"

THEN I should see the "Top Trending Songs" category with list of top trending music

THEN I should be able to navigate through the list using the arrow buttons on the left and right

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### **User Story and Scenario Description 1.3.2**

As a: User,

So that: I can only watch and/or listen to the entertainment options with the highest rating

I want to: View top rated entertainment options

GIVEN I have selected "I want to WATCH" on the myLounge starting page

THEN I should see the "Top Rated Movies" category with list of top rated movies

AND I should see the "Top Rated TV Shows" category with list of top rated TV Shows

THEN I should be able to navigate through the list using the arrow buttons on the left and right

WHEN I select "I want to LISTEN"

THEN I should see the "Top Rated Albums" category with list of top rated albums for music

AND I should see the "Top Rated Podcasts" category with list of top rated podcasts

THEN I should be able to navigate through the list using the arrow buttons on the left and right

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### **User Story and Scenario Description 1.3.3**

As a: User

So that: I can only watch and/or listen to the entertainment options with the genre I want

I want to: View entertainment options by genres

GIVEN I have selected "I want to WATCH" on the myLounge starting page

WHEN I scroll down the page

THEN I should see the "Genre" category with genres including horror, comedy, romance, family etc.

AND I should be able to navigate through the genre list using the arrow buttons on the left and right

WHEN I select "I want to LISTEN"

THEN I should see the "Genres & Moods" category with a list of genres and moods for podcasts and music including Pop, R&B, Country, Workout etc.

AND I should be able to navigate through the genre list using the arrow buttons on the left and right

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## Feature 1.4

As a user, I can play music directly within the myLounge site, so I don't have to leave the site to listen to a song.

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### User Story and Scenario Description 1.4.1

As a: User

So that: I don't require to redirect to another website

I want to: Play songs within myLounge's website

GIVEN I am on the LISTEN page

WHEN I select a song to play

THEN I should see further information on the song

AND I can click play now to play the song in an on-site player

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### User Story and Scenario Description 1.4.2

As a: User

So that: I can use the same functionality I would on Spotify

I want to: Have all features in the music player (skip, play/pause, volume control)

GIVEN I have clicked play now for an audio item I have chosen

WHEN The player opens at the bottom

THEN I can use multiple controls to adjust what I am listening to, such as skips, volume, seeking, and playing/pausing.

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## **Requirement 2**

*As a user I can find useful information on entertainment options so I can decide what I can pick.*

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### **Feature 2.1**

As a user, I can select a TV Show, Movie, Podcast or Music and find out what platforms I can stream it on.

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#### **User Story and Scenario Description 2.1.1**

As a: User

So that: I can decide where to watch an entertainment option I choose

I want to: See which streaming services offer the option

GIVEN that I have selected a media to watch or listen

WHEN I click on the media

THEN I should see a list of streaming services where I can watch or listen to the media

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### **Feature 2.2**

As a user, I can be linked to the web pages where I can access the media so I can start it immediately.

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#### **User Story and Scenario Description 2.2.1**

As a: User

So that: I don't have to search my chosen option again in available streaming services

I want to: Go directly to the streaming service page after choosing my option

GIVEN that I have selected a media to watch or listen

WHEN I click on the media

THEN I should see a list of streaming services where I can watch or listen to the media

AND I can click on any of the streaming services

THEN I will be redirected to that platform to stream my choice of media

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### **Feature 2.3**

As a user I can see information about entertainment options so I can make an informed choice about what to pick.

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#### **User Story and Scenario Description 2.3.1**

As a: User

So that: I can better identify Movies, TV Shows, Podcasts and Songs

I want to: See their poster or cover images

GIVEN I am on the myLounge starting page

AND I have selected "I want to WATCH" or "I want to LISTEN"

WHEN I scroll down the page

THEN I should see the posters for movies/tvshows/podcasts and the cover of songs as thumbnails

WHEN I click on one of these posters or covers

THEN The details page is brought up

AND I should see the full version of the poster/cover.

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#### **User Story and Scenario Description 2.3.2**

As a: User

So that: I can decide on a Movie or TV Show

I want to: See the show or movie trailer

GIVEN I have brought up the details page for a movie or TV show

WHEN I click on "View Trailer"

THEN I should see the trailer for the movie or TV show.

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### **User Story and Scenario Description 2.3.3**

As a: User

So that: I can decide on a Movie or TV Show

I want to: See the show or movie's reviews

GIVEN I have brought up the details page for a movie or TV show

WHEN I click on "Reviews"

THEN I should see the reviews for the movie or TV show.

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### **User Story and Scenario Description 2.3.4**

As a: User

So that: I can get more information about the TV Show or Movie's story

I want to: See a description for the show or movie

GIVEN I have selected a TV Show or Movie and clicked it

THEN I should see a description of that item in the details page

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### **User Story and Scenario Description 2.3.5**

As a: User

So that: I can get more information about a Podcast

I want to: See a short description about the podcast

GIVEN I am viewing the LISTEN options page

THEN I should see the name and short descriptions of Podcasts in the Podcast lists

AND when I click on a Podcast

THEN I should see further information about the Podcast

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### **User Story and Scenario Description 2.3.5**

As a: User

So that: I can get more information about an Album or Song

I want to: See a description or further information about the Album or Song

GIVEN I am viewing the LISTEN options page

AND I have selected an Album or Song by clicking on it

THEN I should see further information of that item

## Sequence Diagrams

Sequence Diagrams can be found in Google Drive links attached. For the larger diagrams that may be too blurry, click open with “diagrams.net” at the top of the screen to see the full picture.

### Our Diagrams by User Story:

- **US 1.1.1, 1.2.1 and 1.2.2**  
<https://drive.google.com/file/d/1R9Q2UzDuX7NHj8oH9VIXfLs0XTYBMgAU/view?usp=sharing>
- **US 1.1.2**  
[https://drive.google.com/file/d/18M\\_jc1NU5tQbyvx728\\_r\\_EdwHye5H7Rt/view](https://drive.google.com/file/d/18M_jc1NU5tQbyvx728_r_EdwHye5H7Rt/view)
- **US 1.3.1, 1.3.2 and 1.3.3**  
<https://drive.google.com/file/d/1dRSZY-8llwY9S8NE1oXSswFlsJcaX8xXB/view?usp=sharing>
- **US 1.4.1, 1.4.2**  
<https://drive.google.com/file/d/12Zgskzrb7Q21EHAZnvrvb9y6S1UcDWsk/view?usp=sharing>
- **US 2.1.1 and 2.2.1**  
<https://drive.google.com/file/d/1Vy-1OodV44XijuzeAE4cJynZrldAl6pl/view?usp=sharing>
- **US 2.3.1, 2.3.2, 2.3.3, 2.3.4 and 2.3.5**  
<https://drive.google.com/file/d/1th5f0phxsZsrGc98jXxxlpRMv5gDip9b/view?usp=sharing>