Field

Matt Nelson

7/11 | Dorian Cohort

Application Overview

Field recordings, sound recordings of acoustic environments, are focused outward. Instead of recording a specific instrument in a controlled studio setting, they are recorded in open spaces, capturing anything that makes a sound. Because of this, these recordings are intrinsically tied to the environment and the location in which they were recorded.

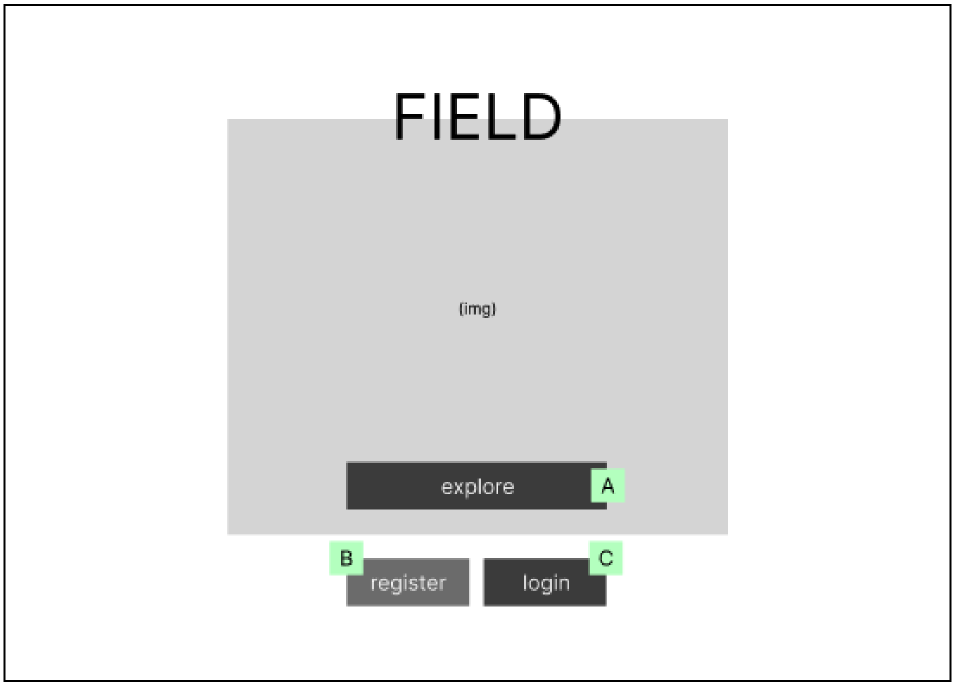
With this quality in mind, Field is an application to share and search for field recordings using a map based interface.

Application Features

Notes:

- Elements significant to the app’s functionality are labeled with a letter enclosed in a box.
    - Green boxes indicate a BASE mode goal. A
    - Red boxes indicate a STRETCH mode goal. A
- All wireframe views are optimized for desktop.

1.0 Landing Page



Overview

Home landing page for the application. Allows users to navigate to the explore page (unauthenticated) and navigate to the register/login pages.

