



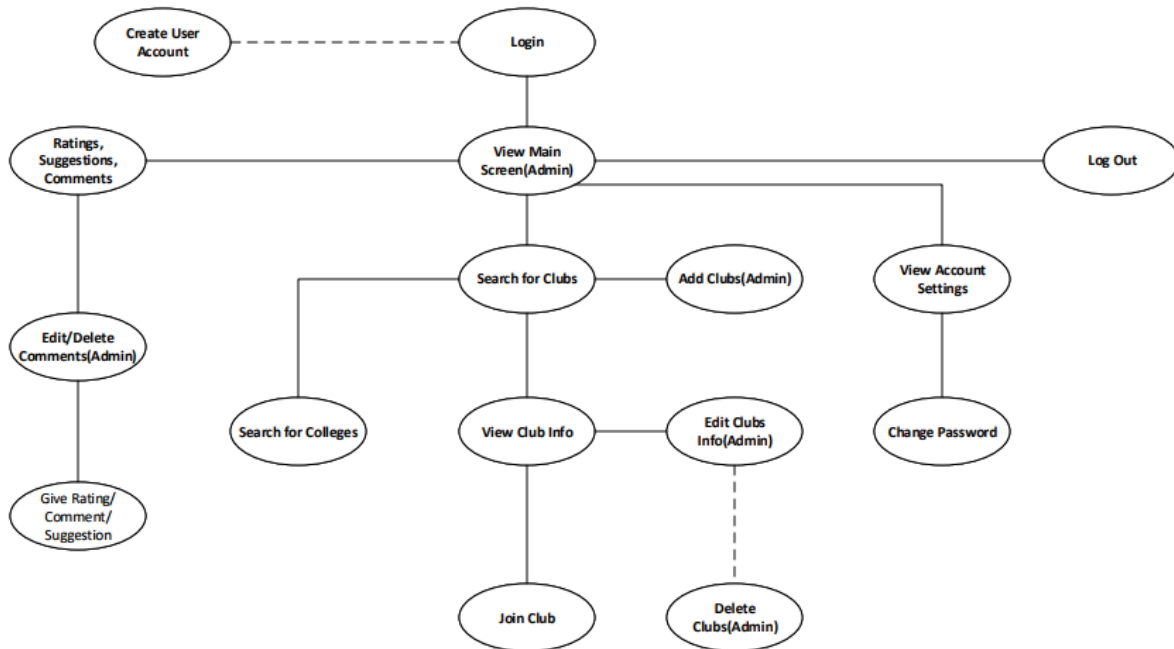
www.RateAClub.com

UML Document

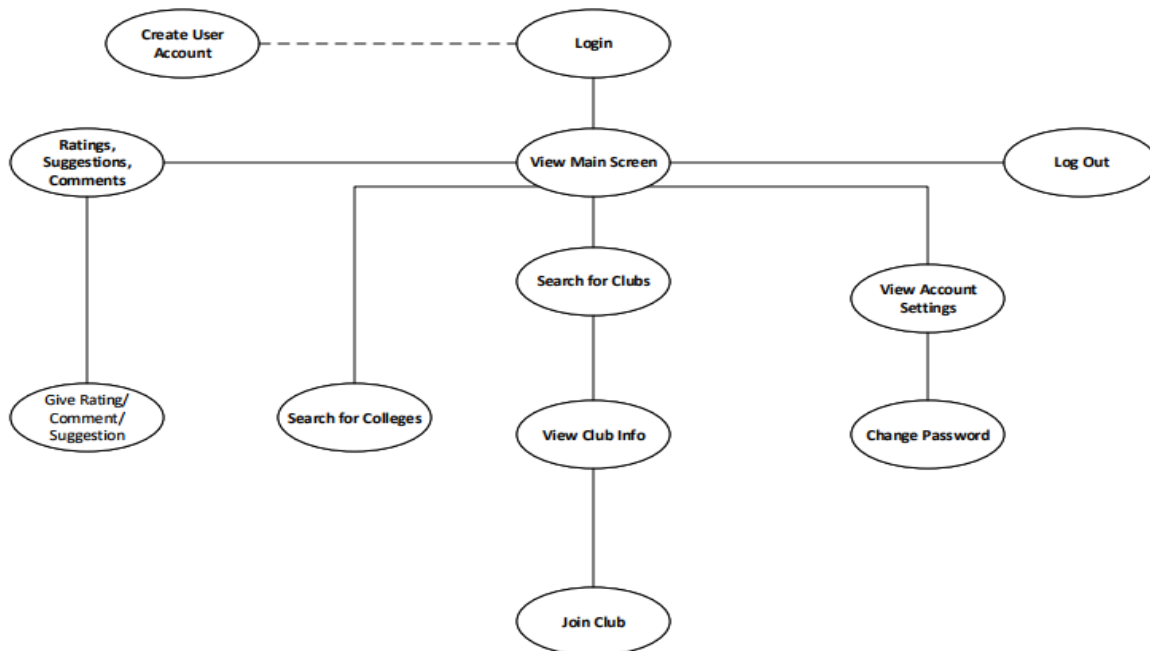
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Diagrams

