

Team 015-3 Software Development Project:

ConCave

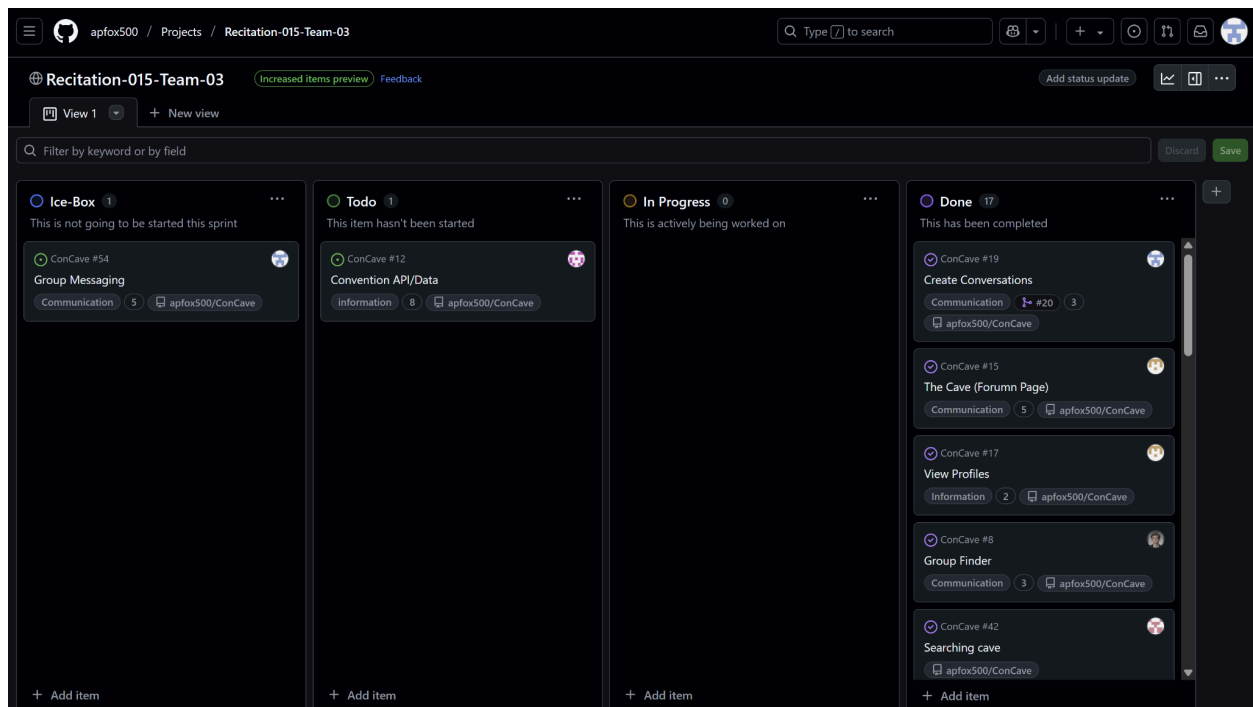
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Project Description:

ConCave is an ultimate hub for all things conventions. Anime expos, comic conventions, and other fan related gatherings can be found on the homepage with important details such as dates, locations, and more. As a user, you can share your experiences through our review system – posting about previous year’s events to help others prepare for the upcoming year’s or just let the world know how you feel about the convention. Our unique forums page, *The Cave*, lets users keep up with one another by digging tunnels (creating posts), replying to posts, and leaving likes. We also have more specialized forms of communicating to each other. Our groups system can be created under any convention for making plans with others and our merch store can be used to list potential con-related merchandise that you want to sell or find other listings you may be interested in. Both of these features are made possible by our real-time instant messaging system that lets you create direct messages with any other user on ConCave. Of course, if you want to stand out from the crowd, you can customize your profile in different ways including a profile picture, a bio that anyone can view to read about you, or display badges with our system that lets you obtain achievements based on different interactions you’ve made with our website.

Project Tracker:

We used Github projects to track our project. The project board can be found [here](#).



Demo Video:

We have created a short video showcasing the features of this product. The video can be accessed [here](#).

Version Control Software:

We used a Github Repository for version control. This repo can be found at:

<https://github.com/apfox500/ConCave>

Contributions:

Andrew Fox:

I created the messaging functionality of the website, allowing users to create conversations, send and receive messages, and get notified for new messages. This feature is good for private, instant communication and is a core feature of the group finder and the merch store. To do this we stored all messages in our Postgresql database, which we can pull the relevant information out of and dynamically render with Handlebars. This makes the whole page very responsive and modular. I also worked with Git and Github to help manage merging and integration testing, ensuring a bug free, cohesive experience.