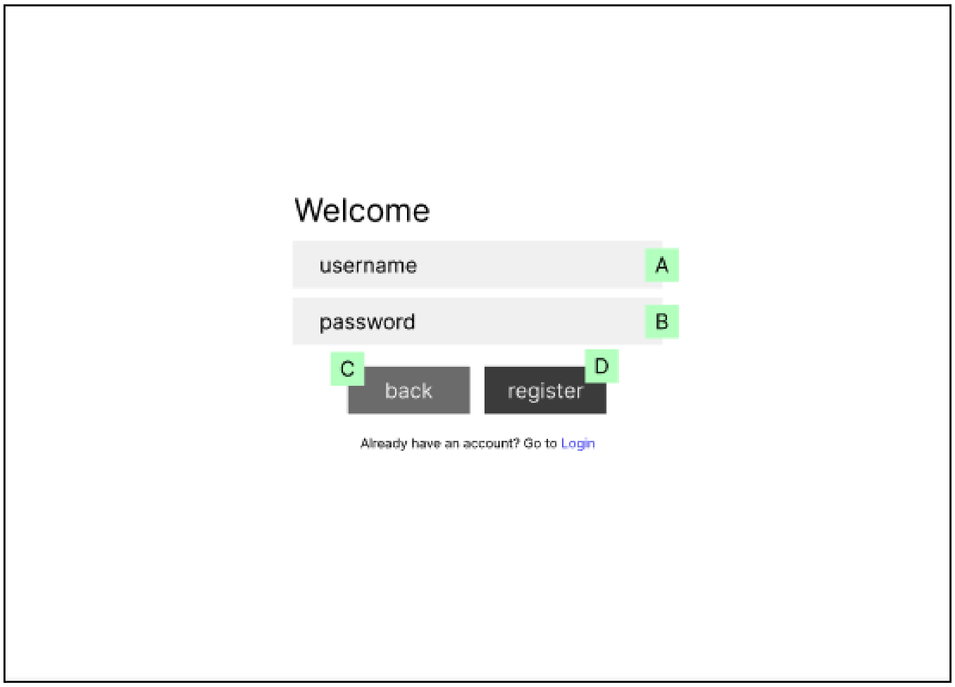
Elements

A. Type: Button
Function: Navigate to the Explore page (view 2.1.1) without authenticating.

B. Type: Button
Function: Navigate to the Register page (view 1.1) to register a new user account

C. Type: Button
Function: Navigate to the Login page (view 1.2) to authenticate using a preexisting account.

1.1 Register



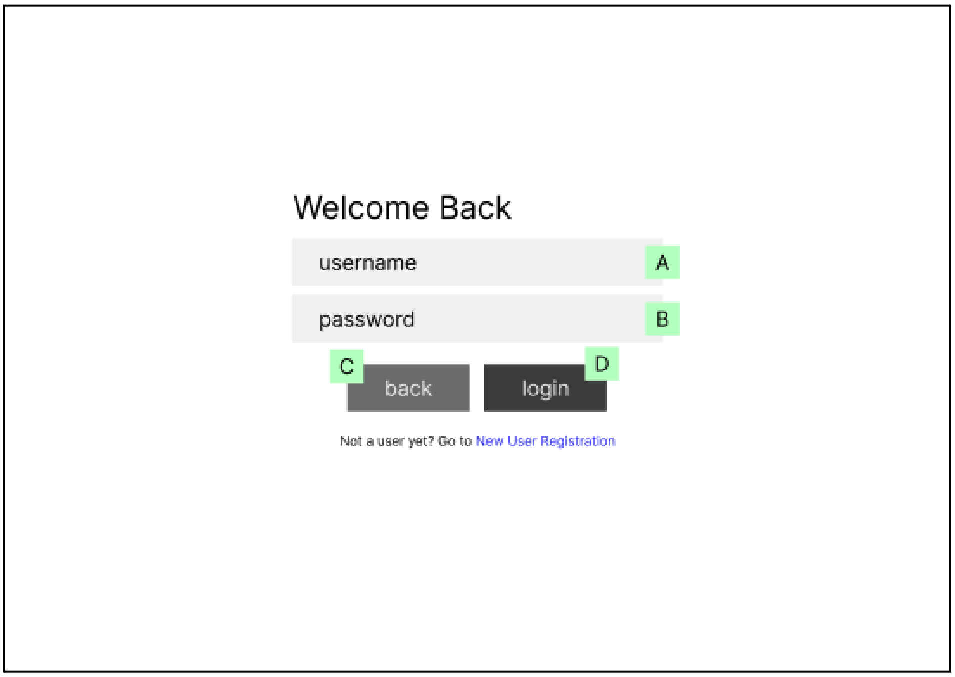
Overview

Registration page for new users to create their account.

Elements

A. Type: Text Input
Function: Enter desired username (must be unique).
B. Type: Text Input
Function: Enter desired password.
C. Type: Button
Function: Navigate to the Landing Page (view 1.0).
D. Type: Button
Function: Collect input data from A and B. Register the new user, log in using the new account, and navigate to the Explore page (view 2.2.1).

1.2 Login



Welcome Back

Not a user yet? Go to New User Registration

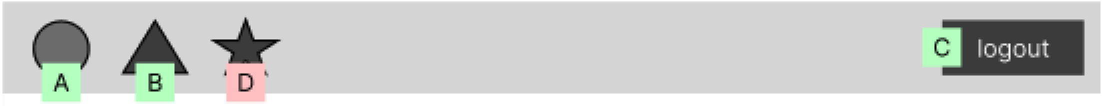
Overview

Login page for users who have already registered an account.

Elements

A. Type: Text Input
   Function: Enter username.
B. Type: Text Input
   Function: Enter password.
C. Type: Button
   Function: Navigate to the Landing Page (view 1.0).
D. Type: Button
   Function: Collect input data from A and B. Log in using the provided credentials, and navigate to the Explore page (view 2.2.1). Failed login creates a modal to alert user that the input data does not match an existing account.

