

Brainstorming

- Users
- First Name
- Last Name
- username
- password
- email
- recipe name
- Recipe author
- ingredients
- instructions
- public/private
- occasions
- grocery list

Table Ideas

- Users: Holds username, password, email, firstname, last name
- Recipe: Holds recipe name, recipe author, instructions
- Ingredients: holds ingredients name, ingredient id
- Recipe ingredients: Holds recipe id's and ingredient id's
- Grocery List: holds list name, ingredient ID's
- Occasions: Holds occasion id and name
- User Occasions: holds user id, occasion id, and recipe id

Relationships

One-to-One

- Users to grocery list: Each user can only have one grocery list

One-to-Many

- Users to recipes: each user can have many recipes but each recipe can only have one user.
- Grocery list to ingredients: Each grocery list can have many ingredients

Many-to-Many

- Recipes to Ingredients: Each recipe can have many ingredients and each ingredient can be used in many recipes.
- Occasions to recipes: Each occasion can have many recipes and each recipe can be used for many occasions.
- Users to user occasions: Each user can have many occasions and each occasion can be used by more than one user.

SQL

```
CREATE TABLE users (  
  user_id SERIAL PRIMARY KEY,  
  first_name VARCHAR(30) NOT NULL,  
  last_name VARCHAR(30) NOT NULL,  
  username VARCHAR(30) NOT NULL,  
  email VARCHAR(100) NOT NULL,  
  password VARCHAR(50) NOT NULL  
);
```

```
CREATE TABLE recipes (  
  recipe_id SERIAL PRIMARY KEY,  
  recipe_name VARCHAR(100) NOT NULL,  
  recipe_author INTEGER REFERENCES users(user_id) NOT NULL,  
  private_or_public BOOLEAN NOT NULL,  
  instructions TEXT NOT NULL  
);
```

```
CREATE TABLE ingredients (  
  ingredient_id SERIAL PRIMARY KEY,  
  ingredient_name VARCHAR(100) NOT NULL  
);
```

```
CREATE TABLE recipe_ingredients (  
  recipe_id INTEGER REFERENCES recipes(recipe_id) NOT NULL,  
  ingredient_id INTEGER REFERENCES ingredients(ingredient_id) NOT NULL  
);
```

```
CREATE TABLE grocery_list (  
  list_id SERIAL PRIMARY KEY,  
  user_id INTEGER REFERENCES users(user_id) NOT NULL,  
  ingredient_id INTEGER REFERENCES ingredients(ingredient_id) NOT NULL  
);
```

```
CREATE TABLE occasions (  
  occasion_id SERIAL PRIMARY KEY,  
  occasion_name VARCHAR(50)  
);
```

```
CREATE TABLE user_occasions (  
  user_id INTEGER REFERENCES users(user_id) NOT NULL,  
  occasion_id INTEGER REFERENCES occasions(occasion_id) NOT NULL,  
  recipe_id INTEGER REFERENCES recipes(recipe_id) NOT NULL
```

);

Insert Data

INSERT INTO users

(first_name, last_name, username, email, password)

VALUES

('linda', 'johnson', 'lindaj77', 'lindaj77@gmail.com', 'lovetocook32')

('rachel', 'simpson', 'rsimpson81', 'rsimpson81@gmail.com', 'eatmorepickles')

('joe', 'blaggadoshiocentro', 'gardenguy', 'gardenguy@yahoo.com', 'inmygarden64');