Tables:

1. Users (user_id, user_name, password, email)
2. Recipe (recipe_id, user_id, recipe_name, ingredient_id(takes in list of ingredients), instructions (takes in a body of instructions), isPublic(bool))
3. Ingredients (ingredient_id, ingrediant_name)
4. Grocery_list (list_id, user_id, recipe_id, ingrediant_id(from ingredients table)
5. Comment (comment_id, user_id, recipe_id, body)
6. Occasions (occasions_id, occasion_name, user_id, recipe_id)

Relationships:

One-to-one:
One grocery list to one user
One unique comment for one unique recipe

One-to-many:

One user can make many recipes
One user can make multiple comments
One recipe can have multiple comments
One recipe can have many ingredients
One grocery list has many ingredients

Many-to-many:

Occasions - users
Many occasions to many recipes
Ingredients can go to many recipes
Many ingredients can go to many grocery lists

Columns:

Users table:

- User_id: integer because it auto iterates
- User_name: varchar BECAUSE it uses the alphabet
- Password: varchar because it uses alphabet, numeric, and special characters
- Email: varchar because it uses alphabet, numeric, and special characters

Ingredients table:

- Indredient_id: integer because it auto iterates
- Ingredient_name : varchar because needs alphabet

Recipes table:

- Recipe_id: integer because it auto iterates
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SQL

```
-- CREATE TABLE users(
--   user_id SERIAL PRIMARY KEY,
--   user_name VARCHAR (30),
--   password VARCHAR(30),
--   email VARCHAR(30)
--   );

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

-- CREATE TABLE recipes(
--   recipe_id SERIAL PRIMARY KEY,
--   recipe_name VARCHAR (30),
--   ingredient_id INTEGER REFERENCES ingredients(ingredient_id),
--   user_id INTEGER REFERENCES users(user_id),
--   instructions TEXT,
--   isPublic boolean,
--   quantity VARCHAR(40)
--   );

-- CREATE TABLE grocery_list(
--   list_id SERIAL PRIMARY KEY,
--   user_id INTEGER REFERENCES users(user_id),
--   recipe_id INTEGER REFERENCES recipes(recipe_id)
--   );

--   CREATE TABLE comment(
--   comment_id SERIAL PRIMARY KEY,
--   user_id INTEGER REFERENCES users(user_id),
--   recipe_id INTEGER REFERENCES recipes(recipe_id)
--   );

-- CREATE TABLE occasions(
--   occasion_id SERIAL PRIMARY KEY,
--   occasion_name VARCHAR(40),
--   user_id INTEGER REFERENCES users(user_id),
--   recipe_id INTEGER REFERENCES recipes(recipe_id)
```

```
--   );

INSERT INTO users
--   (user_name, password, email)
--   VALUES
--   ('Kara', 'abc123', 'email@email.com');

  --SELECT * FROM users;

--   INSERT INTO ingredients
--   (ingredient_name)
--   VALUES
--   ('apple');

--   INSERT INTO recipes
--   (recipe_name, ingredient_id, user_id, instructions, isPublic, quantity)
--   VALUES
--   ('Caramel Apples', 1, 1, 'Push stick into top of apple. Dip apple into hot caramel. Let cool.',
TRUE, '30 caramels, 5 apples');

--   Insert INTO grocery_list
--   (recipe_id, user_id)
--   VALUES
--   (1, 1);

 –SELECT * FROM recipes;
```