

**Team Streams (10) project proposal**

**Project: Yomiru**

**Simon Fraser University**

**CMPT 276: Introduction to software engineering**

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Submitted to Vincent Hu

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<https://github.com/CMPT-276-SUMMER-2025/final-project-10-streams>

## **Overview**

### **Intention:**

The idea for this project came from most of our team being anime fans with a common issue: What to watch or read (manga). Since the covid era the anime world has been on the rise with new releases coming out almost daily. There is an overload, that is further worsened by random reels on social media showing us a clip with no titles given. So that's where our project comes in. Yomiru is an all-in-one anime suggestion tool based on the user's tastes as well to find that anime that has no title by just uploading a screenshot to our website and getting a description of the anime and links on where to watch it. Thus, making the decision what to watch easier and cutting down the hours gone by of wondering 'I don't know what to watch'.

### **Potential users:**

- 1) New to anime user – Discovering new anime or manga based on their general preferences given i.e.) genre through the suggestion interface we intend to implement.**
- 2) Hardcore/ long time anime or manga fan- This user would use our webpage to find new anime that may interest them, that they may have overlooked or not seen before. This would also be achieved through the suggestion feature of the webpage.**
- 3) Manga purist – This user can look for the latest releases of their favorite niche manga's keeping up to date as well as finding a place to get the latest copy. Or even find where that obscure manga panel screenshots originates from using our anime finder feature powered by Trace Moe.**
- 4) Anime only viewer- User that only watches the most popular mainstream anime, they can find this out by looking at the most watched for the week. This need to keep up with the latest mainstream can be achieved by looking our top 10 dynamic anime most watched board.**

- 5) **The casual fan** – This user is a person that watches anime occasionally, this site would keep them up to date and help them commit to watching a new anime by cutting down the work needed to decide on what to watch. Our suggestion feature comes in useful here for this purpose, and the Trace Moe feature can help with identifying the random unnamed anime from social media that brings them back into anime.

**Personas:**

1. **New to anime user: Ian** – Ian is a 38-year-old dad, whose son has recently been developing an interest in anime, Ian wants to relate with his son by getting into anime.
2. **Hardcore/ long time anime/ manga fan: Hino** is a 34-year-old software engineer who lives for anime/manga and has a huge collection of manga and anime DVDs. She uses Yomiru to search for super hidden and underrated manga/anime that she has never read/watched.
3. **Manga purist (user exclusively reads manga): Chloe**- 16-year-old Chloe is an old soul she lives for a fresh copy of manga on release which is why she uses Yomiru to find out when the latest chapter drops and where she can buy a copy.
4. **Anime only enthusiast: Keshav**- 27-year-old Keshav is a busy engineer with friends who are super into anime, he likes anime but lacks the time to get into the deep niches, he uses Yomiru to find out what's the latest trending anime to watch in his spare time to keep up with his friend group.
5. **Casual fan (watches both manga and anime go with the mood on watch to watch): Sarah** is a 20-year-old college student who engages in anime and manga occasionally. She uses the Yomiru swiping feature from time to time to choose anime and manga based off of what she is in the mood for.

## **APIs:**

### **Primary**

1. Myanimelist API (MAL)

#### **Features:**

1. Access to existing user accounts (for adding anime suggestions to their watchlist on myanimelist).
2. Access to release date/ information from MAL API.
3. Getting information about an anime/manga (genre etc) and suggests anime/ manga to a user based on preferences they give for the session.

2. Trace Moe (API)

#### **Features:**

1. Given an image from an episode of an anime – returns the anime the image is from.
2. Gives the exact time stamped clip from the episode.
3. Combining with MAL API to find the anime the scene is from and using the data from MAL give a summary/ synopsis of the anime.

### **Secondary/back-ups**

1. Gemini

#### **Features:**

1. In conjunction with Trace Moe, finds the character and prompts to takes the user to character wiki page.
2. Used as a scraper to search the web for the best places to watch the anime chosen (either from the scene finder or from the recommendation page)
3. Creates summaries for animes/ manga suggested.

