### MangaLike Overview

MangaLike is an application that allows you to keep up with all your favorite mangas! Anyone can create a MangaLike Account with an email and password. Users in MangaLike will be able to browse mangas and add them to four different lists: Favorites, Read, Want to Read, and Reading. Users will be able to see these four lists in the "Home" page. They will be able to toggle the view using nav pills to see each different list. Users will also be able to delete mangas from each respective list. Users will be allowed to have the same manga in all 4 categories at the same time. Some mangas are long and ongoing, which means that some users might want to keep track of mangas that they have not finished reading but have read multiple chapters of (adding them to the want to read list and reading lists at the same time). Other users might want to add a manga to wish to read in the future even though they have read multiple chapters before and want to take a break of the manga until new chapters come out or want to re-read already read mangas. MangaLike will have an index of manga which will contain manga information we will grab from the API, including genre, author, artist and summary. For each manga, users will be able to comment their opinion of the manga as well as join manga-specific chats. In the chats, shown on the side of the page, users should be able to see messages sent real time without the need to refresh the page.

## MangaLike User Functionalities

As a new user I can register a new account:

To create an account I need to click on the "Register" button next to the log-in bar. This will take me to the new user form where I will have to input my name, username, email and password. Once I click submit, my account will be ready to use.

As a returning user I should be able to log into my account.

To log in to my account I need to enter my email address and password in the log-in bar which is located inside the navbar at the top of the page. Once I enter the correct information and click submit, the website will take me to my home page.

As a returning user I should be able to edit my profile information.

To edit my profile information I need to click on the "My Profile" button in the nav-bar after log-in. This will take me to My Profile page where I will be able to view my user information. I then click on the "Edit" button which will take me to the User Edit form. I will be able to change the information I want changed and click submit when finished with the changes.

As a returning user I should be able to browse mangas and see their summaries and reviews.

To browse mangas I need to enter the manga's name in the search bar and click on search. This will take me to the manga's main page where I'll be able to see a summary of the manga and all user reviews.

As a returning user I should be able to mark a manga as favorite.

To mark a manga as favorite I will need to browse for the manga I wish to favorite. Once I find the desired manga, I can click on the "Favorite" button. This will add the manga to my Favorites list. After I have favorited a manga, the favorite button will change to "remove from favorites".

As a returning user I should be able to add mangas to have read, want to read and currently reading lists.

To add a manga as read, want to read or reading, I will need to browse for the manga I wish to add. Once I find the desired manga, I can click on the "Read", "Want to Read" or "Reading" button. This will add the manga to the respective list. After I have added a manga to a list, the button for adding to the list will change to "remove from (respective list)".

As a returning user I should be able to see a list for of all the manga I want to read, have read, am reading and favorited.

To see my lists of mangas, I need to click on "Home" on the navbar. This will take me to my home page which shows a list of my Favorite mangas by default. I will be able to see the Read, Want to Read, and Reading mangas list by clicking on the respective nav pill.

As a returning user I should be able edit my lists of mangas (read, to read, reading, favorites).

To edit my list of mangas I need to click on "Home" on the navbar. Then I need to click on the respective nav pill to see the list I wish to edit. To delete a manga from the list I click on the "Delete" button. The deleted manga will now no longer be in the list I removed it from.

As a returning user I should be able to comment on mangas.

To comment on a manga I need to browse for the manga I wish to comment on. Once I have found the manga, at the bottom of the manga's page I will see a text box to write my comment in. Once I am done writing my comment, I will click on the "Submit Comment" button, which will post my review.

As a returning user I should be able to chat with other users on specific manga topics.

To chat about specific mangas with other users I browse for the manga I wish to chat about. Once I find the manga I see the chat happening on the side of the main page. I will be able to type my messages into a textbox and send them by clicking the "Send" button. My messages should appear on the chat and I should be able to see other users' messages without refreshing the page.

As a returning user I should be able to log out of my account.

To log out of my account I click on the log out button in the navbar. This will take me to the landing page which will ask me to log back in or create a new user.

As an admin user I should be able to delete any other user's comments.

