Team Name: Solid

Team Members:

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Project: CookHub

Project name: CookHub

Communication Channel: https://discord.gg/qNXBvQ

Tech Presentation Topic:

AWS

User Stories

Product Description:
Our web app is a web platform for people to share recipes and pictures of what they have cooked. Each user is able to post their products and own recipes with pictures or video instructions and receive comments and ratings from other users who have tried it. The comments allow interaction among our users such as receiving advice and criticism. Each recipe will have classification tags so users can search for specific types of recipes. Additionally, users would be able to save favorite recipes and see featured recipes that are highly rated and relevant to their interests.

1. **Search recipes:** As the first user, I want to be able to look for some default recipes.
2. **User Account:** As a new user, I want to create my own account for sharing and exploring recipes and photos.
3. **Login/Logout**: As a user I want to be able to log in and log out of my account with a username and password.
4. **Sort by rating/newest/oldest:** As a user I would like to see which recipes are being made and rated recently.
5. **Ratings:** As a user, I would like to see how good others think a recipe is so I can determine if the recipe is reliable.
6. **Social Media:** I would like to easily share my recipe to social media (Twitter, Facebook, etc)
7. **Favorite List:** As a user who cooks often, I'd like to compile and save a list of recipes.
8. **Featured recipes:** As a user, I would like to receive feeds and recommendations at homepage.
9. **Profile Page**: As a user, I would like to view my profile and edit the information on it.
10. **Create Recipe**: As a user, I would like to create and upload recipes.
11. **Recipe page**: As a user, I would like to see a recipe’s ingredients and instructions.

