**3.1 Refined Use Case Model and descriptions**

Diagram

Description automatically generated

**Use Case Description 1**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_1 \_SU | | |
| Use Case Name: | Sign Up | | |
| Created By: | Hill Seah | Last Updated By: | Hill Seah |
| Date Created: | 30/8/2022 | Date Last Updated: | 8/9/2022 |

|  |  |
| --- | --- |
| Actor: | User (Participating) |
| Description: | A new user signs up on the web application to use it. |
| Preconditions: | A new user that desires to sign up |
| Postconditions: | User successfully signs up |
| Priority: | 1 |
| Frequency of Use: | 1 |
| Flow of Events: | 1. The User selects SignUp on the Login/Sign up page 2. User is redirected to the Account Creation page |
| Alternative Flow: | NIL |
| Exceptions: | NIL |
| Includes: | Nil |
| Extended by: | Account Creation |
| Special Requirements: | Nil |
| Assumptions: | Nil |

**Use Case Description 2**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_2\_AC | | |
| Use Case Name: | Account Creation | | |
| Created By: | Hill Seah | Last Updated By: | Hill Seah |
| Date Created: | 30/8/2022 | Date Last Updated: | 30/8/2022 |

|  |  |
| --- | --- |
| Actor: | User (Participating) |
| Description: | Creates an account for the user after account field requests are fulfilled correctly by the user (Ie: Email Address for username and display name) |
| Preconditions: | User clicks sign up in the login/signup page |
| Postconditions: | An account is created successfully for the user |
| Priority: | 2 |
| Frequency of Use: | 1 |
| Flow of Events: | 1. Web app request user to enter his/her email address for the account’s username. 2. Web app will send an authentication security code to the email specified by the user for verification. 3. If the security code is entered correctly and the email address is verified to be valid, the web app will request the user to enter the desired display name for the account. 4. If the display name entered is verified to not be a duplicate of any other account’s display name in the database, the account will be successfully created 5. The created account and its details will be stored in the database by StoringUserProfile. |
| Alternative Flows: | AF-S1: If an already-registered email was used:   1. The web app displays “ Email entered was already used” 2. The web app displays a clickable prompt “Wrong email? Re-Enter email ” 3. If this prompt is clicked, the web app returns to step 1   AF-S3: If a wrong authentication security code is entered:   1. The web app displays “Invalid Authentication Security Code” below the entry box to inform the user 2. The web app displays a clickable prompt “Wrong email? Re-Enter email ”    1. If this prompt is clicked, the web app returns to step 1 3. The web app displays a clickable prompt “Resend Authentication Security Code” below the entry box    1. If this prompt is clicked, the web app returns to step 2   AF-S4: If a duplicate account display name is entered:   1. The web app displays “Display name already exist” below the entry box to inform the user. 2. The web app returns to step 3 |
| Exceptions: | EX1: The user repeatedly enters the wrong authentication security code and clicks “Resends Authentication Security Code” more than 3 times in 1 minute   1. The web app displays “Too many resend requests, wait for 5 minutes” 2. Makes the resend prompt unclickable for 5 minutes 3. A countdown from 5 minutes is shown below the prompt |
| Includes: | Storing User Profile |
| Extended by: | NIL |
| Special Requirements: | NIL |
| Assumptions: | NIL |

**Use Case Description 3**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_3\_SUP | | |
| Use Case Name: | Storing User Profile | | |
| Created By: | Hill Seah | Last Updated By: | Hill Seah |
| Date Created: | 30/8/2022 | Date Last Updated: | 8/9/2022 |

|  |  |
| --- | --- |
| Actor: | User (Participating) |
| Description: | Stores created account and its details in database |
| Preconditions: | Account was just successfully created |
| Postconditions: | Created account and its details are successfully stored in database |
| Priority: | 3 |
| Frequency of Use: | 1 |
| Flow of Events: | 1. System stores account’s username in the database 2. System stores account’s display name in the database |
| Alternative Flows: | NIL |
| Exceptions: | NIL |
| Includes: | NIL |
| Extended by: | NIL |
| Special Requirements: | NIL |
| Assumptions: | Database is not full |

