Features¶

- users can sign into the app with their email and password
- users can create recipes with ingredients and instructions
- recipes can be marked as public or private
- users can view other people's recipes
- ingredients from recipes can be added to user's grocery lists
- users can create their own occasions and assign recipes to occasions

Tables/Columns:
- Users
    - User_id - serial primary key (integer) - numeric identification per user
    - username (varchar 25) - user must have a unique username, characters only up to 25 to limit username length and make sure there is no repetition for multiple users
- Admin
    - Email - primary key (varchar 50) - users must have a unique email for log in that is less than 50 characters
    - Password (text) - password can be any combination of numbers/letters/characters
    - User_id (foreign key) - must connect to the user's information it is accessing
- Recipe
    - Recipe_id - serial primary key (integer) - numeric identification per recipe
    - recipe_name (varchar 100) - must have a name to identify the recipe by for user accessibility
    - Public v private (boolean) - allows the user to create their own recipes without sharing (private), or shares the recipes with other users (public)
    - User_id (foreign key) - users are able to create new recipes
    - Occassion_id (foreign key) - occasions are linked to certain occasions
- Ingredients
    - Ingredient_id serial primary key - numeric identification per ingredient
    - Grocery_id - foreign key - ties to the grocery_list table
    - Recipe_id - foreign key - ties to the recipe table
    - Ingredient_name - VARCHAR(60) - stores the name of the ingredient
- Grocery list
    - Grocery_id serial primary key - numeric identification per user
    - Date - date - list grocery list by date
    - User_id - foreign key to tie back to the user
- Occasions
    - occasion _id serial primary key - numeric identification per occasion
    - Event_title - VARCHAR(25) - name of event

Relationships:

- One to One:
  - Admin to user - admin can only connect user info to the user profile
- One to Many:
  - Users to recipes - users can create many recipes
  - User to occasions - users can have many occasions
  - User to grocery list - users can create many grocery lists
  - User to ingredients - users have access to many ingredients
- Many to Many:
  - Ingredients to recipes - many ingredients can be part of many different recipes
  - Recipe to occasions - many recipes can apply to many different occasions
  - Grocery list to ingredients - many grocery lists can have many of the same ingredients

Create Table Code

1. User table
   ```
   CREATE TABLE user_info (
           user_id SERIAL PRIMARY KEY,
           user_name VARCHAR(25)
           );
   ```

2. Admin table
   ```
   CREATE TABLE admin (
    email VARCHAR(255) PRIMARY KEY,
    password TEXT,
    user_id INTEGER REFERENCES user_info(user_id),
    );
   ```

3. Recipe table
   ```
   CREATE TABLE recipe (
    recipe_id SERIAL PRIMARY KEY,
    recipe_name VARCHAR(100),
    private BOOL,
    user_id INTEGER REFERENCES user_info(user_id),
    occasion_id INTEGER REFERENCES occasion(occasion_id),
    );
   ```

4. Ingredient table
   ```
   CREATE TABLE user_info (
           user_id SERIAL PRIMARY KEY,
           user_name VARCHAR(25)
           );
   ```

5. Grocery list table

```
CREATE TABLE grocery_list (
    grocery_id SERIAL PRIMARY KEY,
    user_id INT REFERENCES user(user_id),
    date_list DATE

);
```

6. Occasion table

```
CREATE TABLE occasion (
    occasion_id SERIAL PRIMARY KEY,
    event_title VARCHAR(25)

);
```