Admin User:



Regular User:



Use Cases:

Use Case: Create Account

Name of Use Case: *Create Account*

Primary Actor: User

Goal context: The goal of the create account use case is to provide further capabilities within the website i.e. leave comments and suggestions, rate clubs.

Preconditions: The user must be connected to the Internet.

Trigger: The user selects create account from the drop down box (See Start App use case).

Scenario:

1. Website loads drop down box with create account and login option
2. User enters username, and password twice to check for validation
3. App checks that username does not already exist and that the passwords match at meet the set requirements (see *Change Password* use case).
4. App sends email to the email address entered to be verified
5. User clicks link in the email
6. App loads confirmation page then redirects the user to the main page and logs the user in

Exceptions:

1. Email is invalid. A message: "This email is invalid." is displayed.
2. Passwords do not match. A message: "Your passwords did not match." is displayed.
3. Passwords do not meet the requirements. A message: "You did not meet the requirements for a password. Please include at least eight characters, a special character, and a number." is displayed.
4. Email is not sent to the user entered email

Priority: High

When available: Week 2

Frequency of Use: High, depends on the influx of users willing to sign up to rate, comment, or join clubs.

Use Case: Log in

Name of Use Case: *Log in*

Primary Actor: User

Goal Context: Provide a simple user interface for users and admins to log in to their accounts.

Preconditions: The user must be connected to the Internet. The user must already have an account.

Trigger: Click on the login box from the drop down (See Start App use case).

Scenario:

1. Website loads drop down box when user hovers over it displaying the login username and password fields.
2. User enters correct username and password.
3. Website validates credentials against firebase database.
4. Website logs user in and loads mainpage.

Exceptions:

1. Username is entered incorrectly. A display message: “You entered an invalid username.” is displayed.
2. Password is entered incorrectly. A display message “You didn’t enter your password correctly.” is displayed.
3. No internet connection

Priority: High

When Available: Week 2

Frequency of use: High, but depends on users logging in or creating an account versus the anonymous browsing user.

Use Case: Log out

Name of Use Case: *Log out*

Primary actor: User

Goal context: The goal of the log out use case is so that the user may log out of their session whilst on the website.

Preconditions: Must have an account, and must be already logged in. Must be connected to the Internet.

Trigger: The user presses the logout button (see Start App use case).

Scenario:

1. App logs user out and loads main page

Exceptions:

1. No internet connection
2. User not logged in

Priority: Medium

When Available: Week 3

Frequency of use: Medium

Use Case: View Main Screen

Name of Use Case: *View Main Screen*

Primary Actor: End User

Goal in Context: Create a landing page that all users will see when first starting up.

Preconditions: None

Trigger: Navigating to the site.

Scenario:

1. Website loads page consisting of toolbar at the top featuring a Log in/out button and a search bar.
2. Website retrieves top 5 rated clubs from firebase server then populates a list
3. User presses Log In button (Invokes Log In use case)
4. User presses Log Out button (Invokes Log Out use case)
5. User enters college name into search bar as the user types a drop down menu appears with potential autofill options (Invokes Search for College use case).
6. User enters club name into search bar as the user types a drop down menu appears with potential autofill options (Invokes Search for Club use case).
7. Images of the colleges associated with the top five clubs are displayed next to the club name and rating.