**Use Case Description 4**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_1\_L | | |
| Use Case Name: | Login | | |
| Created By: | Bhat Sachin | Last Updated By: | Bhat Sachin |
| Date Created: | 6/9/2022 | Date Last Updated: | 6/9/2022 |

|  |  |
| --- | --- |
| Actor: | User(Participating) |
| Description: | An existing user logs in on the web application to use it. |
| Preconditions: | User wants to login. |
| Postconditions: | Successful login |
| Priority: | 1 |
| Frequency of Use: | 1 |
| Flow of Events: | 1. The User selects Login on the login/sign up page 2. The User keys in their username(email in this case) and clicks authenticate to enter password (an OTP in this case). |
| Alternative Flows: | NIL |
| Exceptions: | NIL |
| Includes: | Display |
| Special Requirements: | NIL |
| Assumptions: | User exists. |

**Use Case Description 5**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_2\_LV | | |
| Use Case Name: | Login Verification | | |
| Created By: | Bhat Sachin | Last Updated By: | Bhat Sachin |
| Date Created: | 6/9/2022 | Date Last Updated: | 6/9/2022 |

|  |  |
| --- | --- |
| Actor: | OTP Login Auth(Initiating), User(Participating), Email System(Receiving) |
| Description: | Verifies the login details. |
| Preconditions: | The username is entered and the ‘authenticate’ button is triggered. |
| Postconditions: | Sends OTP on user verification. |
| Priority: | 2 |
| Frequency of Use: | On every login. |
| Flow of Events: | 1. The user presses the authenticate button. 2. There is an internal querying done, matching the username with an existing database of emails. 3. On successful match, the OTP Login Auth generates an OTP of 6 digits and sends it to the external email system. 4. User then enters the OTP provided which is matched by the OTP Login Auth. 5. User logs in successfully. |
| Alternative Flows: | AF-S3: On failed match   1. The message “User does not exist or is incorrect!” is displayed. 2. The user re-enters the username. 3. Go to 1.   AF-S4: On failed match   1. The message “Incorrect password!” is displayed. 2. User re-enters OTP. 3. Go to 4. |
| Exceptions: | NIL |
| Includes: | Login |
| Special Requirements: | The OTP is valid for 10 minutes after generation, following which a new OTP is to be generated. |
| Assumptions: | NIL |

**Use Case Description 6**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_2\_D | | |
| Use Case Name: | Display | | |
| Created By: | Bhat Sachin | Last Updated By: | Bhat Sachin |
| Date Created: | 6/9/2022 | Date Last Updated: | 6/9/2022 |

|  |  |
| --- | --- |
| Actor: | User(Receiving) |
| Description: | A container for all viewable or interactive elements in the webapp. |
| Preconditions: | Successful Login |
| Postconditions: | Open the display. |
| Priority: | 2 |
| Frequency of Use: | On every login. |
| Flow of Events: | 1. On successful login, the user is greeted with a container populated by elements such as the homepage, hamburger menu and icons. |
| Alternative Flows: | NIL |
| Exceptions: | NIL |
| Includes: | Go to homepage |
| Special Requirements: | NIL |
| Assumptions: | NIL |

