Users Table
- User id
- User email
- User password

Recipe table
Recipe id
recipe ingredients ID
Recipe instruction
Recipe public?
User id

Occasions
- Occasion id
- Recipe id
- User id

User_recipe table
User id
Recipe id

Grocery list table
List id
User id
Ingredient id
Recipe id

Ingredient
Ingredient id
Recipe id

Relationships
One to one

One to many
User⇔recipe
User⇔grocery list
user⇔occasions
Many to many
Recipe⇔occasion
Recipe⇔ingredients

```
CREATE TABLE "users" (
  "user_id" SERIAL PRIMARY KEY,
```

```sql
  "user_email" VARCHAR(40),
  "user_password" VARCHAR(500)
);

CREATE TABLE "recipes" (
  "recipe_id" SERIAL PRIMARY KEY,
  "recipe_name" VARCHAR(50),
  "ingredients_id" INT NOT NULL,
  "recipe_instruction" VARCHAR(400),
  "recipe_private" BOOLEAN,
  "user_id" INT NOT NULL
);

CREATE TABLE "occasions" (
  "occasion_id" SERIAL PRIMARY KEY,
  "occasion_name" VARCHAR(30),
  "recipe_id" INT NOT NULL,
  "user_id" INT NOT NULL
);

CREATE TABLE "user_recipes" (
  "user_recipe_id" SERIAL PRIMARY KEY,
  "user_id" INT NOT NULL,
  "recipe_id" INT NOT NULL
);

CREATE TABLE "Grocery_list" (
  "list_id" SERIAL PRIMARY KEY,
  "user_id" INT NOT NULL,
  "ingredient_id" INT NOT NULL,
  "recipe_id" INT NOT NULL
);

CREATE TABLE "ingredients" (
  "ingredient_id" SERIAL PRIMARY KEY,
  "ingredient_name" VARCHAR(40),
  "recipe_id" INT NOT NULL
);
```

```sql
ALTER TABLE "recipes" ADD FOREIGN KEY ("ingredients_id") REFERENCES
"ingredients" ("ingredient_id");

ALTER TABLE "recipes" ADD FOREIGN KEY ("user_id") REFERENCES "users"
("user_id");

ALTER TABLE "occasions" ADD FOREIGN KEY ("recipe_id") REFERENCES "recipes"
("recipe_id");

ALTER TABLE "occasions" ADD FOREIGN KEY ("user_id") REFERENCES "users"
("user_id");

ALTER TABLE "user_recipes" ADD FOREIGN KEY ("user_id") REFERENCES "users"
("user_id");

ALTER TABLE "user_recipes" ADD FOREIGN KEY ("recipe_id") REFERENCES
"recipes" ("recipe_id");

ALTER TABLE "Grocery_list" ADD FOREIGN KEY ("user_id") REFERENCES "users"
("user_id");

ALTER TABLE "Grocery_list" ADD FOREIGN KEY ("ingredient_id") REFERENCES
"ingredients" ("ingredient_id");

ALTER TABLE "Grocery_list" ADD FOREIGN KEY ("recipe_id") REFERENCES
"recipes" ("recipe_id");

ALTER TABLE "ingredients" ADD FOREIGN KEY ("recipe_id") REFERENCES
"recipes" ("recipe_id");
```