Idea:

I will create a simple app where users can post their recipes, similar to how people post on social media. The app will also contain a section called Grocery List that will have the same features as a notepad where users can add the ingredients they want to buy (private to the user's account). Also, users will have a section where they can create occasions, in the specific occasion they can post their recipes for that occasion.

Brainstorming:

- Users can sign into the account with their email and password
- Users have a profile
- Users can create/post their recipes
- Users can make their recipes private/public
- Users can view other recipes
- Users can add to their grocery list/cart
- Users can create Occasions/Events/Holidays and post their recipes to it

Table Ideas:

- **User:** will hold info about the user, each line/row will be an individual user
- **Auth:** will hold credentials for logging-in, each line/row will be an individual credential
- **Recipe_Post:** will hold information about recipe posts, each line/row will be an individual recipe post
- **Occasions:** will hold information about the Occasions, each line/row will be an individual Occasions
- **Occasion_Recipe_Post:** will hold information about the group posts, each line/row will be an individual Occasions Recipe post
- **Grocery_List:** will hold information about ingredients user needs, each line/row will be an ingredient
- **Recipe_Post_Comment:** will hold information about comment, each line/row will be an individual comment
- **Occasion_Recipe_Comment:** will hold information about Occasion comment, each line/row will be an individual Occasion comment

Relationships:

One to One:

- User to Auth

One to Many:

- User to Recipe Post
- User to Grocery List
- Occasion to occasion recipe posts

Many to Many(2 One to Many):

- User to Comment, Recipe Post to Comment (User to Recipe Post)

- User to Occasion Comment, Occasion Post to Occasion Comment (User to Occasion Post)

Occasion —---------- Occasion Post

User —------ Occassion Post Comment —-------- Occasion Post

Columns:

User:

"user_id" **Primary Key (Integer)**
"name" varchar(255)
"address" varchar(255)
"zip_code" integer

- **Explanation:** Creating an User table where we can store the data about the users using the app. It will store the user's name and address as varchar because it can take characters(letter and numbers). For zip_code we can use integer because it contains numbers. In this table, user_id is the Primary Key to identify each user.

Auth:

"auth_id" **Primary Key (Integer)**
"user_id" integer **Foreign Key**
"username" varchar(255)
"password" varchar(255)
"email" varchar(255)

- **Explanation:** Creating an Auth table where we will store user's login information. We will use user_id as a Foreign Key to keep track of the user. Username, Password and Email are set as varchar because it can take characters(letter and numbers). In this table, auth_id is the Primary Key to identify each authentication.

Recipe_Post:

"recipe_post_id" **Primary Key (Integer)**
"user_id" integer **Foreign Key**
"is_public" BOOLEAN
"recipe" TEXT
"recipe_img" TEXT

- **Explanation:** Creating a Recipe_Post table where we will store user's posts about their recipes. We will use user_id as a Foreign Key to keep track of the user. Recipe and recipe_img are set as text because this will be the user's input. is_public is set to boolean because users have the option to make their post public or private (true/false). In this table, recipe_post_id is the Primary Key to identify each post.

Recipe_Post_Comment:

"recipe_comment_id" **Primary Key (Integer)**
"user_id" integer **Foreign Key**
"recipe_post_id" integer **Foreign Key**
"comment" TEXT

- **Explanation:** Creating Recipe_Post_Comment table where we will store user's comments on posts. We will use user_id as a Foreign Key to keep track of the user. Also, we will use recipe_post_id as a Foreign Key to keep track of the post where the comment is being made. It will take comment as a text because this will be the user's input. In this table, recipe_comment_id is the Primary Key to identify each comment.

Occasion:

"occasion_id" **Primary Key (Integer)**
"user_id" integer **Foreign Key**
"location" varchar(255)
"guests" integer
"occasion_name" varchar(255)

- **Explanation:** Creating Occasion table where we will store occasions created by the user. We will use user_id as a Foreign Key to keep track of the user. It will take location and occasion_name as varchar because it can take characters(letter and numbers). Guests will be set as integer because it will be taking the number of people going to that occasion. In this table, occasion_id is the Primary Key to identify each occasion.

Occasion_Recipe_Post:

"occasion_recipe_id" **Primary Key (Integer)**
"user_id" integer **Foreign Key**
"occasion_id" integer **Foreign Key**
"is_public" BOOLEAN
"occasion_recipe" TEXT
"occasion_recipe_img" TEXT

- **Explanation:** Creating a Occasion_Recipe_Post table where we will store user's posts about recipes for their occasion. We will use user_id as a Foreign Key to keep track of the user. Also, we will use occasion_recipe_id as a Foreign Key to keep track of the occasion the post has been made to. Occasion_recipe and occasion_recipe_img are set as text because this will be the user's input. is_public is set to boolean because users have the option to make their post public or private (true/false). In this table, occasion_recipe_id is the Primary Key to identify each post.