Design Document

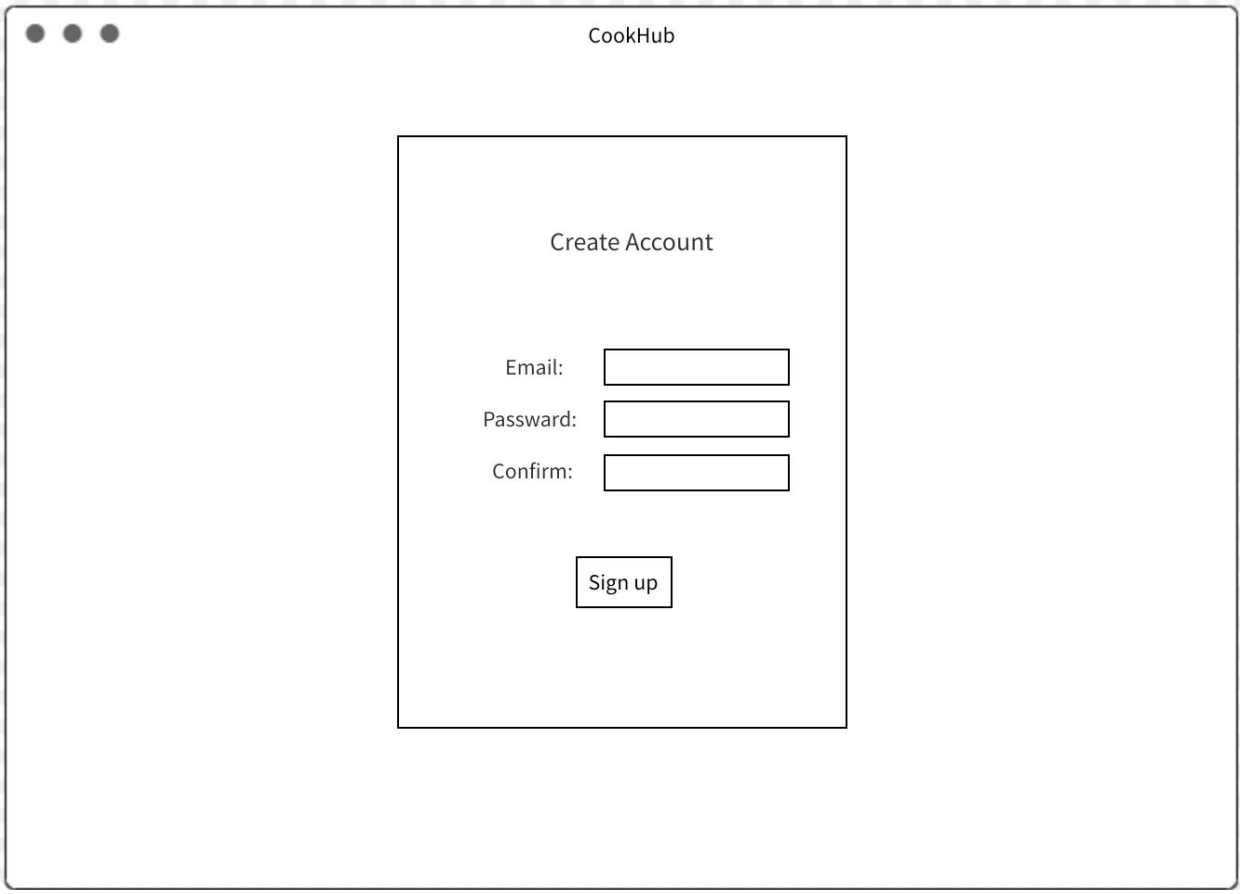
Web app

We implement our application using technologies such as React and Firebase. We will use Material UI with React for our user interface. Firebase will hold all of our data such as recipes and account information. We will authenticate users with Firebase Authentication.

Frontend Design

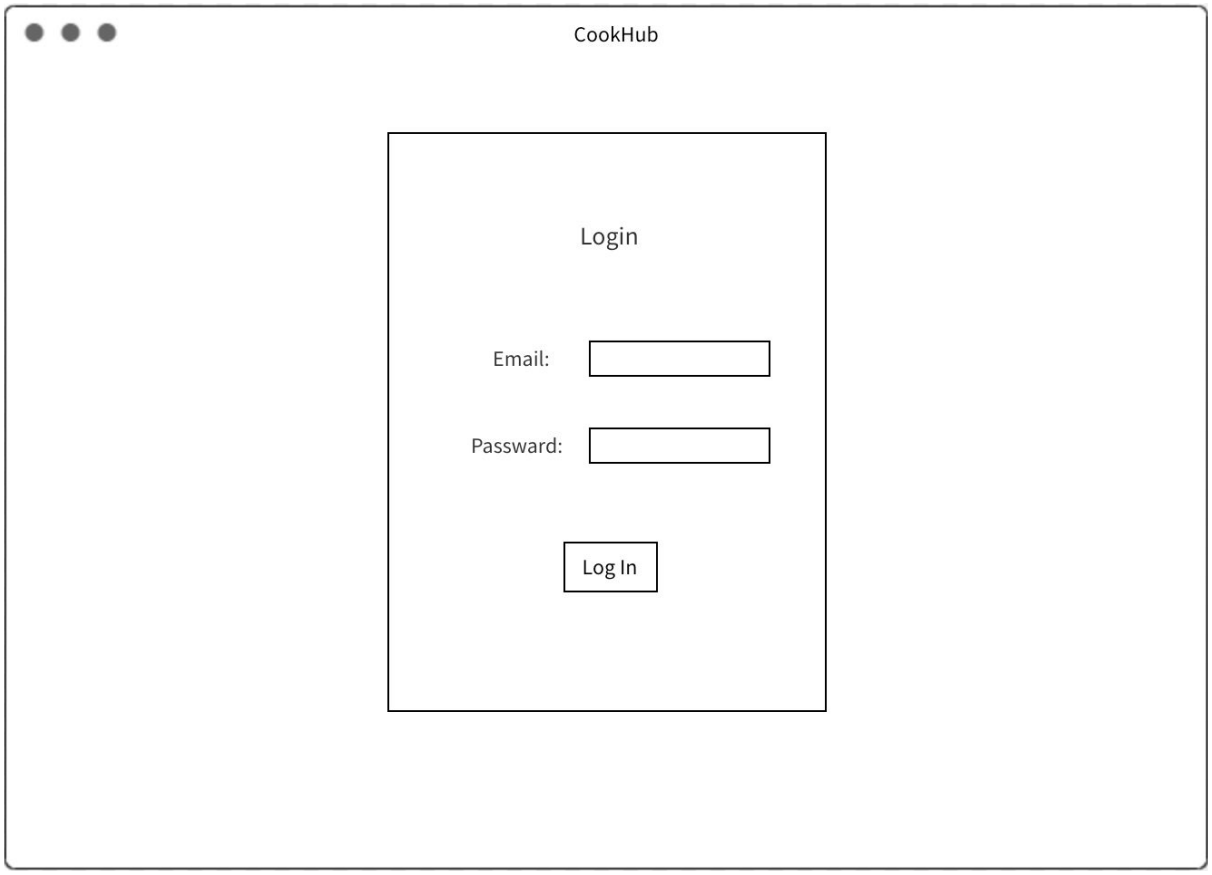
Create Account

First of all, sign up page so that new users are able to create their own account on our website. We let Firebase to hold all of our account data, and we will authenticate users through Firebase.

