

Brainstorming

- Username
- User id
- Email
- Password
- Ingredients
- Instructions
- Recipes
- Grocery list
- Occasions

Table Ideas - columns

- **Users**
 - This table will hold info about **user_id**, **email**, **password** (VARCHAR, not limits to size, helps to identify this user by id, email and password)
- **Recipes**
 - This table will hold info about **recipe_id** (VARCHAR, not limit to size, each recipe has its own id because it is different dish); **ingredient_id**, **recipe_name**
- **Grocery_lists**
 - **grocery_list_id** (VARCHAR, users need to buy), **recipe_id**, **ingredient_id**,

user_id

- **Ingredients**
 - **ingredient_id** (VARCHAR, the id of the ingredient), **ingredient_name**

Relationships

- Users to recipes: one-to-many (one user can create many recipes, but one recipe can only be created by a user.)
- Ingredients to recipes: many-to-many (one ingredient can be in many recipes, and one recipe can have many ingredients)
- Users to grocery_list: many-to-many (one user can create many grocery lists, a grocery list can be created by different users that people happen to buy the exact same things)
- Grocery_list to recipes: many-to-many (one grocery list can contain many recipes, and one recipe can go to different grocery lists)
- Ingredients to grocery_list: many-to-many (one ingredient can belong to many grocery list, one grocery list can have many ingredients too)

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

```
CREATE TABLE ingredients(  
  ingredient_id SERIAL PRIMARY KEY,  
  ingredient_name VARCHAR(30)  
);
```

```
CREATE TABLE recipes(  
  recipe_id SERIAL PRIMARY KEY,  
  recipe_name VARCHAR(20),  
  ingredient_id INTEGER NOT NULL REFERENCES users(user_id)  
);
```

```
CREATE TABLE grocery_list(  
  grocery_list_id SERIAL PRIMARY KEY,  
  recipe_id INTEGER REFERENCES recipes(recipe_id),  
  ingredient_id INTEGER NOT NULL REFERENCES users(user_id),  
  user_id INTEGER REFERENCES users(user_id)  
);
```