Exceptions:

1. Site hosting is down: Standard 404 error would be shown
2. Database connection is invalid: "Database connection failed. Please refresh the page."
3. No Internet connection: "Internet connection failed. Please verify you are connected."

Priority: High

Frequency of Use: Very Often

When available: Week 3

Use Case: View Account Settings

Name of Use Case: *View Account Settings*

Primary Actor: End User; Admin

Goal in Context: Allows the user to see their account information such as email and password.

Preconditions: The user has an account. The user must also be logged in. User must be connected to the internet.

Trigger: The user clicks the “User Settings” link on the *View Main Screen*.

Scenario:

1. App loads a page which shows their name, user name and email address, as well as the “Change Password” and “Delete Account” buttons.
2. If the user presses the “Change Password” button (see *Change Password* use case)
3. If the user presses the “Delete Account” button, which allows the user to delete their account from the server. They are shown a confirmation prompt. That reads “Are you sure you want to delete your account?” “Yes or No”
4. If “Yes” is selected, then the account is deleted and the user is returned to the main screen.

Exceptions:

When Available: Week 2

Priority: High

Frequency of Use: Frequently

Use Case: Change Password

Name of Use Case: *Change Password*

Primary Actor: End User; Admin

Goal in Context: Allows the user to change their password.

Preconditions: The user has an account. The user must also be logged in. User must be connected to the internet.

Trigger: The user clicks the “Change Password” button on the *View Account Settings* page.

Scenario:

1. The user gets taken to a page with text boxes with the labels “Current Password”, “New Password” and “Confirm New Password” and a “Submit” button.
2. The user enters their current password and their new password twice.
3. A line of text stating that they need to have a minimum of eight characters, with a digit, capital letter, and special character will appear under the “New Password” box.
4. The user presses submit. And the system verifies passwords are the same and satisfies the requirements and updates the password in the database.
5. There will then be a confirmation prompt that states “You have changed your password.”

Exceptions:

1. The user could enter their current password incorrectly. If this happens the blank text boxes will be displayed again along with a red text line that states: “You didn’t enter your password correctly.”
2. The user could enter something different in the new password, and confirm new password boxes. If this is the case, the blank text boxes will be displayed again along with a text line that states: “Your passwords did not match.”
3. If the password doesn't meet the requirements a red text line will be displayed saying: “You did not meet the requirements for a password. Please include at least eight characters, a special character, and a number.”

When Available: Week 3

Priority: High

Frequency of Use: Frequently

Use Case: View Ratings/Suggestions/Comments

Name of Use Case: *View Ratings/Suggestions/Comments*

Primary Actor: End User

Goal in Context: Allow the user to view the ratings and comments on a club as well as the suggestions for improvement for that club.

Preconditions: None

Trigger: User has selected club from the results of their search.

Scenario:

1. Website pulls all the entries for that club.
2. Website calculates the average rating for that club.
3. A list of text boxes are filled out with all the information.
4. A list of blocks with the rating is next to a textbox with the first 100 characters of the comment shown. At the bottom is the word expand that opens a larger text box that contains the full comment/suggestion.
5. At the top of the list is a button that says Add (Invokes Add Rating/Comment/Suggestion use case).
6. Website displays edit button next to any comments the user has left. The user can click this to edit their comment (Invokes Edit comment use case).
7. Website displays delete button if the user is a admin. Admin can press this to delete a comment (Invokes Delete Comment use case).

Exceptions:

1. Club has no entries: Display “Wow empty” message
2. Database connection is invalid: “Database connection failed. Please refresh the page.”
3. No Internet connection: “Internet connection failed. Please verify you are connected.”

Priority: High

Frequency of Use: Very Often

When available: Week 3

Use Case: Edit/Delete Comments

Name of Use Case: *Edit/Delete Comments*

Primary Actor: User

Goal in Context: Allow user to edit or delete comments.

Preconditions: Internet connectivity, user has previously entered a comment.

Trigger: User clicks edit button.

