Brainstorming:

users

recipes

grocery list

ingredients

search function

Table Ideas/Columns:

User

-user id int

-name varchar

-email varchar

-password varchar

-recipes

-created

-public

-grocery list

recipes

-recipe id int

-recipe name varchar

-instructions text

-ingredients

-measurements float

-grocery list

-public bool

-food tag

-occasions

grocery list

-grocery user id int

-ingredients

-amounts float

ingredients

-food id

-food name

-food tag

-dietary information

search

-ingredients

-recipes

-tag types

occasions

-date

-time

-recipes

food tags

-tag id

-name type

Relations:

one to one

-user to grocery list each user only has one grocery list and each grocery list only has one user

one to many

-user to occasions each user has many unique occasions but each occasion is decicided by the user

-user to created recipes

-grocery list to recipes

-grocery list to ingredients

-search to recipes

-search to ingredients

-search to food tag

many to many

-occasions to recipes each occasion can have many recipes and each recipe can be used in many occasions

-users to public recipes

-recipes to ingredients

-recipes to food tag

-ingredients to food tag

```
CREATE TABLE user_data(
  user_id SERIAL PRIMARY KEY,
  u_name VARCHAR(20),
  email VARCHAR(50),
  password VARCHAR(36)
);

CREATE TABLE grocery_list(
  grocery_list_id SERIAL PRIMARY KEY,
  amount float,
  user_id INT NOT NULL REFERENCES user_data(user_id)
);

CREATE TABLE recipes(
        recipe_id SERIAL PRIMARY KEY,
  r_name VARCHAR(20),
  instructions TEXT,
  public BOOL DEFAULT False,
  grocery_list_id INT NOT NULL REFERENCES grocery_list(grocery_list_id),
  creator_id INT NOT NULL REFERENCES user_data(user_id)
);

CREATE TABLE occasion(
        occasions_id SERIAL PRIMARY KEY,
  o_name VARCHAR(20),
  o_date DATE,
  o_time TIME,
  user_id INT NOT NULL REFERENCES user_data(user_id)
);
```

```
CREATE TABLE tags(
        tag_id SERIAL PRIMARY KEY,
 t_name VARCHAR(20)
);

CREATE TABLE ingredients(
        ingredient_id SERIAL PRIMARY KEY,
 i_name VARCHAR(20),
 diet_info TEXT,
 grocery_list INT
);

CREATE TABLE recipesingredients(
 ingredient_id INT NOT NULL REFERENCES ingredients(ingredient_id),
 recipe_id INT NOT NULL REFERENCES recipes(recipe_id)
);

CREATE TABLE publicrecipes(
 recipe_id INT NOT NULL REFERENCES recipes(recipe_id),
 user_id INT NOT NULL REFERENCES user_data(user_id)
);

CREATE TABLE recipetag(
        recipe_id INT NOT NULL REFERENCES recipes(recipe_id),
 tag_id INT NOT NULL REFERENCES tags(tag_id)
);

CREATE TABLE occasionrecipe(
```

```
  recipe_id INT NOT NULL REFERENCES recipes(recipe_id),
  occasions_id INT NOT NULL REFERENCES occasion(occasions_id)
);

CREATE TABLE ingredienttag(
  ingredient_id INT NOT NULL REFERENCES ingredients(ingredient_id),
  tag_id INT NOT NULL REFERENCES tags(tag_id)
);

INSERT INTO user_data (u_name, email, password)
VALUES ('Scott Mottola','sjmottola@gmail.com','password1'),
('Steven Mottola','smottola18@yahoo.com','password2'),
('Andrew Mottola','andrewmottola@hotmail.com','password3');

SELECT * FROM user_data;
```