- 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

Brainstorm:

- Password
- Email
- Ingredients
- Instructions
- Recipe private
- Recipe public
- Grocery list
- Create recipe

Tables:

- User email
    - They need a specific username to access their account
    - VARCHAR to limit from being long
- Password
    - The user needs a special key to get their specific account data
    - VARCHAR to limit from being to long
- Username
    - Another way to sign into their account
    - VARCHAR to limit from being to long

Recipes:

- Ingredients
    - The table will show the recipes ingredients
    - VARCHAR limit so it will not be so long
- Instructions
    - The table will display the instructions for each recipe
    - VARCHAR to limit from being long
- Link to users
    - Users can have their own recipes
    - REFERENCES to link to other tables
- Recipe name
    - Names of each recipe
    - VARCHAR to limit from names being too long
- Boolean
    - To show if the recipe is public or not

        - BOOLEAN to tell whether it is public or not

Grocery List:

- Link to user
    - Each user will have a grocery list
    - VARCHAR to limit lengths

Ingredient:

- Link to grocery
    - Ingredients will connect with what is on the grocery lists
    - VARCHAR
- Link to user
    - Each user will have specific ingredients

Occasions:

- Recipe id
    - Recipes can connect to specific occasions
    - REFERENCES
- User id
    - Users can have specific occasions for recipes
    - REFERENCES
- Occasion name
    - The name of the occasion
    - VARCHAR

Relationships:

- One to one
- One to many
    - Users ===> Recipes
        - One user can have many recipes
    - User ===> Occasions
        - One user can create many occasions
    - Grocery list ===> Ingredients
        - One grocery list can have many ingredients
    - Occasions ===> Users
        - One user for many occasions
- Many to many

```
Table "users" {
  "user_id" int [pk, increment]
  "user_email" VARCHAR(100)
  "user_password" VARCHAR(50)
  "username" VARCHAR(50)
}

Table "recipes" {
  "recipe_id" int [pk, increment]
  "user_id" INT [not null]
  "ingredients" VARCHAR(50)
  "instructions" VARCHAR(1000)
  "recipe_name" VARCHAR(100)
  "public_recipe" BOOLEAN [default: true]
}

Table "groceries" {
  "id" int [pk, increment]
  "user_id" INT [not null]
  "ingredients" VARCHAR(1000)
}

Table "occasions" {
  "occasions_id" int [pk, increment]
  "occasions" VARCHAR(100)
  "user_id" INT [not null]
}

Table "occasionsRecipes" {
  "id" int [pk, increment]
  "recipe_id" INT [not null]
  "occasions_id" INT [not null]
}

Ref:"users"."user_id" < "recipes"."user_id"

Ref:"users"."user_id" < "groceries"."user_id"

Ref:"users"."user_id" < "occasions"."user_id"

Ref:"recipes"."recipe_id" < "occasionsRecipes"."recipe_id"

Ref:"occasions"."occasions_id" < "occasionsRecipes"."occasions_id"
```