Scenario:

1. User clicks edit button.
2. User edits their previous comment.
3. User clicks button labeled “save” confirming they want to confirm the change.
4. Admin clicks button labeled “delete” to delete comment because he/she cannot edit it to an acceptable standard that the college accepts.
5. Admin clicks button labeled “edit” because the comment violates college guidelines.
6. Admin edits the comment so that it is within college guidelines.

Exceptions:

1. Database connection is invalid: “Database connection failed. Please refresh the page.”
2. No Internet connection: “Internet connection failed. Please verify you are connected.”
3. User is not logged in. Display error message: “You are not logged in. Please log in or create an account.”

Priority: High

When Available: Week 4

Frequency of Use: Not often

Use Case: Add Rating/Comment/Suggestion

Name of Use Case: *Add Rating/Comment/Suggestion*

Primary Actor: User

Goal in Context: User wants to leave a comment/rating/suggestion.

Preconditions: Internet connectivity, user is signed in.

Trigger: User clicks “Add a rating and comment” or “Add a suggestion” or “Add a rating”.

Scenario:

1. App displays a box that the user can write out a comment/suggestion, or give a rating.
2. User types a comment/suggestion into the text box, and clicks the rating they want to leave for the club.
3. User clicks button labeled “save” that confirms that they want to leave the rating/comment/suggestion that they entered.

Exceptions:

1. Cannot connect to database. Error message displayed: “Database connection failed. Please refresh the page.”
2. Comment/suggestion contains keyword or phrase that is inappropriate. Gives error message “Please remove inappropriate language”.
3. If user enters a comment, but not a rating. Error messages that says: “You cannot enter a comment without leaving a rating.”
4. User is not logged in. Display error message: “You are not logged in. Please log in or create an account.”

Priority: Essential

When Available: Week 4

Frequency of Use: Very often

Use Case: Search for Clubs

Name of Use Case: *Search for Clubs*

Primary Actor: End User

Goal in Context: Allow users to search for clubs.

Preconditions: internet connectivity, must be on the site.

Trigger:

1. Clicks “search” button from *Main Screen*.
2. Press “enter” button
3. Clicks on a suggested search.

Scenario:

1. User enters name of club, tag, name of institution in text field.
2. User enters name of institution.
3. User receives list of suggestions for search.
4. User clicks search button.
5. User clicks on provided suggestion.
6. “Pop down” of suggested items.
7. User scrolls or press down arrow through suggested searches
 - a. User receives list of results with club or institution name with Club name, College, 100 characters of description.
8. Brief information about search results is retrieved from database.
9. User clicks on a result and get sent to its page.

Exceptions:

1. There are no instances of the intended search. Display “There was nothing found with that name. Please try a different search.” error message.
2. Site is down. “404 Site Not Found” error message is displayed.
3. The database that site will search through is empty. Display a message that states: “There are currently no clubs to be found. Please try again.”

Priority: Medium

Frequency of Use: Very Frequent

When available: Week 9.

Use Case: Add Club

Name of Use Case: *Add Club*

Primary Actor: Administrators

Goal in Context: Allow administrators to add a club to the database

Preconditions: Internet Connection, account must have Administrator access

Trigger: Admin clicks the Add Club button (see main screen use case)

Scenario:

1. App displays Add Club page with a collection of blank, labelled fields
2. Admin enters club name into club name field (String)
3. Admin enters contact email into email field (String)
4. Admin enters club information into club info fields (String)
5. Admin enters additional info (Image, video link, President's name, meeting times and location, tags) into appropriate fields (Links and String)
6. Admin enters college name into college field (Drop-down)
7. Admin clicks Add Club to Database button
8. App creates new entry in club table of database and enters all of the information in the fields, returns admin to main page

Exceptions:

1. Admin clicks button without entering anything into club name, college, or contact fields. Red error message is displayed: "You must enter something in the fields.", and reloads Add Club page
2. Admin enters club name that already exists in that college. Red error message is displayed: "This club already exists", and reloads Add Club page.
3. Admin enters a club into a college that they don't have permission to add to. Red error message is displayed: "You do not have permission to add to this college.", and reloads Add Club page
4. There is an error when adding club to database because it could not be reached. Red error message is displayed: "There was an error when reaching the database. Please try again.", reloads Add Club page

Priority: High

Frequency of Use: Frequent

When Available: Week 5

Use Case: Search for Colleges

Name of Use Case: *Search for colleges*

Primary Actor: Student or User.