2.0 Navigation Bar



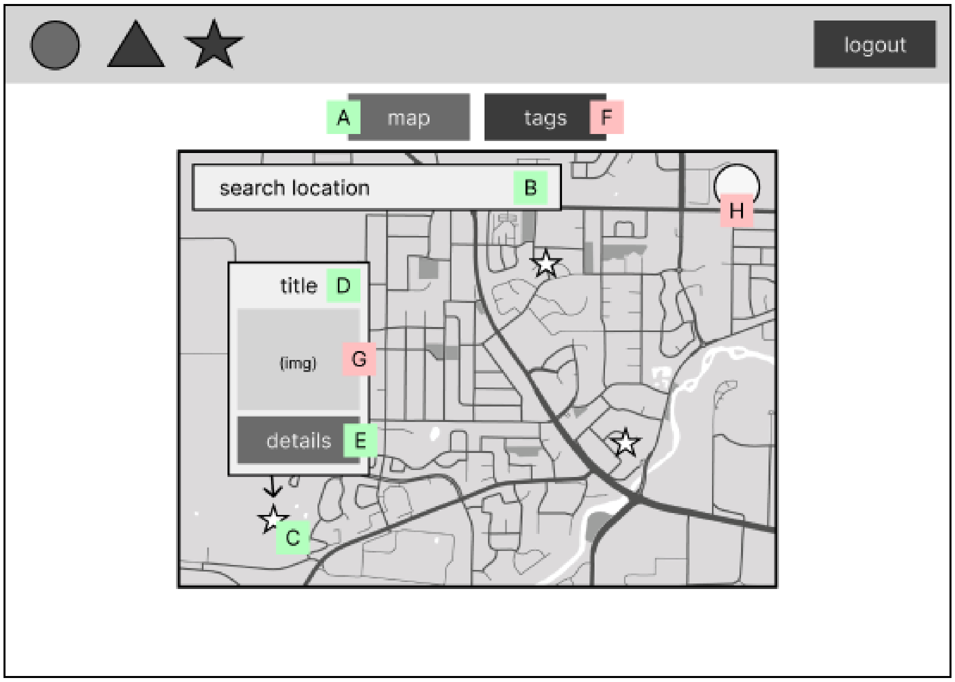
Overview

Navigation bar that exists at the head of the page after users have navigated into the application (past views 1.0,1.1,1.2).

Elements

A. Type: Button
   Function: Navigate to the Explore page (view 2.1.1).
B. Type: Button
   Function: Navigate to the User Profile page (view 3.0).
C. Type: Button
   Function: Variable text if a user is accessing the application while authenticated.
   - Authenticated: “logout”: Ends the user’s session and navigates to the Landing Page (view 1.0).
   - Unauthenticated: “login”: Navigate to the Login page (view 1.2).
D. Type: Button
   Function: Navigate to the User Feed page (view 4.0).

2.1.1 Explore (map view) - UNPROTECTED



Overview

Allows users to search for posts on a map. Navigated to from views 1.1.D, 1.2.D, 2.0.A, 2.2.F.

Elements

A. Type: Button
Function: Navigate to current view to search for posts on the map.

B. Type: Text Input
Function: Combobox input to search locations. Location names appear in a dropdown below the input. Selecting a location pans the map view to the selected location.

C. Type: Map Marker
Function: An image marking where a user has posted a field recording. Clicking the marker opens an info window with variable data about the post (D).

D. Type: Info Window
Function: Pops up when a marker (C) is clicked. Displays general post information.

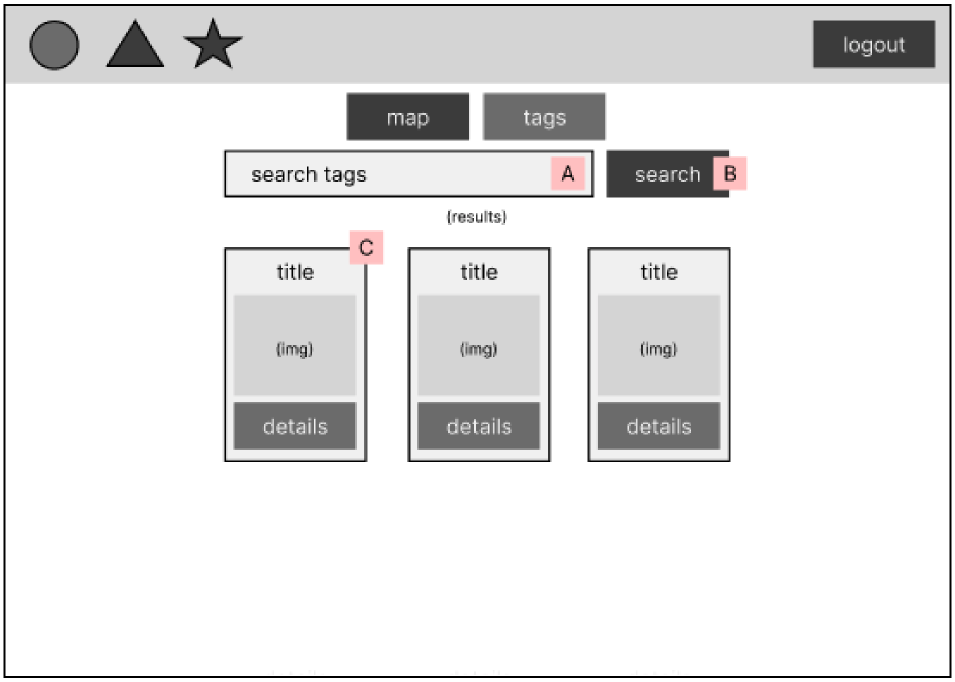
E. Type: Button
Function: Navigate to Details page (view 2.2) for this post.