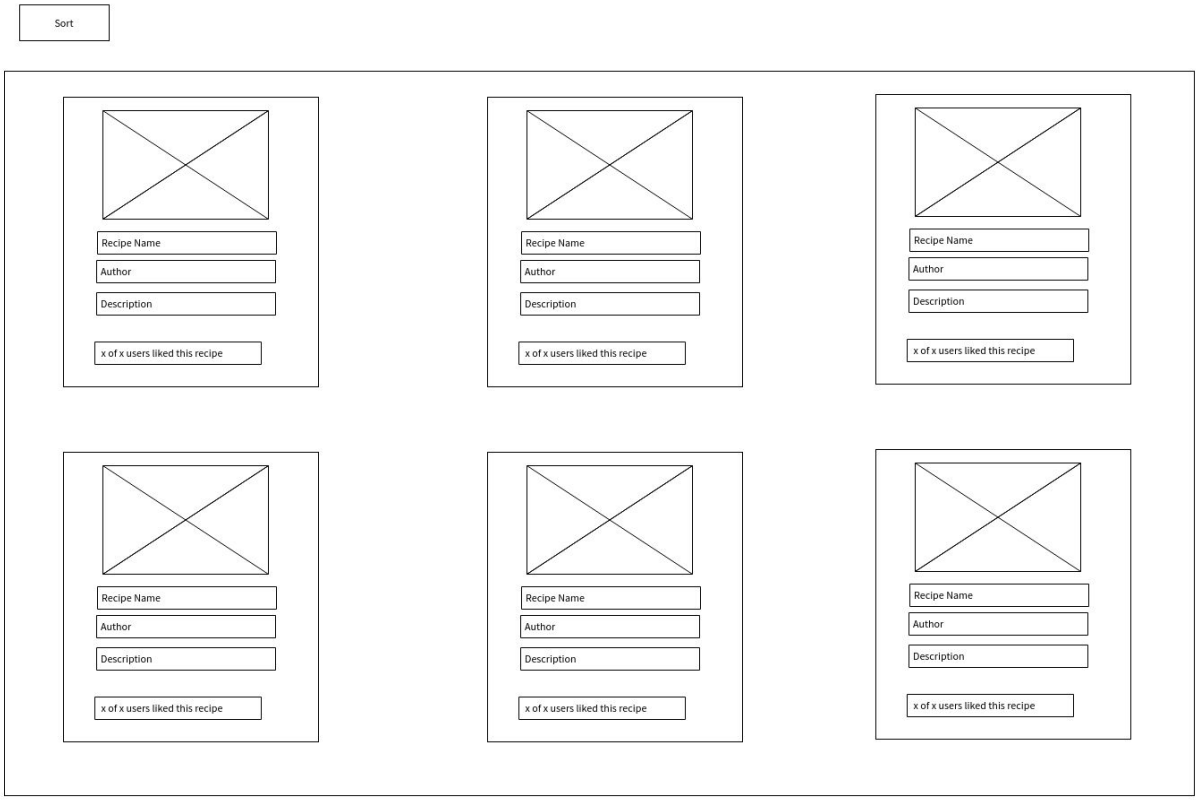


Login/Logout

After users created their own account, they are able to login to their accounts. Also, they are able to log out of their account.