Goal in Context: To search for other colleges offering the same or other clubs.

Preconditions: Internet access, Logged in

Trigger: Search Colleges button.

Scenario:

1. Search colleges button is clicked.
2. User enters the name of a college in the search field.
3. Data is retrieved from database(colleges).
4. Returns user recommended search results.
5. User clicks on one of the items in the list(see View Colleges use case).

Exceptions:

1. The user isn't connected to the internet. Error message: "Internet connection failed. Please verify you are connected." is displayed.
2. The search returned nothing. Error message: "There was nothing found with that name. Please try a different search." is displayed.

Priority: Low priority.

When Available: Week 13

Frequency of Use: Medium

Use Case: View Club Info

Name of Use Case: *View Club Info*

Primary Actor: End User

Goal in Context: Allow the user to view information on the club such as: meeting time, meeting location, club description, member population, and other relevant information

Preconditions: None

Trigger: User clicks the display club info button on the club's page. (see View ratings)

Scenario:

1. Website connects to the database, and the club information is retrieved.
2. Website fills in a series of text boxes with labels defining what they are. This contains college they are based in, club name, contact email, president's name, meeting time, meeting location, a image, and a video. If no info in the optional fields is found then that field is left blank.
3. User clicks search bar in header and enters a club or college name. A drop down menu with potential autofill options is displayed as they type (Invokes search club or search college).
4. User clicks Log in/out buttons in header (Invokes Log In or Log Out)
5. User clicks express interest button (Invokes Express Interest use case).

Exceptions:

1. The database server is down: "Database connection failed. Please refresh the page."
2. Not connected to Internet: "Internet connection failed. Please verify you are connected."

Priority: Medium

Frequency of Use: Often

When Available: Week 7

Use Case: Express Interest

Name of Use Case: *Express Interest*

Primary Actor: End User

Goal in Context: Allow users to join clubs

Preconditions: Internet Connectivity, logged in, and not administrator

Trigger: Clicks “Express Interest” button

Scenario:

1. User clicks on “Express Interest” button.
2. If user is not logged in, then users will be asked to log in.
3. Credentials are checked.
4. Automated email gets sent to the club expressing interest to the club with user’s first and last name.

Exceptions:

1. User is not logged in. Display error message: “You are not logged in. Please log in or create an account.”
2. Site is down. Display error message: “404 Site Not Found”
3. User is logged in but is an administrator. Solution: disable “Express Interest” button for admins.
4. Database connection is invalid. Display error message: “Database connection failed. Please refresh the page.”

Priority: Medium

Frequency of Use: Mild

When Available: Week 6

Use Case: Edit Club Info

Name of Use Case: *Edit Club Info*

Primary Actor: Administrators

Goal in Context: Allow admins to change the displayed information about a club

Preconditions: club must exist in database, admin must know club name as it is in the database

Trigger: admin clicks the Edit Club button (see main screen use case)

Scenario:

1. App displays Edit Club page with collection of editable fields that contain the currently stored values in the database
2. Admin enters the new club name (if any) into the club name field (String)
3. Admin enters new contact email (if any) into contact field (String)
4. Admin enters new club info (if any) into club info field (String)
5. Admin enters new video, image, president name, meeting time and location, or tags info (if any) into appropriate fields (Links and Strings)
6. Admin clicks Apply button
7. App updates the club entry in the database with the information in the fields, returns admin to main screen

Exceptions:

- 1) There is an error when updating the database. A red error message states: “There was an error when reaching the database. Please try again.” and reloads Edit Club Info page

Priority: Medium

Frequency of Use: Frequent

When Available: Week 6

Use Case: Delete Clubs

Name of Use Case: *Delete Clubs*

Primary Actor: Administrators

Goal in Context: To delete or edit clubs.

Preconditions: Internet, must be logged in as admin.

Trigger: Admin Button or Delete button.