**Use Case Description 7**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_3\_GTH | | |
| Use Case Name: | Go to homepage | | |
| Created By: | Seah Jun Sheng | Last Updated By: | Seah Jun Sheng |
| Date Created: | 6/9/22 | Date Last Updated: | 6/9/22 |

|  |  |
| --- | --- |
| Actor: | User (Participating) |
| Description: | Brings user to the homepage from whichever page the user is on |
| Preconditions: | 1. User has an account with the webapp 2. User is logged in |
| Postconditions: | Homepage is displayed |
| Priority: | 2 |
| Frequency of Use: | Whenever user wants to go back to homepage |
| Flow of Events: | 1. User clicks on the hamburger menu icon which will initiate the “Go to Hamburger Menu” use case 2. User selects the “Homepage” option 3. System displays the homepage |
| Alternative Flows: | NIL |
| Exceptions: | NIL |
| Includes: | Go to hamburger menu  Display |
| Special Requirements: | NIL |
| Assumptions: | NIL |

**Use Case Description 8**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_4\_GTHM | | |
| Use Case Name: | Go to Hamburger Menu | | |
| Created By: | Seah Jun Sheng | Last Updated By: | Seah Jun Sheng |
| Date Created: | 6/9/22 | Date Last Updated: | 6/9/22 |

|  |  |
| --- | --- |
| Actor: | User (Participating) |
| Description: | Provides a dropdown box with possible options for the user to navigate the web app |
| Preconditions: | 1. User has an account with the web app 2. User is logged in |
| Postconditions: | Open the hamburger menu |
| Priority: | 2 |
| Frequency of Use: | Whenever the user wants to navigate the web app |
| Flow of Events: | 1. User clicks on the hamburger menu icon 2. A drop down list will appear with options including “Homepage”, “Recommended”, “Trending”, “Review” |
| Alternative Flows: | NIL |
| Exceptions: | NIL |
| Includes: | Go to “Recommended” Page  Go to “Trending” Page  Go to “Review” Page  Go to homepage |
| Special Requirements: | NIL |
| Assumptions: | NIL |

**Use Case Description 9**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_5\_GTRP1 | | |
| Use Case Name: | Go to “Recommended” Page | | |
| Created By: | Seah Jun Sheng | Last Updated By: | Seah Jun Sheng |
| Date Created: | 6/9/22 | Date Last Updated: | 6/9/22 |

|  |  |
| --- | --- |
| Actor: | User (Participating) |
| Description: | Brings the user to the “Recommended” subpage of the web app |
| Preconditions: | 1. User has an account with the web app 2. User is logged in |
| Postconditions: | “Recommended” subpage is displayed |
| Priority: | 2 |
| Frequency of Use: | Whenever the user wants to go to the “recommended” subpage |
| Flow of Events: | 1. User clicks on the hamburger menu which initiates the “Go to Hamburger Menu” use case 2. User selects “Recommended” 3. System displays the “Recommended” page with all the anime posters of different anime titles |
| Alternative Flows: | Nil |
| Exceptions: | Nil |
| Includes: | Go to “Description Page” |
| Special Requirements: | Nil |
| Assumptions: | Nil |

**Use Case Description 10**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_5\_GTTP | | |
| Use Case Name: | Go to “Trending” Page | | |
| Created By: | Loke Kah Hou | Last Updated By: | Loke Kah Hou |
| Date Created: | 6/9/2022 | Date Last Updated: | 6/9/2022 |

|  |  |
| --- | --- |
| Actor: | User (Participating) |
| Description: | Brings User to the “Trending” page |
| Preconditions: | 1. User must have a valid account 2. User must be signed in to their account 3. User must be on the Homepage, “Recommended” page or “Review” page |
| Postconditions: | “Trending” page is displayed by the System |
| Priority: | 2 |
| Frequency of Use: | When the User decides to go to the “Trending” page |
| Flow of Events: | 1. User will click on the Hamburger Menu 2. User will be given a list of pages to choose from 3. User will click on the “Trending” page 4. System will redirect User to the “Trending” page with all the anime posters of different anime titles |
| Alternative Flows: | NIL |
| Exceptions: | NIL |
| Includes: | Go to “Description Page” |
| Special Requirements: | NIL |
| Assumptions: | NIL |