User Recipe Feed

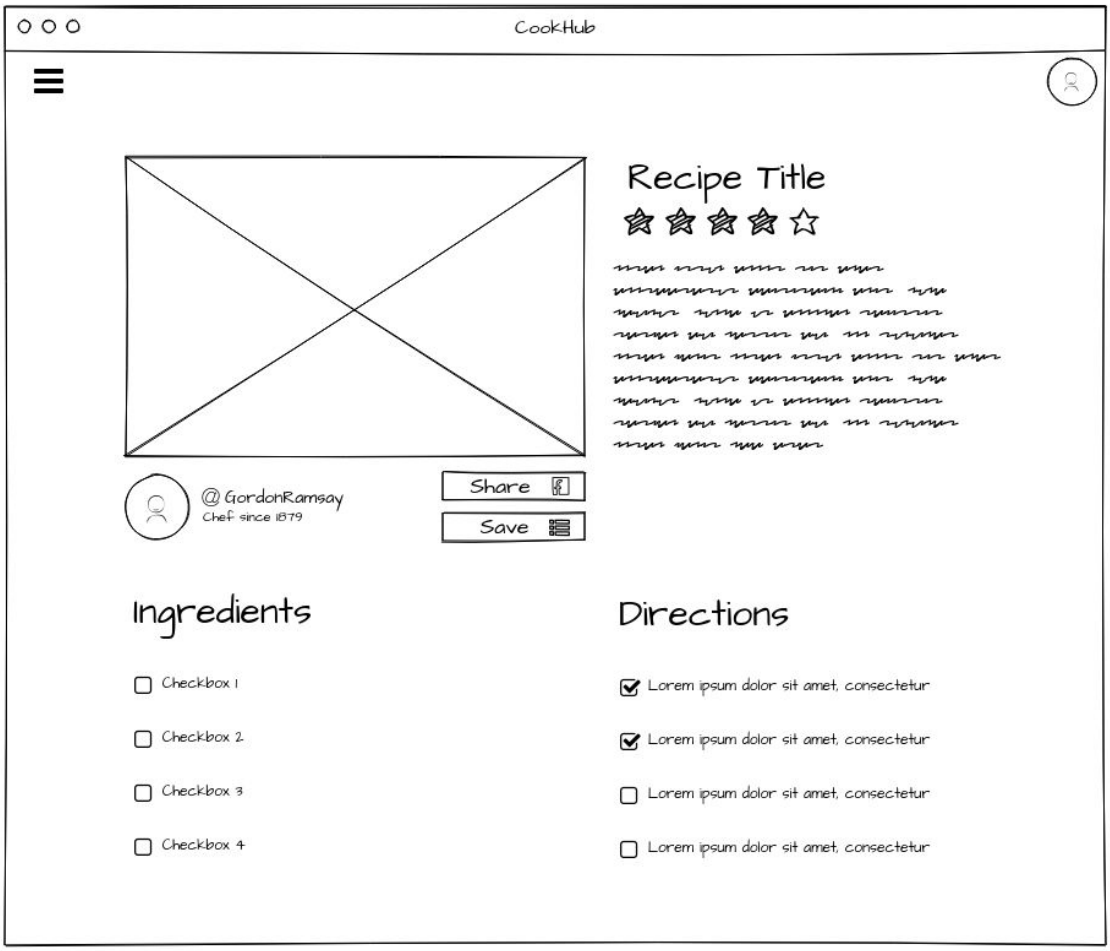


The homepage displays recipes on a feed. We will fetch the latest 10 recipes from the firebase database and display the image, title, description, and rating for each. It will show the current user and have a log out and search bar. There is a sort button to sort the recipe database based on certain criteria.

Recipe Feed Features:

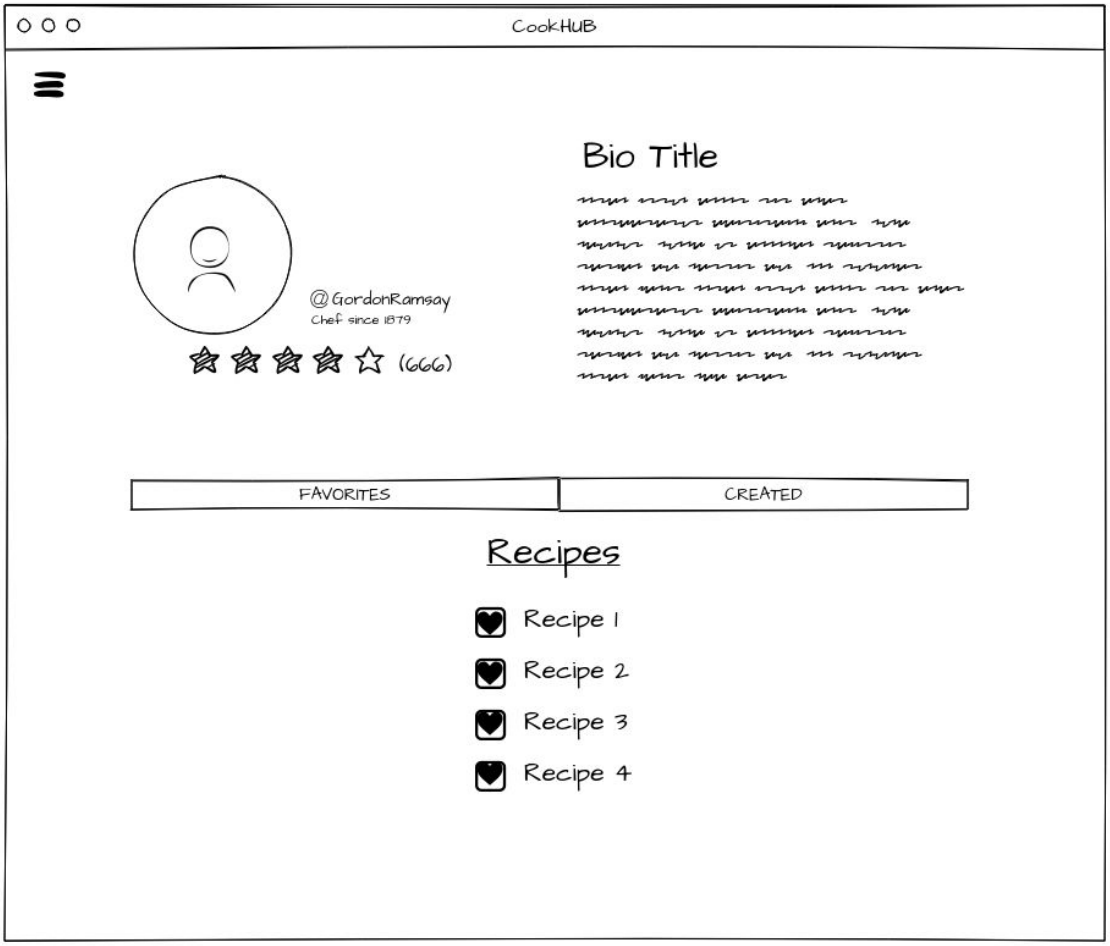
- Picture of the recipe result
- Blurb describing the recipe
- How many users liked the recipe
- Sort recipes by age and rating

Recipe Page



The recipe page consists of a large image of the dish. To the right of the image you will see the recipe title. Below the title you will see the recipe's ratings, which can be clicked on to rate if you are logged in to your account. You will also see a summary/description/background of the dish below the ratings. Below the image of the dish you will find links to share/save recipe, the name of the chef responsible for the recipe, ingredients needed, and directions. All of the recipe's information will be retrieved from a Firebase database.