F. Type: Button
Function: Navigate to the Explore (search view) page (view 2.1.2).

G. Type: Image
Function: Display post's image.

H. Type: Button
Function: Pans map view to user's current location.

2.1.2 Explore (tag search view) - STRETCH - UNPROTECTED



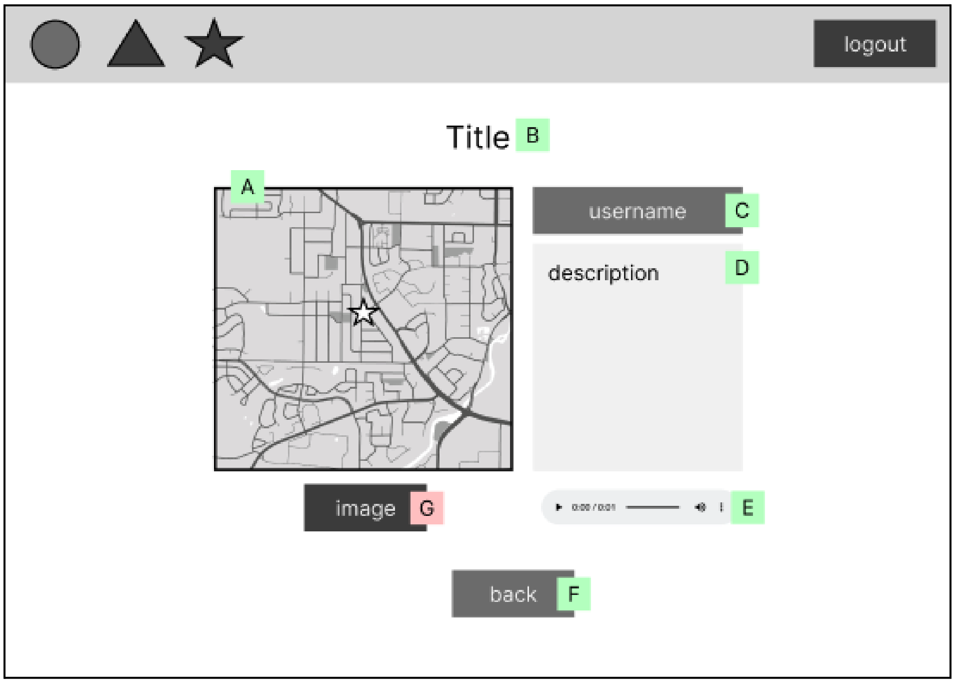
Overview

Allows the user to search for posts by tag, using a text input. Navigated to from view 2.1.1.F.

Elements

A. Type: Text Input
   Function: Enter tag to search for.
B. Type: Button
   Function: Gathers input string from A and searches for posts with that tag. Results are displayed in C.
C. Type: List
   Function: List of posts that contain the tag searched for in A. Details button navigates to the Details page (view 2.2) for that post (similar to 2.1.1.E).

2.2 Details - UNPROTECTED



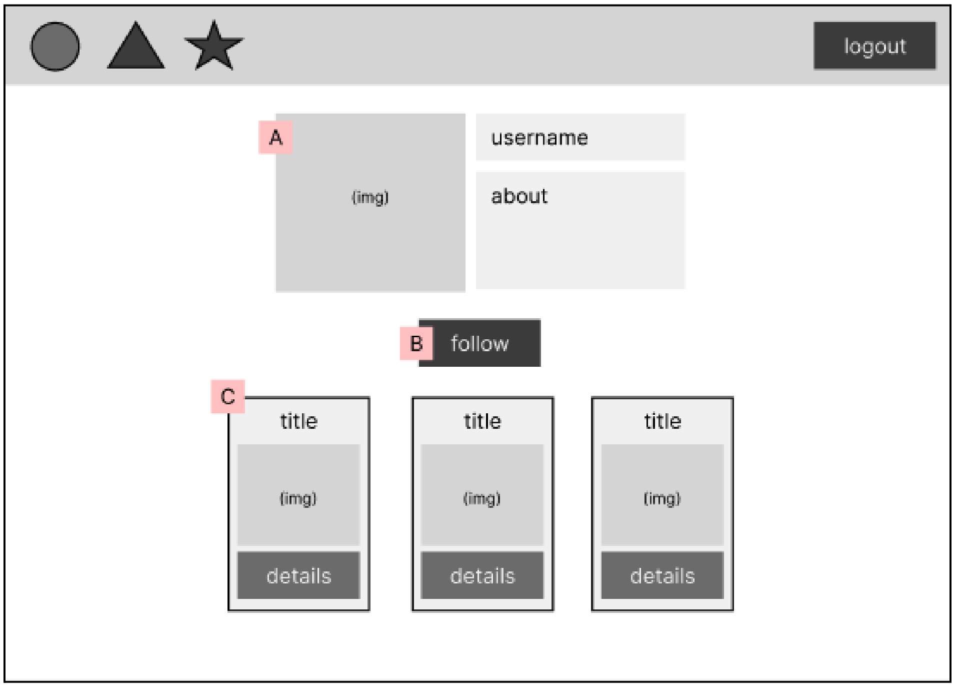
Overview

Details page for a specific post. Navigated to from views 2.1.1.E and 2.1.2.C.

Elements

A. Type: Map
Function: A map that displays the post's location.
B. Type: Text
Function: Displays the post's title.
C. Type: BASE: Text / STRETCH: Button
Function: Variable based on goals:
   - BASE: Displays the username of the post creator as text.
   - STRETCH: Displays username of post creator as a button. Navigates to Forign User Profile page (view 2.3) for that user on click.
D. Type: Text
Function: Displays the post's description.
E. Type: Audio
Function: Plays post's audio.
F. Type: Button
Function: Navigates user to the Explore page (views 2.1.1 or 2.1.2) depending on where they navigated to this page from.
G. Type: Button
Function: Toggles between this post's location on map and this post's image.