**Use Case Description 11**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_5\_GTWRP2 | | |
| Use Case Name: | Go to “Write a Review” Page | | |
| Created By: | Loke Kah Hou | Last Updated By: | Loke Kah Hou |
| Date Created: | 6/9/2022 | Date Last Updated: | 6/9/2022 |

|  |  |
| --- | --- |
| Actor: | User (Participating) |
| Description: | Brings User to the “Review” page |
| Preconditions: | 1. User must have a valid account 2. User must be signed in to their account 3. User must be on the Homepage, “Recommended” page or “Review” page |
| Postconditions: | System displays the “Write a Review” page and a review is entered and posted for a particular anime |
| Priority: | 2 |
| Frequency of Use: | 1 |
| Flow of Events: | 1. User clicks the Search Bar 2. User types in the Anime name 3. If the queried name matches with Animes in the database, the System will display the Animes matching the search query 4. User selects the Anime they want to write a review for 5. Review Verification is called to verify if the user has watched the anime 6. If the user was verified to have watched the anime, a textbox to type the review will appear. |
| Alternative Flows: | AF-S3: If the queried name does not match with any Anime in the database:   1. System will display “Based on your search query, there are no Animes found” as an Error Message 2. User will try again to type in the Search Bar to search for their Anime. 3. Return to step 2   AF-S5: The user has not watched the anime yet   1. The Web app displays the message “The user is not permitted to post a review” 2. The web app returns to step 4 |
| Exceptions: | NIL |
| Includes: | Review Verification |
| Special Requirements: | The user must have watched the anime to write a review. |
| Assumptions: | NIL |

**Use Case Description 12**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_8\_RV | | |
| Use Case Name: | Review Verification | | |
| Created By: | Keerthana Jayaraman Karthikeyan | Last Updated By: | Keerthana Jayaraman Karthikeyan |
| Date Created: | 6/9/2022 | Date Last Updated: | 6/9/2022 |

|  |  |
| --- | --- |
| Actor: | User (participating) |
| Description: | Verification to write a review . |
| Preconditions: | 1. User must have a valid account 2. User must be logged in 3. The user must select the anime they want to write a review for. |
| Postconditions: | The user is permitted to post a review. |
| Priority: | 3 |
| Frequency of Use: | When the user wants to write a review. |
| Flow of Events: | 1. The web app verifies the user’s watch history 2. Once verified as having watched the particular anime, the user is allowed to review it. 3. A textbox to type the review will appear. |
| Alternative Flows: | AF-S2: The user has not watched the anime yet   1. The Web app displays the message “The user is not permitted to post a review” 2. The web app returns “Review” page |
| Exceptions: | NIL |
| Includes: | NIL |
| Special Requirements: | NIL |
| Assumptions: | NIL |

**Use Case Description 13**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_4\_SM | | |
| Use Case Name: | Surprise Me | | |
| Created By: | Bhat Sachin | Last Updated By: | Bhat Sachin |
| Date Created: | 8/9/2022 | Date Last Updated: | 8/9/2022 |

|  |  |
| --- | --- |
| Actor: | User (participating, receiving) |
| Description: | Surprises the user with a random anime title. |
| Preconditions: | 1. User must have a valid account 2. User must be logged in |
| Postconditions: | The user is shown a random anime title. |
| Priority: | 4 |
| Frequency of Use: | When the user wants a surprise title. |
| Flow of Events: | 1. The user is on the homepage currently. 2. The user scrolls to find the button “Surprise Me!” and clicks it. 3. The system gets and redirects the user to a random anime description page. |
| Alternative Flows: | NIL |
| Exceptions: | NIL |
| Includes: | NIL |
| Special Requirements: | NIL |
| Assumptions: | NIL |