Leon Vayedjian:

Created the convention pages with handlebars that dynamically create a new card on the home page when a convention host adds their convention to the database. On the convention pages there is a reviews system that I created allowing users to post a review for that convention giving a review and rating 1-5. There is a sorting system that allows people on the convention page to sort reviews by score and date posted (ascending and descending) where it will show the five most relevant reviews to the query. Finally, I implemented the multer upload into profile pictures and conventions.

Billy Daves:

I implemented the merch store functionality(adding, viewing, removing, and purchasing merch items). The merch store itself is just a simple masonry layout of cards, merch items(cards) are created by users after properly filling out the post item form. Each item has two buttons directly beneath them. More info will display any additional information the seller listed when posting the item. Where the contact seller button will open an instant message between the seller and user. Users looking at their own items will see a delete listing button instead of a contact seller.

Michael Wallace:

I added the functionality of being able to search for conventions based on their names. When a user searches for a convention, conventions that match the search are shown. The results are linked to the convention pages where there is more information. I also added the functionality of being able to search the cave. This search functionality works through keywords. Any cave post that contains the search is shown as a result. Finally, I worked on the final UI for our website.

Tucker Banks:

I implemented “The Cave”, a forum web page where users can create posts and reply to others' posts. These posts are called Tunnels, so to create a post you have to “Dig” a tunnel, users can reply to these posts with a message of their own. Tunnels posts display the username of the poster and the associated convention, which can be clicked on to be taken to the user's profile or the associated convention page. Tunnels can be liked, and sorted based on date, likes, and also filtered based on a Tunnels associated convention. And lastly Tunnels can have up to 5 attached images when digging a tunnel.

Daniel Park:

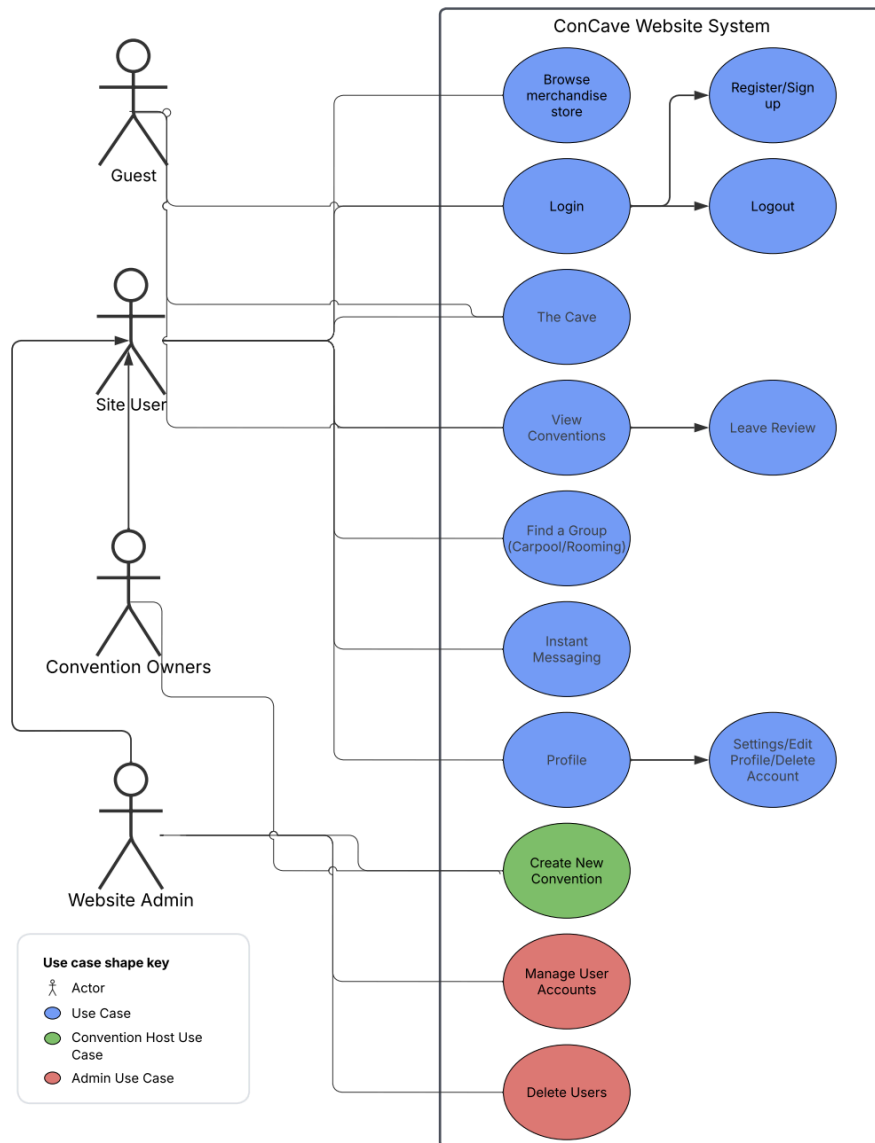
I added the ability to add a convention to the home page if you are a convention host or an admin. If you are a user, you cannot see or access the button to do so. I also added the ability for users to see their own profile, with the information that they input when they registered, such as emails, name, bio (if added one), etc. I also implemented a settings page where users can change their account information, add or change a bio, change their password, and delete their account if they don't need it anymore. Finally, if and only if you are the rank of an admin, you are able to see an additional button in the settings page, where you can manage all user's ranks, along with deleting their account if need be.