To delete another user's comment as an admin, I log into my admin account. Then I browse the manga that contains the comment I wish to delete. Once in the manga's main page I find the comment I wish to delete and click on the "Delete" button to delete the comment.

#### Data

All manga information in MangaLike is provided by the public API/dataset MangaEden: <a href = "http://www.mangaeden.com/api/"> <a href = "http://www.mangaeden.com/api/</a>. We are only accessing the information MangaEden's data using HTTPoison and using postgresql for user-related data such as the information in each user's account and the lists of each user (read, want to read, read and favorites).

#### User

- Email (string)
- Password hash (string)
- Username (string)
- Password tries (integer)
- Password last try (datetime)
- Is admin (boolean)

## Manga

- Title (string)
- Author/Artist (string)
- Summary (text)
- Comments (text)

### Comments

- References User
- Comment (text)

## Lists

- Reference to users
- Category read, want to read, reading (string)
- Reference to manga

#### **Pages**

In MangaLike users will be able to navigate through multiple pages. When existing users or new users first enter MangaLike, they will be directed to the Landing page where they asked to either log in or register a new account. If registering a new account, users will be taken to the Register New User account where they can input the necessary information. Once logged in, users will be directed to their Home page where they will be able to see the main four manga lists (Favorite, Read, Reading, Want to Read) by toggling the list views using the nav pills. Users will also be able to access their Profile page where they will able to see their Name, Username and email as well as edit

said information. Users will also be able to see individual Main Manga pages where they will be able to comment on the manga or chat with other users in the manga's Chat section.

## **Experiments**

# **Experiment 1**: Experimenting Accessing API

If you look into manga.ex, there are functions made to test whether or not we are able to access the information. The API we are using from MangaEden (http://www.mangaeden.com/api/) has information spread over different URLs that we would want to access. Examples of the different URLs we tested were in the format of https://www.mangaeden.com/api/list/0/, with this being the dictionary of all the manga and their basic information. Another one that we would use is https://www.mangaeden.com/api/manga/[manga.id]/, and this has the more detailed information on the manga specified, like the summary, artist, chapters and genres. The manga.id in the URL is an id field that you would need to look up in the previous API URL

(https://www.mangaeden.com/api/list/0/). From this experiment we learned that we needed another URL to bring in summary information. This helped us change our project to support both URL's in order to get all the information we originally wanted to get.

For our experiment, we wrote a few functions:

- manga list() to get the manga information from the first API
- map titles() maps the id and title information from the manga in the first API in a list
- get\_id\_by\_title(title) returns the id of the manga title specified
- get\_manga\_info(id) returns the data for the manga

# Experiment 2: Experimenting with Standalone Websockets - Chat Rooms

We experimented on implementing standalone Websockets for manga-specific chat sections. We experimented on getting channels with different subtopics so that corresponding chat section only get the correct respective messages and no message is sent to the wrong chat section. Neither of us had implemented Websockets for different subtopics so this was new to us. We managed to successfully create a very simple chat section - it can send messages to only the specified chat section. We created two chat sections (Hana Kimi and Toukyou Kushu). The ones on the Hana Kimi show page can type and receive messages from other Hana Kimi pages while not affecting the Toukyou Kushu page and vice versa. We made generated a Room data structure, but we realized that there would be difficulty generating the new rooms to begin with. We decided to merge the chat section with the manga page so you can chat directly on the manga info page. We will need to look more about implementing joining the channel dynamically.

### Experiment 3: Experimenting with React

We experimented with React by creating a local react app. It is a static front end of our MangaLike landing page. React was successfully installed and locally. This experiment has helped us understand React a little better and has influenced us to learn much more react before the project is due. React seems rather different compared to what we have worked on previously before so it's a very good thing that we are starting to gain exposure to it early on in the project.

# Status

Currently we have the API's working. We have been focusing mostly on the Experiments as instructed in class and therefore have not progressed much in what the original project plan. Currently, we have ran into issues like lack of knowledge in React as well as not full understanding on some items in elixir. Even so, we have not made too much of major changes to our initial concept. The biggest change we have made until now is changing chatrooms to become chat sections instead due to the large amount of mangas which we hadn't originally thought through well enough.