**Use Case Description 14**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_6\_GTDP | | |
| Use Case Name: | Go to Description Page | | |
| Created By: | Bhat Sachin | Last Updated By: | Bhat Sachin |
| Date Created: | 8/9/2022 | Date Last Updated: | 8/9/2022 |

|  |  |
| --- | --- |
| Actor: | User (participating, receiving) |
| Description: | Go to the description page of an anime. |
| Preconditions: | 1. User must have a valid account. 2. User must be logged in. 3. The user must select the anime they want a description for. |
| Postconditions: | The user is directed to the description page of an anime. |
| Priority: | 3 |
| Frequency of Use: | When the user wants to write a review. |
| Flow of Events: | 1. The user could either be in the homepage, trending or recommended page. 2. In this page, the user clicks on an anime poster to see more details or add to the watchlist. 3. The user is redirected to the description page which contains details of the anime. 4. The user can click the watchlist button to add it to the watchlist. 5. This will enable a drop down menu to change the status from “watching”, “watch” or  “remove from watchlist”. 6. The description page also has hyperlinks to external streaming platforms which the user can click. |
| Alternative Flows: | NIL |
| Exceptions: | NIL |
| Includes: | NIL |
| Special Requirements: | NIL |
| Assumptions: | NIL |

**Use Case Description 15**

|  |  |  |  |
| --- | --- | --- | --- |
| Use Case ID: | Case\_7\_VR | | |
| Use Case Name: | View Review | | |
| Created By: | Loke Kah Hou | Last Updated By: | Loke Kah Hou |
| Date Created: | 6/9/2022 | Date Last Updated: | 6/9/2022 |

|  |  |
| --- | --- |
| Actor: | User (Participating) |
| Description: | Brings User to the Review page of an Anime when they click on view review button of anime on description page |
| Preconditions: | 1. User must have a valid account 2. User must be signed in to their account |
| Postconditions: | 1. System displays the Reviews for the Anime |
| Priority: | 2 |
| Frequency of Use: | When the User wants to look up Reviews of a particular Anime |
| Flow of Events: | 1. User clicks the on the view review button on the anime description page 2. A list of validated reviews posted by users are shown |
| Alternative Flows: | AF-S1: If there are no Reviews present for the Anime they have queried:   1. System will display “There are no Reviews available for this Anime” as a clickable prompt 2. User will be prompted to click the “Write A Review” button to Review the Anime. |
| Exceptions: | NIL |
| Extends: | Go To “Description” page |
| Special Requirements: | NIL |
| Assumptions: | NIL |

***Readme:*** *The JPEG files for each diagram are uploaded for better quality and clarity as per the file names written respectively*

**3.2 Conceptual Models (Class diagrams of Entity, Control and Boundary Classes)**

1. Sign up (file name: cd1\_signUp)

Diagram

Description automatically generated

2. Login (file name: cd2\_login)

Diagram

Description automatically generated

3. Homepage : UIs, Trending page, Recommended page, Write A Review page, Description page, Review Page (file name: cd3\_homePage)

Please refer to attached file “cd3\_homePage” as diagram words in docs is very small

- The class diagram for homepage includes multiple other use cases: hamburger menu, trending page, Recommended page, Write A Review page, Description page, Review Page

- Reason: the aforementioned individual use cases have very small class diagrams each

Diagram

Description automatically generated

**3.3 Dynamic Models (Sequence Diagrams and Dialogue Map)**

*3.3.1 Sequence Diagrams*

Please refer to attached files for sequence diagrams below for better quality

1. Sign up (file name: sd1\_signUp)

Diagram

Description automatically generated

2. Login (file name: sd2\_login)

Table

Description automatically generated

3. Recommended page (file name: sd3\_recommendedPage)

A picture containing timeline

Description automatically generated

4. Trending Page (file name: sd4\_trendingPage)

Table

Description automatically generated

5. Write a review page (file name: sd5\_writeAReviewPage)

Diagram

Description automatically generated with medium confidence

6. Surprise me (file name: cd6\_surpriseMe)

A picture containing diagram

Description automatically generated

*3.3.2 Dialogue Map*

(file name : dialogueMap)

Diagram

Description automatically generated