2.3 Forign User Profile - STRETCH - UNPROTECTED



Overview

Details about a user profile other than the logged in user. Navigated to from views 2.2.C.

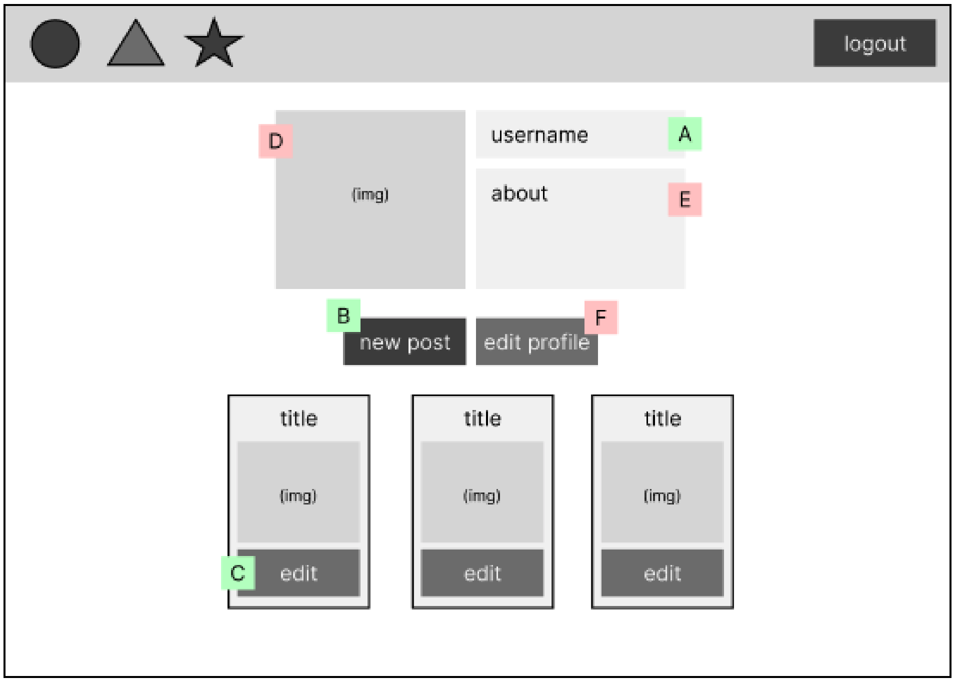
Elements

A. Type: Text / Image
Function: Displays user information (profile image, username text, about text)

B. Type: Button
Function: Variable:
- If not following: “follow”: adds account to list of followed accounts. Posts made by this account will appear in the User Feed page (view 4.0).
- If already following: “unfollow”: removes account from list of followed accounts. Posts made by this account will no longer appear in the User Feed page (view 4.0).

C. Type: Post
Function: Displays posts created by this user account.

3.0 User Profile



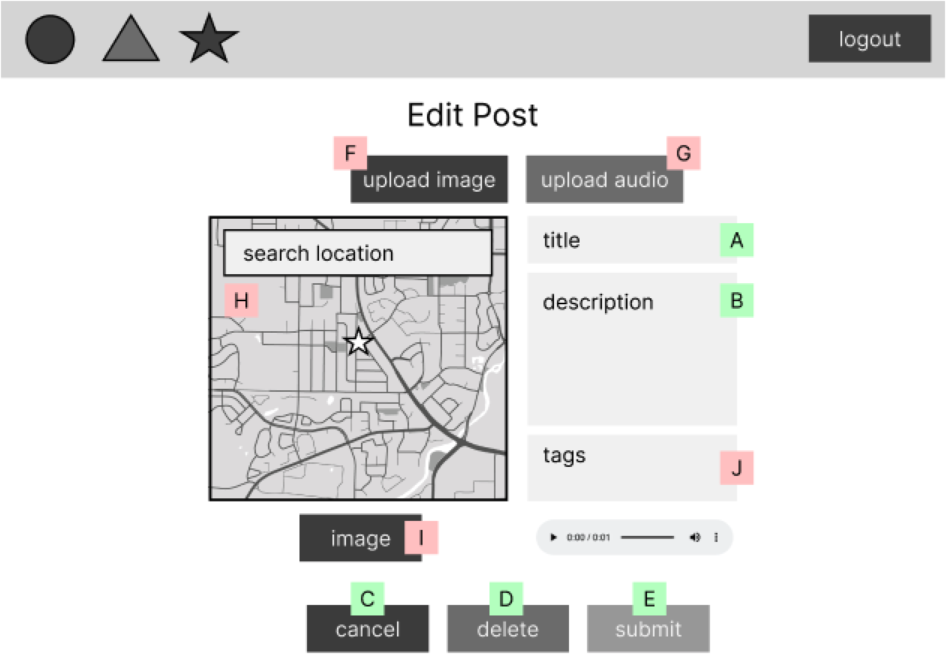
Overview

Details about the user profile for the currently logged in user. Navigated to from 2.2.B.

