LAB - Recipe/Grocery List App

- 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

Brainstorming:

Userid
Name
Email
Password
Ingredients
Recipes
Measurements
Public boolean
Recipebook
Grocerylists
Quantity
Occasion
Date

Tables:

User - this table will hold user info with their login
- User_id -PK, assign users an id int
- Name - varchar(40) know a users name string
- Email - varchar(50) have an email for easy log in string
- Password - varchar(200) password stored for user login string

Ingredients - this will hold ingredient names to pull from for recipes and grocery lists
- Ingredient ID - PK, give each ingredient an id int
- Ingredient_name - varchar(50) the name of each ingredient string

Recipes - recipes that pull ingredients from the ingredients table and tell a user all instructions
- Recipe_id - int PK for a recipe ID
- Recipe_name - varchar(50) string of the name of a recipe
- Creater(userID) - FK int from users table
- Ingredients - FK INT, pull ingredient id out of ingredients table

- Measurement - TEXT - enter numbers and measurements of each ingredient
- Prep_time - INT - a whole number, in minutes
- Cooking_time - INT a whole number in minutes
- Instructions - TEXT(1000) a string of recipe instructions

Posts - users are able to post their recipes for others to see, if public is marked true when posted then other users have access to it

- Post_id - INT PK to assign post an id
- User_id - FK from users table
- title - FK from recipe table recipe_id
- Public - BOOLEAN to show if public is true or false

Grocerylist - a table for grocery list items and quantity of each item

- List_id - INT PK to assign a list and id
- Ingredient - FK INT - ingredient_id from ingredients table
- Quantity - INT whole number of how many of one ingredient you need

Occasions - a table that lets users keep track of occasions and the recipes they will make for that occasion

- Occasion_id - INT PK to assign occasion an id
- Ocassion_name - VARCHAR(50) to name an occasion string
- Recipe_name - FK INT - recipe_id from recipes table
- Date - DATETIME - to know what date and time the occasion is happening

<u>Relationships:</u>

One to one:

- Post and recipe are on to one because one post can have one recipe id and one recipe id can only have one post

One to many:

- User and post has one user id but can have many posts per user
- Grocery list and ingredients. One grocery list can have many ingredients
- Recipe and occasions. One occasion can have many recipes
- User and recipes. One user can create many recipes

Many to many:

- Recipes and ingredients. Many recipes can have different ingredient and many ingredients can go on different recipes

SQL:

```
CREATE TABLE users (
	user_id SERIAL PRIMARY KEY,
  user_name VARCHAR(40),
  email VARCHAR(50),
  password VARCHAR(200)
);

CREATE TABLE ingredients (
	ingredient_id SERIAL PRIMARY KEY,
  ingredient_name VARCHAR(50)
);

CREATE TABLE recipes (
	recipe_id SERIAL PRIMARY KEY,
  recipe_name VARCHAR(50),
  creator INT REFERENCES users(user_id),
  ingredient INT REFERENCES ingredients(ingredient_id),
  measurement TEXT,
  prep_time INT,
  cook_time INT,
  instructions TEXT
);

CREATE TABLE posts (
	post_id SERIAL PRIMARY KEY,
  user_id INT REFERENCES users(user_id),
  recipe INT REFERENCES recipes(recipe_id),
  is_public BOOLEAN
);

CREATE TABLE groceryList (
	list_id SERIAL PRIMARY KEY,
  ingredient_id INT REFERENCES ingredients(ingredient_id),
	quantity INT
);

CREATE TABLE occasion (
	occasion_id SERIAL PRIMARY KEY,
  occasion_name VARCHAR(50),
  recipe_id INT REFERENCES recipes(recipe_id),
	occasion_date DATE
);
```

Add Data to Tables:

```
INSERT INTO users
(user_name, email, password)
VALUES
('beth', 'barker@gmail.com', 'sgiuhwqiaguhg'),
('Sara', 'fah@gmail.com', 'ghjfe'),
('Ryan', 'gafih@hotmail.com', 'hello!')

INSERT INTO ingredients
(ingredient_name)
VALUES
('flour'),
('sugar'),
('salt'),
('eggs')

INSERT INTO recipes
(measurement, recipe_name, creator, ingredient, prep_time, cook_time, instructions)
VALUES
('2Tsp','Cookies', 1, 3, 10, 30, 'Bake until brown'),
('4C', 'Bread', 2, 3, 20, 35, 'Let rise');


INSERT INTO posts
(user_id, recipe, is_public)
VALUES
(1, 2, true),
(2,1,false);
```