Features

- users can sign into the app with their email and password
- users can create recipes with ingredients and instructions
- recipes can be marked as public or private
- users can view other people's recipes
- ingredients from recipes can be added to user's grocery lists
- users can create their own occasions and assign recipes to occasions

Brainstorming

- User IDs (email, password)
- Ingredients
- Instructions
- Grocery lists
- Recipes
- Occasions

Table Ideas	Relationship Types

USERS (to store user names)
 	
• First_name
• Last_name
 	
AUTH (to store user emails & password hashes)
 	
• Foreign key to users(user_id)
• Email
• Hash
 	
RECIPE (to store recipe information)
 	
• Name
• About
• Text of recipe
• Public (true/false)
• Foreign key to user(user_id)
• Foreign key to ingredient(name)
• Foreign key to ingredient(amount)
 	
INGREDIENT (to store types & amounts of ingredients)
 	
• Name
• Amount
 	
GROCERY (to make a grocery list including ingredients and the needed amounts)
 	
• Foreign key to ingredient(name)
• Foreign key to ingredient(amount)
 	
OCCASION (to create occasions and store recipes related to them)
 	
• Foreign key to recipe(name)
• Foreign key to users(user_id)
	ONE-TO-ONE
	
	• Auth to Users(user_id)
	  ○ Each user has one, unique email/hash
	
	ONE-TO-MANY
	
	• Recipe to Ingredient(name)
	  ○ A recipe can have multiple ingredients
	• Recipe to Ingredient(amount)
	  ○ A recipe can have multiple ingredient amounts
	• Users to Recipe
	  ○ A user can create multiple recipes
	• Users to Occasion
	  ○ A user can create multiple occasions
	• Occasion to Recipe(name)
	  ○ An occasion can have multiple recipes
	
	MANY-TO-MANY

Columns

USERS Table

- User_id
- First_name
- Last_name

AUTH Table

- Auth_id
- User_id
- Email
- hash

RECIPE Table

- recipe_id
- name
- about
- text
- public
- fk to ingredient_name
- fk to ingredient_amount
- user_id

INGREDIENT Table

- ingredient_id
- name
- amount

GROCERY Table

- grocery_id
- fk to ingredient_name
- fk to ingredient_amount

OCCASION Table

- occasion_id
- fk to recipe_name
- user_id

Create Table Statements

```
CREATE TABLE 'public.users' (
        'user_id' serial NOT NULL,
        'first_name' varchar(255) NOT NULL,
        'last_name' varchar(255) NOT NULL,
        CONSTRAINT 'users_pk' PRIMARY KEY ('user_id')
) WITH (
  OIDS=FALSE
);

CREATE TABLE 'public.auth' (
        'auth_id' serial NOT NULL,
        'user_id' integer NOT NULL,
        'email' varchar(255) NOT NULL,
        'hash' TEXT NOT NULL,
        CONSTRAINT 'auth_pk' PRIMARY KEY ('auth_id')
) WITH (
  OIDS=FALSE
);

CREATE TABLE 'public.recipe' (
        'recipe_id' serial NOT NULL,
        'name' varchar(255) NOT NULL,
        'about' varchar(255) NOT NULL,
        'public' BOOLEAN NOT NULL,
        'ingredient_name' varchar(255) NOT NULL,
        'ingredient_amount' integer NOT NULL,
```

```
        'user_id' integer NOT NULL,
        CONSTRAINT 'recipe_pk' PRIMARY KEY ('recipe_id')
) WITH (
  OIDS=FALSE
);

CREATE TABLE 'public.ingredient' (
        'ingredient_id' serial NOT NULL,
        'name' varchar(255) NOT NULL,
        'amount' integer NOT NULL,
        CONSTRAINT 'ingredient_pk' PRIMARY KEY ('ingredient_id')
) WITH (
  OIDS=FALSE
);

CREATE TABLE 'public.grocery' (
        'grocery_id' serial NOT NULL,
        'ingredient_name' serial(255) NOT NULL,
        'ingredient_amount' serial NOT NULL,
        CONSTRAINT 'grocery_pk' PRIMARY KEY ('grocery_id')
) WITH (
  OIDS=FALSE
);

CREATE TABLE 'public.occasion' (
        'occasion_id' serial NOT NULL,
        'recipe_name' serial(255) NOT NULL,
        CONSTRAINT 'occasion_pk' PRIMARY KEY ('occasion_id')
) WITH (
  OIDS=FALSE
```

```
);

ALTER TABLE 'auth' ADD CONSTRAINT 'auth_fk0' FOREIGN KEY ('user_id') REFERENCES 'users'('user_id');

ALTER TABLE 'recipe' ADD CONSTRAINT 'recipe_fk0' FOREIGN KEY ('ingredient_name') REFERENCES
'ingredient'('name');

ALTER TABLE 'recipe' ADD CONSTRAINT 'recipe_fk1' FOREIGN KEY ('ingredient_amount') REFERENCES
'ingredient'('amount');

ALTER TABLE 'recipe' ADD CONSTRAINT 'recipe_fk2' FOREIGN KEY ('user_id') REFERENCES
'users'('user_id');

ALTER TABLE 'grocery' ADD CONSTRAINT 'grocery_fk0' FOREIGN KEY ('ingredient_name') REFERENCES
'ingredient'('name');

ALTER TABLE 'grocery' ADD CONSTRAINT 'grocery_fk1' FOREIGN KEY ('ingredient_amount') REFERENCES
'ingredient'('amount');

ALTER TABLE 'occasion' ADD CONSTRAINT 'occasion_fk0' FOREIGN KEY ('recipe_name') REFERENCES
'recipe'('name');
```