Scenario:

1. App says “Confirm delete?” and displays text input field.
2. Admin enters club name to confirm deleting.
3. App connects to database and deletes club info.
4. App redirects user to Search for Clubs use case.
5. The group will no longer be displayed.

Exception:

1. Database could have potential problem with trying to delete and recreate club. A display message: “There was an error when reaching the database. Please try again.” is displayed.

Priority: Low priority

When Available: Week 4

Frequency of Use: Low use

General Error Messages (Apply to all use cases)

Site hosting is down.

“404 Site Not Found”

Database connection is invalid.

“Database connection failed. Please refresh the page.”

The user has no internet connection.

“Internet connection failed. Please verify you are connected.”

Specific Error Messages

When an entered password does not match what is stored on the server.

“Your passwords did not match.” (See *Create Account, Change Password*)

When an user greets an account but enters an invalid email address.

“This email is invalid.” (See *Create Account*)

When the entered passwords do not match.

“Your passwords did not match.” (See *Create Account, Change Password*)

When a user tries to login but enters an invalid username.

“You entered an invalid username.” (See *Log In*)

When a password is entered correctly.

“You didn’t enter your password correctly.” (See *Log In, Change Password*)

The user doesn’t meet the requirements when entering a password.

“You did not meet the requirements for a password. Please include at least eight characters, a special character, and a number.” (See *Create Account, Change Password*)

A club has no entries.

“Wow empty” (See *View Ratings/Suggestions/Comments*)

A user enters a comment/suggestion that contains inappropriate language.

“Please remove inappropriate language” (See *Add Rating/Comment/Suggestion*)

A user enters a comment, but not a rating.

“You cannot enter a comment without leaving a rating.” (See *Add Rating/Comment/Suggestion*)

When a user searches and no results are found.

“There was nothing found with that name. Please try a different search.” (See *Search for Clubs, Search for Colleges*)

The database holding the search results is empty.

“There are currently no clubs to be found. Please try again.” (See *Search for Clubs*)

A user tries to complete an action that requires them to be logged in, but they aren't.

“You are not logged in. Please log in or create an account.” (See *Edit/Delete Comments, Add Rating/Comment Suggestion, Express Interest*)

Admin Specific Error Prompts

When an admin creates a club, but doesn't enter anything in the required fields.

“You must enter something in the fields.” (See *Add Club*)

When an admin creates a club that already exists on the server.

“This club already exists.” (See *Add Club*)

When an admin tries to create a club, but is on the wrong college page.

“You do not have permission to add to this college.” (See *Add Club*)

When there is an error when updating the database.

“There was an error when reaching the database. Please try again.” (See *Add Club, Edit Club Info, Delete Clubs*)

When changes are made successfully.

“Your changes have been made.” (See *Add Club, Edit Club Info, Delete Clubs*)

Other Dialog Prompts

If a user tries to delete their account.

“Are you sure you want to delete your account?” “Yes or No” (See *View Account Settings*)

When a comment is added successfully.

“Your comment has been added.” (See *Add Rating/Comment/Suggestion*)

When a user has confirmed their email.

“Your email address has been confirmed.” (See *Create Account*)

Glossary:

Account: a username, password, email address, and privileges associated with a user

Administrator (Admin): a user that has administrative privileges that include being able to add, edit, and delete clubs and the associated information in addition to the abilities of a standard user

Club Description: the section where miscellaneous information not covered by other fields is placed in the club entry

Comment: a section where a logged user may type information regarding their rating of a club, viewable after searching

Credentials: the username, password, and email address used to validate an account by comparison with the database

Logged User: a user that has created and logged into an account, allowing them to leave ratings, comments, and suggestions in addition to the abilities of a standard user

Password: a String with at least 8 characters (one being in capital case and another being a special character and one being a number) used to authenticate and authorize actions

Rating: a integer between 1 and 5 used to describe the quality of a club, viewable after searching; also known as “stars”

Suggestion: a section where a logged user can provide solutions to perceived problems with a club as part of a rating, viewable by search

User: a person using the application, which has the ability to search for clubs and to view ratings, comments, and suggestions

Username: a user-designated identifier associated with an account, used to authenticate log in attempts and show which user left a particular rating