Elements

A. Type: Text
   Function: Displays the user's username
B. Type: Button
   Function: Navigates to the New Post page (view 3.2)
C. Type: Button
   Function: Navigates to the Edit Post page (view 3.1) for each post.
D. Type: Image
   Function: Displays the logged in user's profile image.
E. Type: Text
   Function: Displays the logged in user's about information.
F. Type: Button
   Function: Navigates user to the Edit Profile page (view 3.3)

3.1 Edit Post



Overview

Editable details about a currently logged in user’s post. Navigated to from view 3.0.C.

Elements

A. Type: Text Input
Function: Allows user to adjust the post’s title.

B. Type: Text Input
Function: Allows user to adjust the post’s description.

C. Type: Button
Function: Navigates to the User Profile page (view 3.0).

D. Type: Button
Function: Deletes this post after confirmation modal.

E. Type: Button
Function: Updates this post with current values. Navigates to User Profile page (view 3.0) after confirmation modal.

F. Type: Button
Function: Allows user to upload a new image for this post.

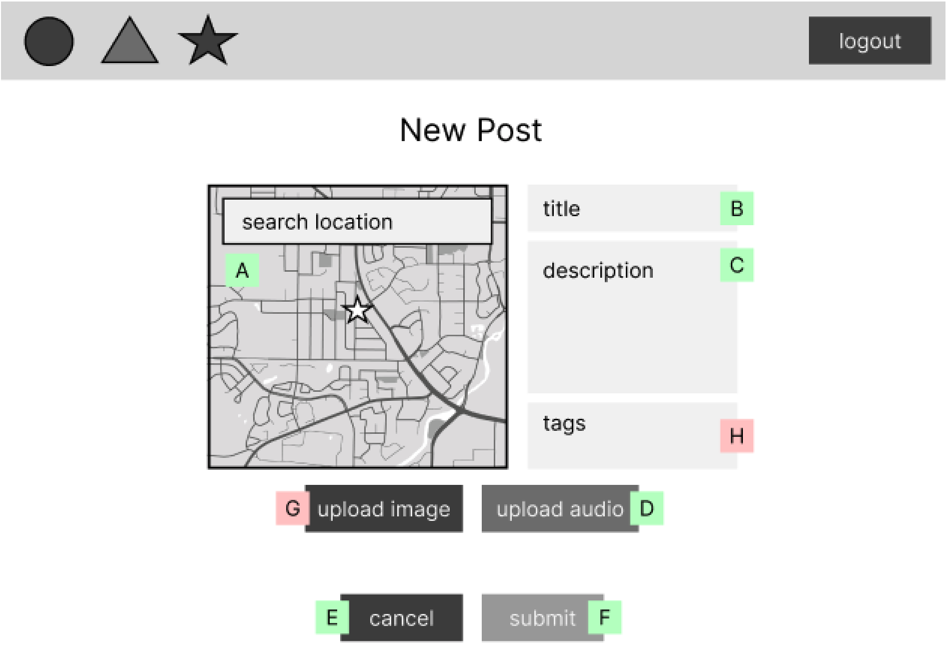
G. Type: Button
Function: Allows user to upload new audio for this post.

H. Type: Map
Function: Allows user to select a new location for the post.

I. Type: Button
Function: Toggles between the post’s location on map and the post’s image.

J. Type: Text Input
Function: Allows user to add/remove tags from the post.

3.2 New Post



Overview

Editable form for users to create new posts. Navigated to from view 3.0.B.

Elements

A. Type: Map
Function: Allows user to navigate map and place a marker for this post.

B. Type: Text Input
Function: Allows user to input the post's title.

C. Type: Text Input
Function: Allows user to input the post's description.

D. Type: Button
Function: Opens file explorer window for user to select an audio file to upload.

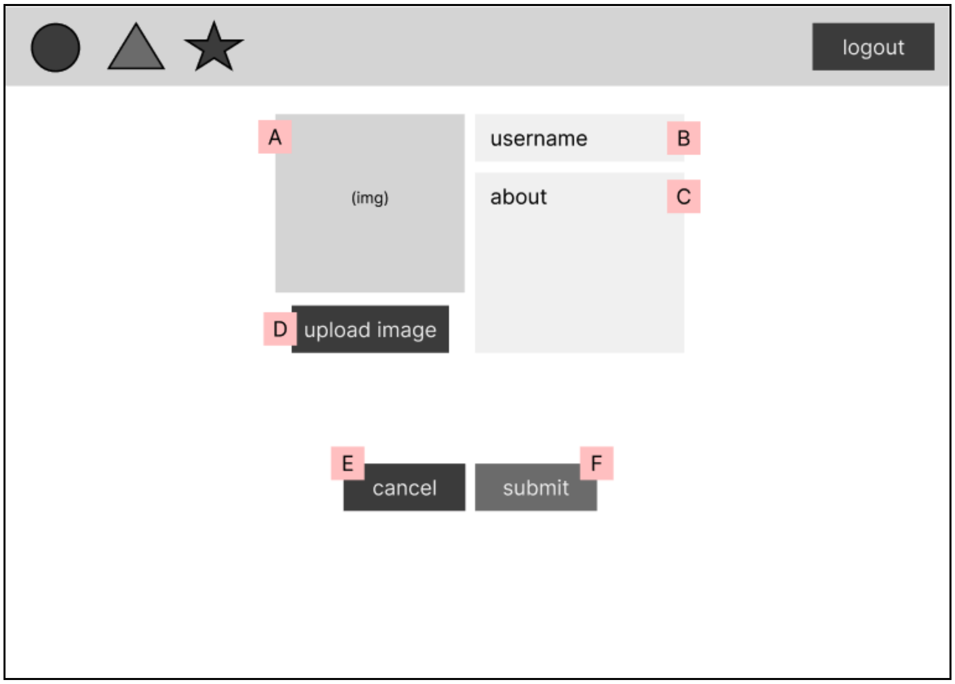
E. Type: Button
Function: Navigates to User Profile page (view 3.0) after confirmation modal.