## 2. Studio Ghibli API

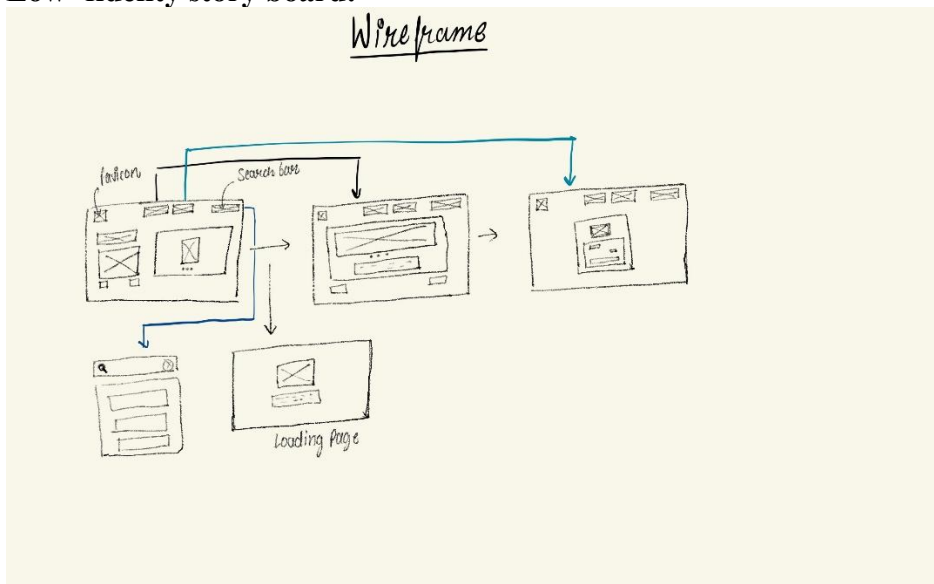
### Features: (All for specifically Ghibli studios)

1. Character and location data for characters within the Ghibli universe
2. Insights into the inner workings/ behind the scenes related to Ghibli productions
3. Use /people and attach fun facts like voice actors (can be scraped from IMBD or Wikipedia.)

#	API	Feature Description	User Story
1	Gemini	Scrape the web for	<i>As a busy viewer, I want to</i>
		the best places to	<i>know where to watch</i>
		watch the anime	<i>anime immediately, so I</i>
		(from scene finder or	<i>don't waste time</i>
		recommendations)	<i>searching.</i>
			<i>As a casual fan, I want to</i>
2	Trace Moe	Identify an anime	<i>upload a screenshot and</i>
		from an uploaded	<i>find the anime name so I</i>
		screenshot	<i>can watch the anime from</i>
			<i>the screen.</i>
			<i>As a new anime fan, I want</i>
		Add anime	<i>to save a suggested anime</i>
3	MyAnimeList	suggestions to a	<i>to my MAL account so I</i>
		user's watchlist	<i>can watch it later.</i>

#	API	Feature Description	User Story
4	Gemini	Generate summaries for suggested anime/manga	<i>As a casual viewer, I want a short summary of suggested anime, so I know if I'll enjoy it.</i>
5	Trace Moe + MAL	Identify anime from image and use MAL to display full details (summary, rating, genre, etc.)	<i>As a hardcore fan, I want full details from a screenshot so I can dive into a new anime quickly.</i>
6	MyAnimeList	Access release dates and information about anime/manga	<i>As a manga purist, I want to know when a new chapter is coming out so I can be up to date.</i>

### Low- fidelity story board:



## Front-end technology stack used:

- React- We plan on using react as the base framework, due to the extensive libraries on offer as well as the ease of use/ familiarity team members have with the framework. We also kept testability in mind and the ease and speed react based frameworks can be tested.
- Tailwind- Tailwind was chosen as the main styling tool, due to the flexibility and control over UI design it offers.
- GitHub issues for CI/CD pipeline – Group members are familiar with it and it increases
  - convenience
- Testing platforms
  - Jest – due to the ease of testing JavaScript competent by component
  - React testing library – JavaScript and UI testing chosen for the proximity of it to the React framework
  - Cypress – For the complete end-to-end testing of the project, we choose this due to it being the most comprehensive for the purpose of the project while maintaining an ease-of-use characteristic.

## -Design

- Low fidelity – mix of physical white boards(planning), and digital stylus and tablets for finalization, chosen for the ease and comfort of the teams' planners and designers.
- High fidelity – Figma was chosen due to the easy to access nature remotely by team members as well as all team members being comfortable with it.

## - Web- hosting

- Netlify, we chose this as the hosting platform due it is fitting our needs for posting a web project with not a lot if any server-side resources. It is also free to use.

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