Brainstorming

- Users
- Authentication data
- Recipes
- Instructions for recipes
- Ingredients for recipes
- Recipe's public vs private status
- Occasions
- Recipes linked to occasion

Table ideas

- Users table: contains user data, each row will be a different user
- Authentication table: contains hashed username/password data
- User-recipe table: contains this user's recipes with a description and references to the ingredients and instructions tables and the id of he user that posted it
- Global-recipe table: contains all public recipes with ingredients and a reference to its user id (Note: this is a horrible way of doing this, I know, but tables melt my brain so this is what we get)
- Instructions table: contains instructions and id of recipe
- Ingredients table: contains ingredients and id of recipe
- Occasion table: contains a description of the occasion and a reference to the recipe set

Relationships

- One to one
    - Users to authentication - should only be one email/username associated with each user
- One-to-many
    - Users to user-recipes - each user can have many recipes
    - User-recipes to ingredients - recipes can have many ingredients
    - User-recipes to instructions - same as above
    - global-recipes to ingredients - recipes can have many ingredients
    - global-recipes to instructions - same as above
    - Occasions to global-recipes - occasions can have multiple dishes
- Many-to-many
    - Users to global-recipes - each user can view many recipes

```
 CREATE TABLE "public.user" (
        "user_id" serial NOT NULL,
        "user_name" varchar(255) NOT NULL UNIQUE,
        CONSTRAINT "user_pk" PRIMARY KEY ("user_id")
) WITH (
  OIDS=FALSE
);
```

```
CREATE TABLE "public.user_recipe" (
	"recipe_id" serial NOT NULL,
	"recipe_name" varchar(255) NOT NULL,
	"recipe_instr" varchar(255) NOT NULL,
	"recipe_ingr" varchar(255) NOT NULL,
	"recipe_authId" integer NOT NULL,
	CONSTRAINT "user_recipe_pk" PRIMARY KEY ("recipe_id")
) WITH (
  OIDS=FALSE
);



CREATE TABLE "public.user_auth" (
	"auth_id" serial NOT NULL,
	"user_name" varchar(255) NOT NULL,
	"user_pass" varchar(255) NOT NULL UNIQUE,
	CONSTRAINT "user_auth_pk" PRIMARY KEY ("auth_id")
) WITH (
  OIDS=FALSE
);



CREATE TABLE "public.instruction" (
	"instruction_id" serial NOT NULL,
	"recipe_id" integer NOT NULL,
	"instruction_index" integer NOT NULL,
	"instruction_text" varchar(255) NOT NULL,
	CONSTRAINT "instruction_pk" PRIMARY KEY ("instruction_id")
) WITH (
  OIDS=FALSE
);



CREATE TABLE "public.ingredient" (
	"ingredient_id" serial NOT NULL,
	"ingredient_recipe" integer NOT NULL,
	"ingredient_text" varchar(255) NOT NULL,
	"ingredient_amount" FLOAT(255) NOT NULL,
	CONSTRAINT "ingredient_pk" PRIMARY KEY ("ingredient_id")
) WITH (
```

```
  OIDS=FALSE
);



CREATE TABLE "public.occasion" (
        "occasion_id" serial NOT NULL,
        "occasion_recipe" integer NOT NULL,
        "occasion_text" varchar(255) NOT NULL,
        CONSTRAINT "occasion_pk" PRIMARY KEY ("occasion_id")
) WITH (
  OIDS=FALSE
);



CREATE TABLE "public.global_recipe" (
        "recipe_id" serial NOT NULL,
        "recipe_name" varchar(255) NOT NULL,
        "recipe_instr" varchar(255) NOT NULL,
        "recipe_ingr" varchar(255) NOT NULL,
        "recipe_authId" integer NOT NULL,
        CONSTRAINT "global_recipe_pk" PRIMARY KEY ("recipe_id")
) WITH (
  OIDS=FALSE
);




ALTER TABLE "user_recipe" ADD CONSTRAINT "user_recipe_fk0" FOREIGN KEY
("recipe_instr") REFERENCES "instruction"("recipe_id");
ALTER TABLE "user_recipe" ADD CONSTRAINT "user_recipe_fk1" FOREIGN KEY
("recipe_ingr") REFERENCES "ingredient"("ingredient_recipe");
ALTER TABLE "user_recipe" ADD CONSTRAINT "user_recipe_fk2" FOREIGN KEY
("recipe_authId") REFERENCES "user"("user_id");

ALTER TABLE "user_auth" ADD CONSTRAINT "user_auth_fk0" FOREIGN KEY ("user_name")
REFERENCES "user"("user_name");

ALTER TABLE "instruction" ADD CONSTRAINT "instruction_fk0" FOREIGN KEY ("recipe_id")
REFERENCES "user_recipe"("recipe_id");
```

```
ALTER TABLE "ingredient" ADD CONSTRAINT "ingredient_fk0" FOREIGN KEY ("ingredient_recipe") REFERENCES "user_recipe"("recipe_id");

ALTER TABLE "occasion" ADD CONSTRAINT "occasion_fk0" FOREIGN KEY ("occasion_recipe") REFERENCES "user_recipe"("recipe_id");

ALTER TABLE "global_recipe" ADD CONSTRAINT "global_recipe_fk0" FOREIGN KEY ("recipe_instr") REFERENCES "instruction"("recipe_id");
ALTER TABLE "global_recipe" ADD CONSTRAINT "global_recipe_fk1" FOREIGN KEY ("recipe_ingr") REFERENCES "ingredient"("ingredient_recipe");
ALTER TABLE "global_recipe" ADD CONSTRAINT "global_recipe_fk2" FOREIGN KEY ("recipe_authId") REFERENCES "user"("user_id");
```