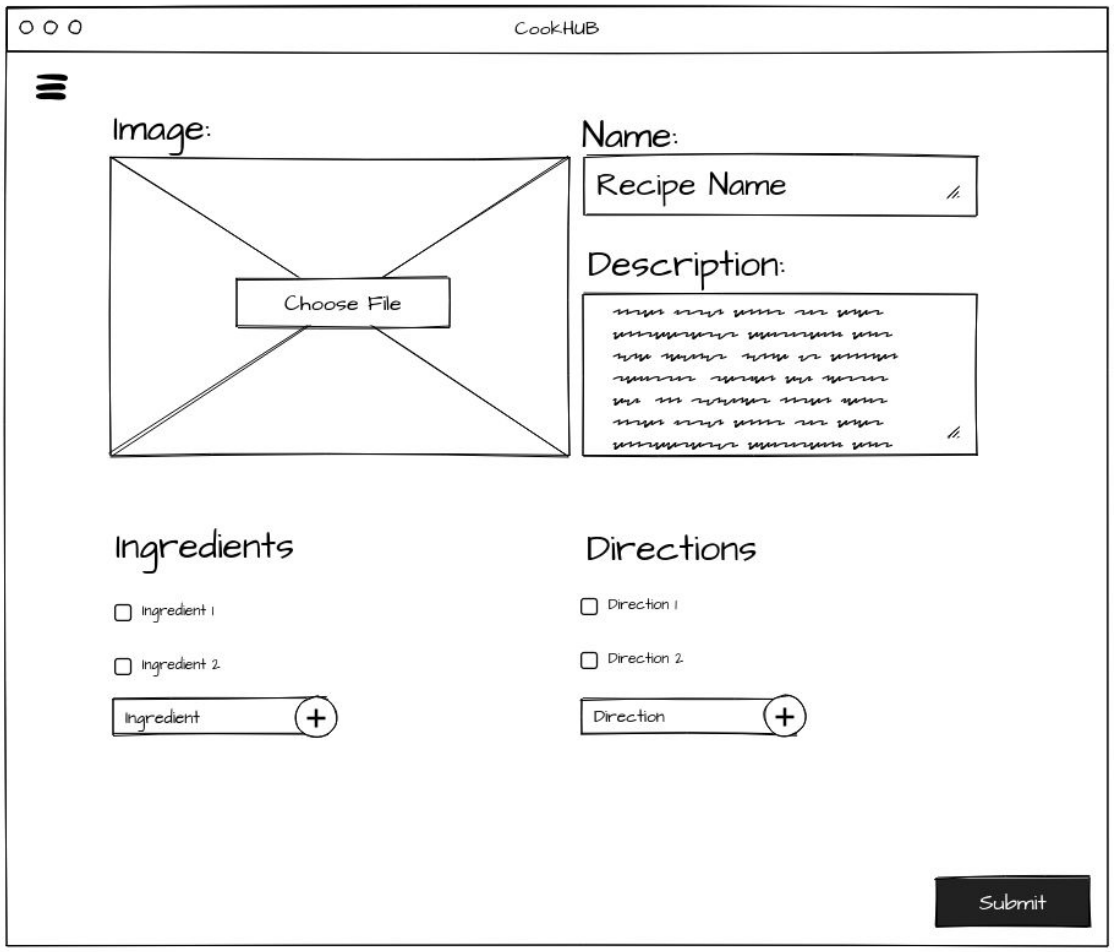
User Profile



The User Profile Page has the following functionalities:

- List of the Users Favorited Recipes
- List of the Users Created Recipes
- User information
    - Profile Picture
    - User Name
    - Display Name
    - Personal bio
- The user is able to change their profile picture, bio, and their display name from the user profile page

Create Recipe

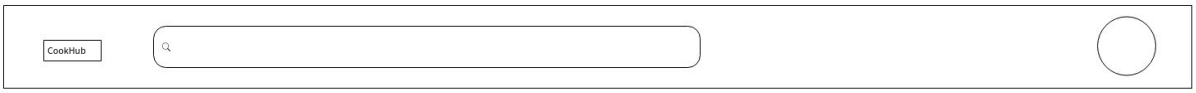


The Create Recipe Page has the following functionalities:

- Can upload an image
- Can add a recipe: name, description, ingredients, and directions