F. Type: Button
Function: Gathers input data and submits it to create a new post.

G. Type: Button
Function: Opens file explorer window for user to select an image to upload.

H. Type: Text Input
Function: Allows user to add tags (separated by a comma) to a post.

3.3 Edit Profile - STRETCH



Overview

Allows the logged in user to edit their profile information.

Elements

A. Type: Image
Function: Displays the user’s current profile image.

B. Type: Text
Function: Displays user’s username

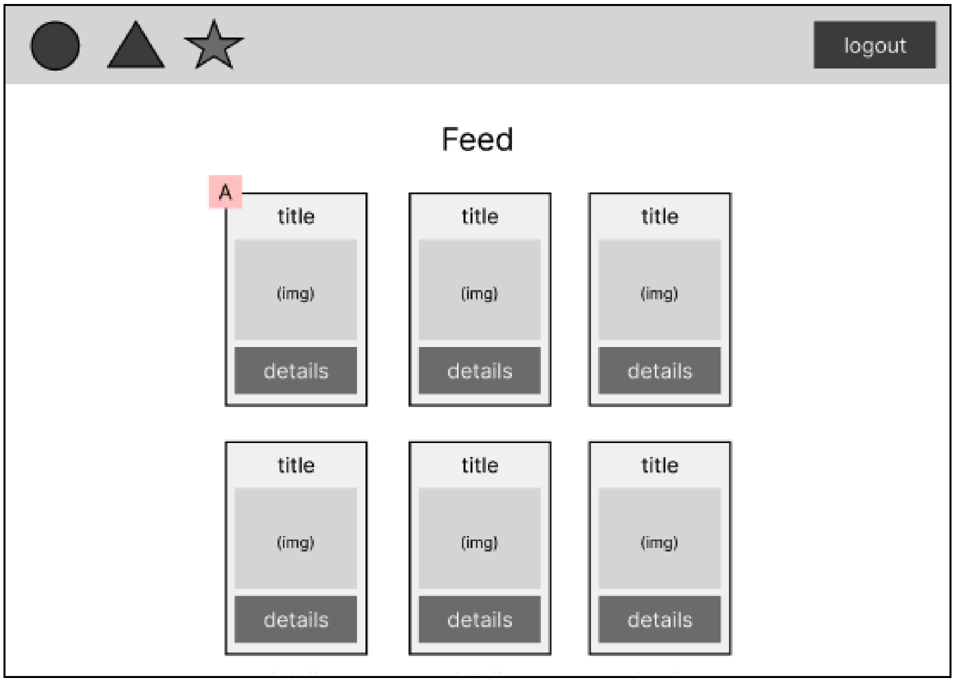
C. Type: Text Input
Function: Displays use’s current “about” information in an editable text field.

D. Type: Button
Function: Allows user to upload a new profile image.

E. Type: Button
Function: Navigates back to User Profile page (view 3.0) after confirmation modal.

F. Type: Button
Function: Gathers input data and updates profile information. Navigates back to User Profile page (view 3.0) after confirmation modal.

4.0 User Feed - STRETCH



Overview

A list of posts from users that the logged in user follows.

Elements

A. Type: List
   Function: Loads a list of posts from followed users.

5.0 Additional Base Goals

- Material UI styling.
- Customized MUI palette.

5.1 Additional Stretch Goals

- Custom artwork.
- Customized MUI components.
- Host app on Heroku.
- Host user uploaded data on Cloudinary.

5.1 Ideas for the future

- Like buttons for posts.
- Favorite buttons for posts.
- Favorites view that shows all favorited posts.
- Comments for posts.
- Rewrite backend in Go.
- Host with Docker and Digital Ocean.

3rd Party APIs

- Google Maps API
  - Maps JavaScript API
  - Geolocation API
- Cloudinary API

Browsers

Application will fully support browsers listed below. All browsers or versions not listed below are considered out of scope.