Occasion_Recipe_Comment:

"occasion_comment_id" **Primary Key (Integer)**
"user_id" integer **Foreign Key**

"occasion_recipe_id" integer **Foreign Key**
"comment" TEXT

- **Explanation:** Creating Occasion_Recipe_Comment table where we will store user's comments on posts for occasion. We will use user_id as a Foreign Key to keep track of the user. Also, we will use occasion_recipe_id as a Foreign Key to keep track of the post where the comment is being made. It will take comment as a text because this will be the user's input. In this table, occasion_comment_id is the Primary Key to identify each comment.

Grocery_List:

"grocery_item_id" **Primary Key (Integer)**
"user_id" integer **Foreign Key**
"ingredients" TEXT

- **Explanation:** Creating Grocery_List table where users can store the ingredients they want to buy. Ingredients are set as text because this will be the user input. In our app, the grocery list will be a section that works like a notepad. We will use user_id as a Foreign Key to keep track of the user. In this table,grocery_item_id is the Primary Key to identify each grocery list.

Create Tables:

User:

```
CREATE TABLE recipe_user(
  user_id SERIAL PRIMARY KEY,
        name VARCHAR(255),
        address VARCHAR(255),
        zip_code INTEGER );
```

Auth:

```
CREATE TABLE auth(
        auth_id SERIAL PRIMARY KEY,
        user_id INTEGER references recipe_user(user_id),
        username VARCHAR(255),
        password VARCHAR(255),
        email VARCHAR(255));
```

Recipe_Post:

```
CREATE TABLE recipe_post(
        recipe_post_id SERIAL PRIMARY KEY,
        user_id INTEGER references recipe_user(user_id),
        is_public BOOLEAN,
        recipe TEXT,
        recipe_img TEXT);
```

Recipe_Post_Comment:

```
CREATE TABLE recipe_post_comment(
        recipe_comment_id SERIAL PRIMARY KEY,
        user_id INTEGER references recipe_user(user_id),
        recipe_post_id INTEGER references recipe_post(recipe_post_id),
        comment TEXT
);
```

Occasion:

```
CREATE TABLE occasion(
occasion_id SERIAL PRIMARY KEY,
        user_id INTEGER references recipe_user(user_id),
        location VARCHAR(255),
        guests INTEGER,
        occasion_name VARCHAR(255)
);
```

Occasion_Recipe_Post:

```
CREATE TABLE occasion_recipe_post(
        occasion_recipe_id SERIAL PRIMARY KEY,
        user_id INTEGER references recipe_user(user_id),
        occasion_id INTEGER references occasion(occasion_id),
        is_public BOOLEAN,
        occasion_recipe TEXT,
        occasion_recipe_img TEXT
);
```

Occasion_Recipe_Comment:

```
CREATE TABLE occasion_recipe_comment(
        occasion_comment_id SERIAL PRIMARY KEY,
        user_id INTEGER references recipe_user(user_id),
        occasion_recipe_id INTEGER references occasion_recipe_post(occasion_recipe_id),
        comment TEXT
);
```

Grocery_List:

```
CREATE TABLE grocery_list(
        grocery_item_id SERIAL PRIMARY KEY,
        user_id INTEGER references recipe_user(user_id),
        ingredients TEXT );
```

Insert Data Into Tables:

recipe_user:

```
INSERT INTO recipe_user(name,address,zip_code)
VALUES('John','12-34 ave',11243),
('Maria','10-11 ave',10032),
('Sam','48-12 ave',18473);
```

auth:

```
INSERT INTO auth(user_id,username,password,email)
VALUES(1,'John12','372498','john12@gmail.com'),
(2,'Maria10','2183MM','maria10@gmail.com'),
(3,'Sam48','P27392','sam48@gmail.com');
```

recipe_post:

```
INSERT INTO recipe_post(user_id,is_public,recipe,recipe_img)
VALUES(1,TRUE,'Oatmeal','oatmeal.png'),
(2,FALSE,'Caramel Latte','latte.png'),
(3,TRUE,'Pancake','pancake.png');
```

recipe_post_comment:

```
INSERT INTO recipe_post_comment(user_id,recipe_post_id,comment)
VALUES(1,3,'Nice!'),
(2,1,'Cool!'),
(3,1, 'Awesome!');
```

occasion:

```
INSERT INTO occasion(user_id,location,guests,occasion_name)
VALUES(1,'Paris',30,'Thanksgiving'),
(2,'New York',50,'Christmas'),
(3,'Los Angeles',25,'Birthday');
```

occasion_recipe_post:

```
INSERT INTO
occasion_recipe_post(user_id,occasion_id,is_public,occasion_recipe,occasion_recipe_img)
VALUES(2,1,TRUE,'Turkey','turkey.png'),
(3,2,TRUE,'Cheese Pizza','pizza.png'),
(1,3,FALSE,'Vanilla Cake', 'cake.png');
```

occasion_recipe_comment:

```
INSERT INTO occasion_recipe_comment(user_id,occasion_recipe_id,comment)
VALUES(2,1,'Amazing!'),
(3,2,'Nice!'),
(1,2,'Cool!');
```

grocery_list:

```
INSERT INTO grocery_list(user_id,ingredients)
VALUES(1,'Eggs'),
(2,'Apples'),
(3,'Bread');
```