Search Recipe

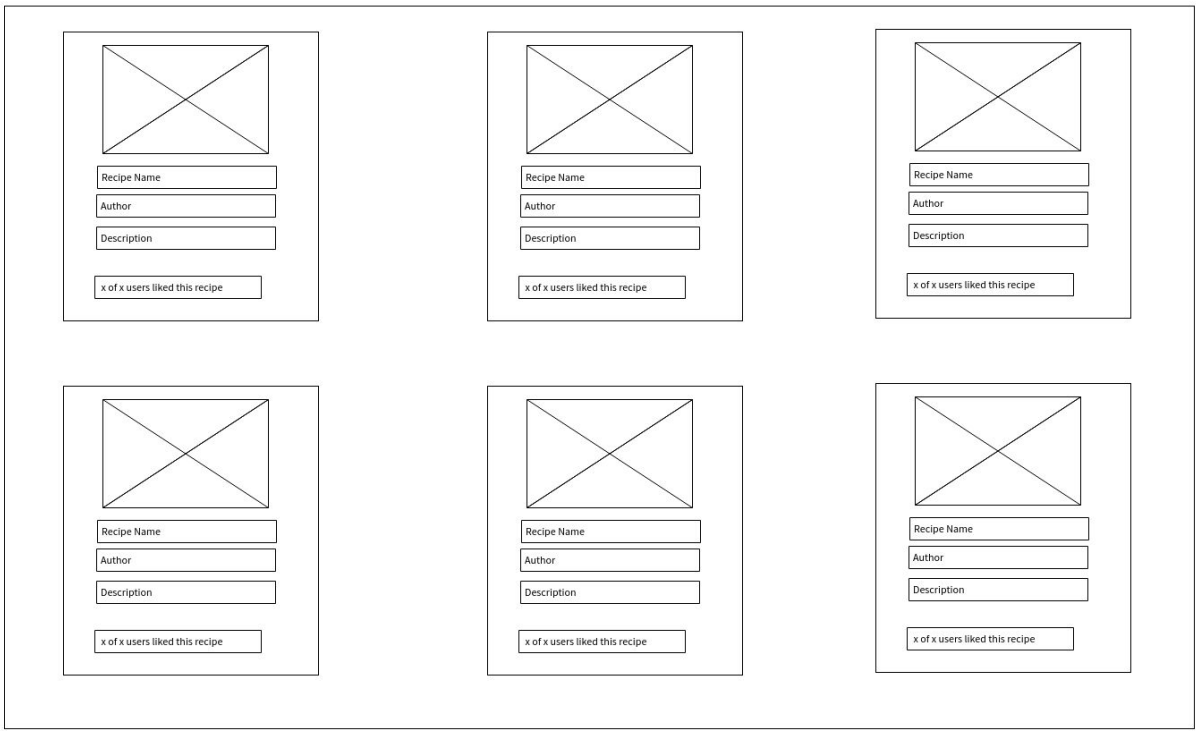
Search Bar



The Search Recipe is meant to extend functionality to the applications app bar.
The Main functionalities of the Search Bar are as follows:

- Allows user to input text
- If the user hits enter, and has text in the input box, the search links to the search page

Search Page



The search page uses the Recipe Feed component to display search results. However instead of top recipes, the search page uses prefix based search in order to populate the feed. For example if a user searches for the letter “B”, recipes that start with the letter “B” are shown.

If there are no results found, then an error message is shown to the user.

Backend Design

Recipe Database

Recipe will be stored as a json file on firebase. Each recipe will be identified internally with a unique string. In the json we still store recipe information such as recipe name, tags, difficulty, ratings, comments, etc.

```
"recipeID": {
  "id": 0,
  "name": "recipe name",
  "source": "where recipe came from",
  "prep_time": 0,
  "wait_time": 0,
  "cook_time": 0,
  "servings": 6,
  "notes": “”,
  "instructions": [],
  "ingredients": [
    "One",
    "Two",
    "...",
  ],
  "tags": [
    "seafood",
    "shrimp",
    "etc"
  ],
  "rating": {
    "total": 0,
    "likes": 0
  },
  "overview": “”,
  “nutrition”: {}
}
```

Key - Value

id - id of the recipe (Not sure if this is needed again)

