- Email
- Password
- Username
- Recipes (including ingredients, instruction)
- Private Recipes (boolean)
- Occasions

Table Ideas
User
- Email - login authentication, VARCHAR because text
- Password login authentication - VARCHAR because text
- Username - login authentication, VARCHAR because text
- User ID - Because it creates a unique user id, used SERIAL PRIMARY KEY to create a unique number

Recipes
- Ingredients foreign key - To show what ingredients are needed for a certain recipe - used INT NOT NULL REF to connect with a different table
- Recipe Key - To differentiate different recipes by giving them a unique number, used SERIAL PRIMARY KEY to create a unique number
- Instruction foreign Key - To give instructions for certain recipes, used INT NOT NULL REF to connect with a different table
- User ID - To differentiate which user created a certain recipe - used INT NOT NULL REF to connect with a different table
- Privatization (boolean) - Accessibility, used BOOLEAN to be able to toggle easily with true/false
- Occasion ID (set default any) - To set recipes to different occasions, used INT NOT NULL REF to connect with a different table

Instructions
- Instructions - TEXT because it is text

Ingredients
- Ingredients - TEXT because it is text
- Ingredients Key - unique number, used SERIAL PRIMARY KEY to create a unique number

Grocery List
- Ingredients foreign key - to show what ingredients are in a specific grocery list, used INT NOT NULL REF to connect with a different table
- User ID - show which users grocery list it is, used INT NOT NULL REF to connect with a different table

Occasions
- Occasion Types - TEXT because it is text
- Occasion Key- creates unique number for occasions, used SERIAL PRIMARY KEY to create a unique number

Relationships
- One to one
  - Recipes====>Instructions = Instructions are specifically for one recipe and on recipe only

- One to many
  - Occasion ===> recipe - Multiple recipes can have an occasion, but they can only have one occasion
- Many to many
  - Recipes ====> Occasion- There can be multiple recipes in an occasion and
  - Ingredients ====> Grocery list- There can be multiple ingredients in a grocery list and ingredients can be in different recipes or grocery lists

```
CREATE TABLE users(
  user_id SERIAL PRIMARY KEY,
  username VARCHAR(50),
  user_password VARCHAR(500),
  email VARCHAR(100)
);
CREATE TABLE recipes(
  recipe_id SERIAL PRIMARY KEY,
  user_id INT NOT NULL REFERENCES users(user_id),
  instruction_id INT NOT NULL REFERENCES instructions(instruction_id),
  occasion_id INT NOT NULL REFERENCES occasions(occasion_id),
  private BOOLEAN NOT NULL DEFAULT private,
  ingredient_id INT NOT NULL REFERENCES ingredients(ingredient_id)
);
CREATE TABLE instructions(
  instruction_id SERIAL PRIMARY KEY,
  instructions TEXT
);
CREATE TABLE ingredients(
  ingredient_id SERIAL PRIMARY KEY,
  ingredients TEXT,
  recipe_id INT NOT NULL REFERENCES recipes(recipe_id)
);

CREATE TABLE grocerylist(
  grocery_id SERIAL PRIMARY KEY,
  ingredients_id INT NOT NULL REFERENCES ingredients(ingredient_id),
```

```
  user_id INT NOT NULL REFERENCES users(user_id)
);

CREATE TABLE occasions(
  occasion_id SERIAL PRIMARY KEY,
  occasion TEXT,
  recipe_id INT NOT NULL REFERENCES recipes(recipe_id)
);
```