Browser Name	**Mobile or Desktop?**	**Version**
Example : Chrome	Desktop	Version 103.x

Technologies

- Node
- Express
- React w/ Hooks, Redux, Sagas
- Passport w/ Local Authentication
- Postgresql
- Heroku
- Multer
- Combobox
- Material UI
- CSS

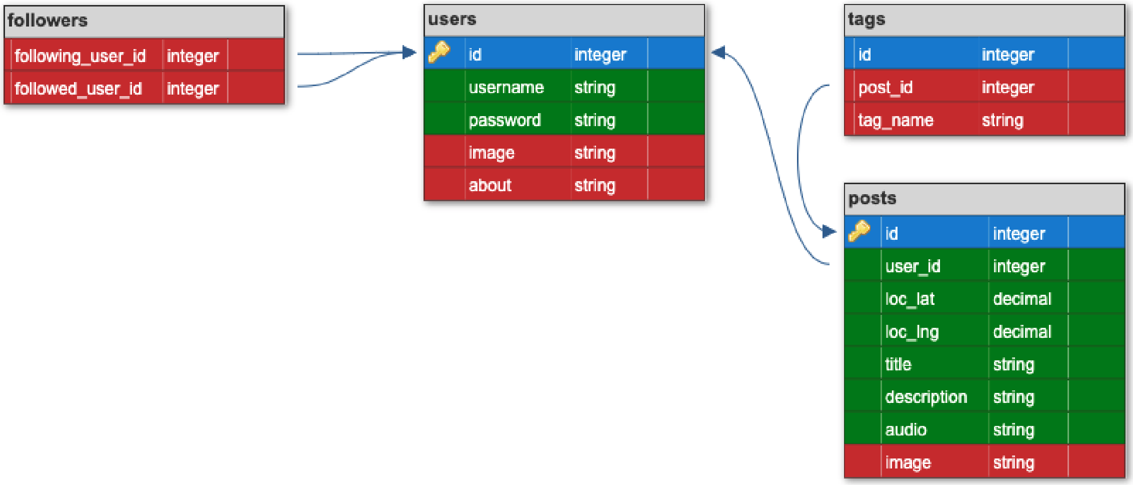
Project Milestones and Schedule

Milestone (Should match a Feature from Above)	**Hours Est.**	**Due Date**	**Base or Stretch**
Create DB table and queries for “users”.	1	7/18	Base
Create DB table and queries for “posts” table.	1	7/18	Base
Create placeholder base mode components (no functionality) and routes to each of them. (**views 1.0, 1.1, 1.2, 2.1, 2.2, 3.0, 3.1, 3.2**)	2	7/18	Base
View 1.0 Landing Page - Flesh out view. Buttons link to correct components.	1	7/18	Base
View 1.1 Register - Flesh out view. Link buttons. Register sends registration request.	1	7/22	Base
View 1.2 Login - Flesh out view. Link Buttons. Login authenticates user. Confirm protected/ unprotected views are working.	2	7/22	Base
View 2.0 Nav Bar - Link buttons. Conditional rendering for “logout” button.	1	7/22	Base
Create Google Map component. Variable Combobox search bar (for **views 2.2, 2.1.1, 3.1**)	4	7/22	Base
Create global modal for CRUD confirmations (for **views 3.1, 3.2, 3.3**)	2	7/22	Base
View 3.2 New Post - Flesh out view. Set up base mode user inputs. Collect and post data to DB. Set up Multer middleware to store files in a public folder.	4	7/22	Base
View 3.0 User Profile - Flesh out view. Link buttons. Create user post Saga and reducer. Map results as MUI cards.	3	7/22	Base
View 3.1 Edit Post - Flesh out view. Link buttons. Create a delete saga to delete a post from DB. Create a put saga to update a post in DB.	3	7/22	Base
View 2.1.1 Explore (map) - Flesh out view. Create get saga to load posts from DB. Results are mapped to the map (lol) as markers. Markers open Info window on click.	2	7/25	Base

Create and flesh out Info window component (for **view 2.1.1**). Link button.	1	7/25	Base
View 2.2 Details - Flesh out view. Ensure data loads correctly.	2	7/25	Base
Basic MUI styling.	2	7/25	Base
Update base views for stretch content.	6	7/29	Stretch
View 2.1.2 Explore (search) - Flesh out view. Create a get saga to load posts with matching tags.	3	7/29	Stretch
View 3.3 Edit Profile - Flesh out view. Create a put Saga to update profile data. Ensure data loads correctly on **views 3.0 and 2.3**	2	7/29	Stretch
View 2.3 Forign User Profile - Flesh out view. Link buttons. Create a get saga to fetch profile information.	2	7/29	Stretch
Adjust all asset uploads to send to Cloudinary api.	1	7/31	Stretch
Adjust all get requests to send Cloudinary public URL.	1	7/31	Stretch
Customize artwork and design	8	7/31	Stretch
Host on Heroku / testing	4	8/1	Stretch

Database Documentation

Note: Base mode columns are colored in green. Stretch mode columns are colored in red.
Link: https://dbdesigner.page.link/JJ1p7pAi8uGUG6FU8



followers	
following_user_id	integer
followed_user_id	integer

users	
id	integer
username	string
password	string
image	string
about	string

tags	
id	integer
post_id	integer
tag_name	string

posts	
id	integer
user_id	integer
loc_lat	decimal
loc_lng	decimal
title	string
description	string
audio	string
image	string

Browsers

Application will fully support browsers listed below. All browsers or versions not listed below are considered out of scope.

Browser Name	**Mobile or Desktop?**	**Version**
Example : Chrome	Desktop	Version 96.x