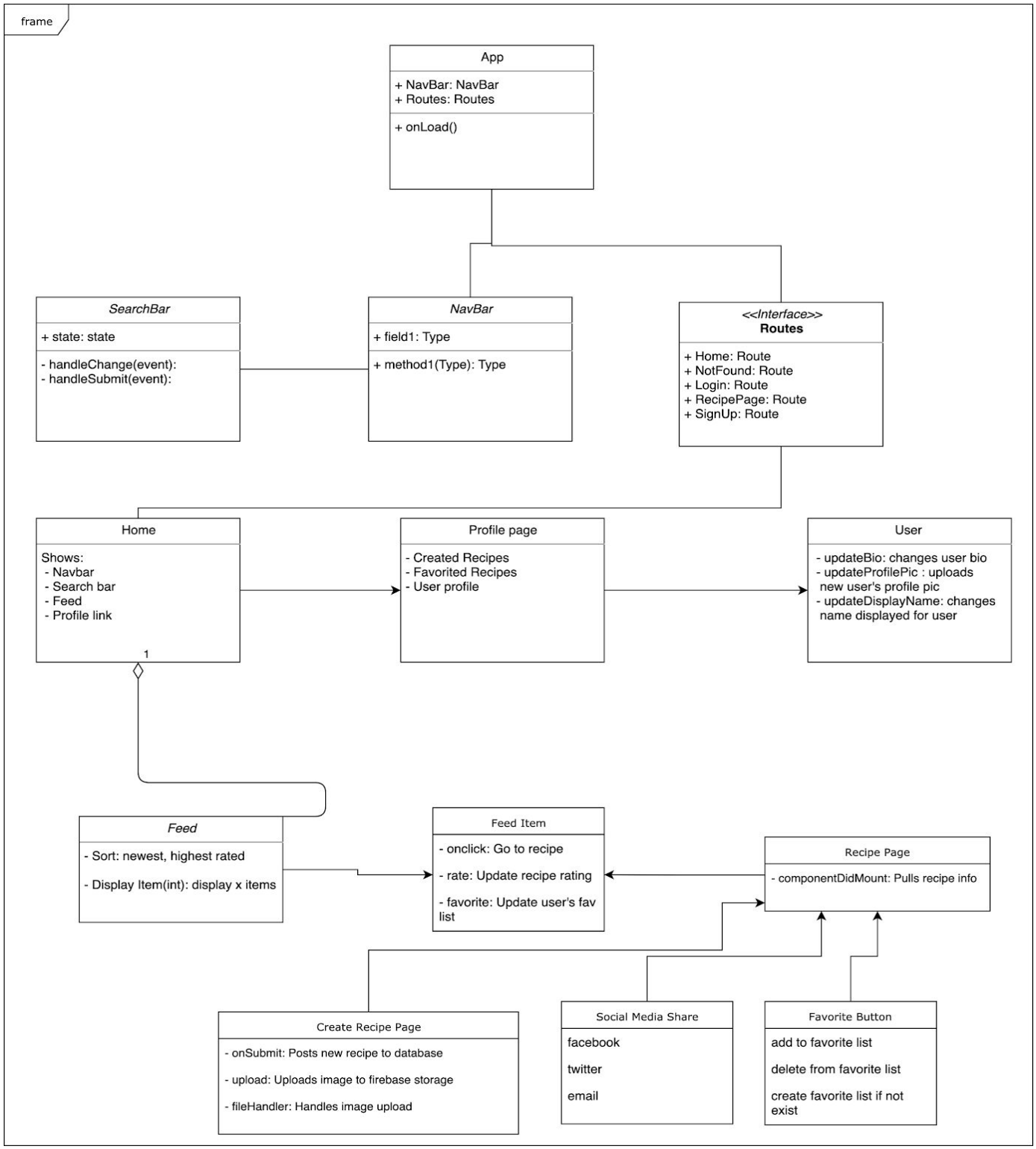
name - Name of the recipe
source - Where recipe came from - if applicable
prep/wait/cook time - Times to do each - if applicable
servings - amount of food the recipe makes
notes - any additional info / substitutions
nutrition - object that holds calories, fat, sat_fat, etc
instructions - List that contains steps to complete the recipe
ingredients - List of ingredient objects with amount, units, and name.
tags - main categories the recipe fits in
overview - Blurb describing the recipe
ratings - object that holds total votes, and total likes

User Database

Recipe will be stored as a json file on firebase. Each recipe will be identified internally with a unique string. In the json we still store recipe information such as recipe name, tags, difficulty, ratings, comments, etc.

```
"userID": {
  "name": “users unique name",
  "displayName": “users display name",
  “date_created”: “date user was created on”,
  "bio": "users bio",
  “image”: link to picture in storage,
  "favorited_recipes": {
      “recipeID” : recipeID
   },
   "created_recipes": {
      “recipeID” : recipeID
   },
   "liked_recipes": {
      “recipeID” : 0 - dislike or 1- like
   }
}
```

UML Diagram


frame
App
+ NavBar: NavBar
+ Routes: Routes
+ onLoad()
SearchBar
+ state: state
- handleChange(event):
- handleSubmit(event):
NavBar
+ field1: Type
+ method1(Type): Type
<<Interface>>
Routes
+ Home: Route
+ NotFound: Route
+ Login: Route
+ RecipePage: Route
+ SignUp: Route
Home
Shows:
- Navbar
- Search bar
- Feed
- Profile link
1
Profile page
- Created Recipes
- Favorited Recipes
- User profile
User
- updateBio: changes user bio
- updateProfilePic : uploads new user's profile pic
- updateDisplayName: changes name displayed for user
Feed
- Sort: newest, highest rated
- Display Item(int): display x items
Feed Item
- onclick: Go to recipe
- rate: Update recipe rating
- favorite: Update user's fav list
Recipe Page
- componentDidMount: Pulls recipe info
Create Recipe Page
- onSubmit: Posts new recipe to database
- upload: Uploads image to firebase storage
- fileHandler: Handles image upload
Social Media Share
facebook
twitter
email
Favorite Button
add to favorite list
delete from favorite list
create favorite list if not exist