Liam Ford:

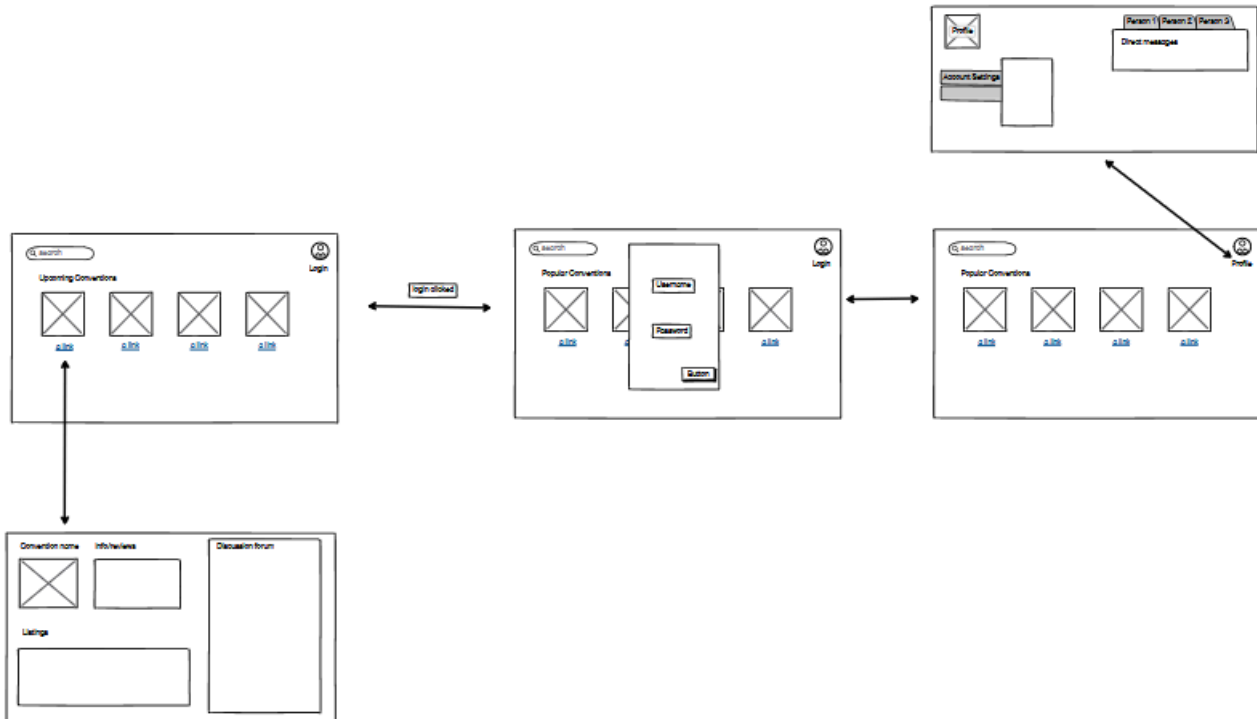
I implemented the login and log out functionalities as well as the register functionality which allowed users to make an account with username, email, and password. I also implemented the home page UI that included a carousel of conventions and tiles for all conventions. Lastly I implemented the group finder functionality which allowed users to create, join, or delete groups as needed for a given convention. The group creator is able to make a group with a name and a description associated with a convention. This functionality also included the ability for a user to request to join a group which would send an automated request message to the group creator where they would be able to click a “Accept” button to add the requested user to the group.

Use Case Diagram:

In our repo([here](#)) you can find our most update to date use case diagram, but here is a screenshot of our use case diagram:



Wireframes:



Test Results:

Unit tests:

We created unit tests to test the login and registration functions of our website. Our website passes all of these tests.

User Acceptance Tests (UAT):

We created a plan for UAT in our github repository, which can be found [here](#). Going off of these tests, here are our results. We conducted these tests by handing our website to non-developer friends and giving minimal instructions.

Instant Messaging:

Passes all three tests with the ability to create, send, and receive messages.

Searching:

Passes all three tests with the ability to search the conventions, and the forum (The Cave).

Login and Registration:

Passes all three tests with the ability to create an account, login, edit and view user information.

Convention Pages:

Passes all two tests with the ability to scroll and view multiple conventions.

Deployment:

The website was deployed via Render, a web based service that can host databases and websites.

You can access our website from anywhere, 24/7 at the following link:

<https://concave-daz3.onrender.com/>