Functional Requirements

Create Account
Delete Account
Log in
Log Out
Rate Club
Change password
View Account Settings
Edit/View rating/comment/suggestion
Search for Club/Colleges
View Club Information
Express Interest
Admin Only:
Delete Club
Edit Club
Add Club
Delete Comment

Nonfunctional Requirements

Database on a server
Encryption
Email verification
Password requirements
Password verification (like if the two passwords match when creating an account)

Gantt Chart

| ID | Use Case | Start | Finish | Duration | Jan 2018 | | | Feb 2018 | | | Mar 2018 | | | Apr 2018 | | | | | | |
|----|-----------------------------------|-----------|-----------|----------|----------|------|------|----------|-----|------|----------|------|-----|----------|------|------|-----|-----|------|--|
| | | | | | 1/7 | 1/14 | 1/21 | 1/28 | 2/4 | 2/11 | 2/18 | 2/25 | 3/4 | 3/11 | 3/18 | 3/25 | 4/1 | 4/8 | 4/15 | |
| 1 | Log In | 1/8/2018 | 1/12/2018 | 1w | | | | | | | | | | | | | | | | |
| 2 | Log Out | 1/8/2018 | 1/12/2018 | 1w | | | | | | | | | | | | | | | | |
| 3 | View Main Screen | 1/8/2018 | 1/12/2018 | 1w | | | | | | | | | | | | | | | | |
| 4 | Create Account | 1/15/2018 | 1/19/2018 | 1w | | | | | | | | | | | | | | | | |
| 5 | Give Rating/Comment/Suggestion | 1/15/2018 | 1/19/2018 | 1w | | | | | | | | | | | | | | | | |
| 6 | View Ratings/Suggestions/Comments | 1/22/2018 | 1/26/2018 | 1w | | | | | | | | | | | | | | | | |
| 7 | Search for Clubs | 1/22/2018 | 1/26/2018 | 1w | | | | | | | | | | | | | | | | |
| 8 | Edit/Delete Comments | 1/29/2018 | 2/2/2018 | 1w | | | | | | | | | | | | | | | | |
| 9 | View Account Settings | 2/5/2018 | 2/9/2018 | 1w | | | | | | | | | | | | | | | | |
| 10 | Add Club | 2/5/2018 | 2/9/2018 | 1w | | | | | | | | | | | | | | | | |
| 11 | Express Interest | 2/12/2018 | 2/16/2018 | 1w | | | | | | | | | | | | | | | | |
| 12 | Edit Club Info | 2/12/2018 | 2/16/2018 | 1w | | | | | | | | | | | | | | | | |
| 13 | View Club Info | 2/19/2018 | 2/23/2018 | 1w | | | | | | | | | | | | | | | | |
| 14 | Change Password | 2/19/2018 | 2/23/2018 | 1w | | | | | | | | | | | | | | | | |
| 15 | Delete Clubs | 3/5/2018 | 3/9/2018 | 1w | | | | | | | | | | | | | | | | |
| 16 | Reset Password | 3/12/2018 | 3/16/2018 | 1w | | | | | | | | | | | | | | | | |
| 17 | Search for Colleges | 4/2/2018 | 4/6/2018 | 1w | | | | | | | | | | | | | | | | |

Database Table Design

| Colleges | |
|-------------------|----------------------|
| PK | college_id: AUTO INT |
| name: VARCHAR(60) | |

| Tags | |
|-------------------|------------------|
| PK | tag_id: AUTO INT |
| PK | club_id: INT FK |
| text: VARCHAR(25) | |

| Clubs | |
|---|-------------------|
| PK | club_id: AUTO INT |
| club_name: VARCHAR(100) club_desc: VARCHAR(500) contact_email: VARCHAR(75) pres_name: VARCHAR(40) meet_time: VARCHAR(20) meet_loc: VARCHAR(20) image_path: VARCHAR(50) video_path: VARCHAR(50) | |
| FK | college_id: INT |

| Users | |
|--|-------------------|
| PK | user_id: AUTO INT |
| email: VARCHAR(75) password: VARCHAR(20) username: VARCHAR(20) f_name: VARCHAR(20) l_name: VARCHAR(20) admin: BOOLEAN | |
| FK | college_id: INT |