Nelson Moreno 3/29/2022 DATA MODELING LAB **Brainstorming Section** usergrocerymain userID int username varchar(50) userpassword varchar(50) recipespublic Boolean useringredients text userInstructions text userFollowingID integer userOccasions Brain storming section END Table Ideas NOTE: ALL PRIMARY AND FOREIGN KEYS WILL HAVE TYPE INTEGER **UserGroceryMain Table (One to many table)** This table will hold information about the users and each row is a separate user name varchar holds name information password varchar email varchar holds email information password varchar holds password information recipePublic boolean lets the user choose whenether they want their information public (TRUE) or private (FALSE) userFollowingID Contains information of a user another user may be following **GroceryIngredients Table (Many-to-many table)** 

This table sustains a many to many relationship between ingredients and a users grocery list

grocerIngredientsID
Primary Key
groceryID
Foreign key
ingredientsID
Foreign Key
Ingredients Table
Ingredients table: this table will hold unique rows about different ingredients needed for a recipe
ingredientsID
Primary key for ingredients
ingredientAmount float
Self-explanatory
ingredientName varchar
Self-explanatory
ingredientPrice float
Self-explanatory
Groceries Table (Many-to Many relationship table)
Groceries: This table will hold information about the groceries people need to create ingredients each row will be an individual product
userGrocerID
primary key that is an integer
groceriesID
foreign key that is creating a one to many relationship between user and grocery list
groceryItemName
Self-explanatory
userSavedRecipes (Many-to Many Table)
Recipe: This table will hold information about the different recipes people will have listed. Each row will have a unique recipe

RecipeID

Primary Key for recipes usergrocerID Recipe created by specific user ingredientsID Specific ingredient needed by this recipe recipeName Self-explanatory instructionsText Self-explanatory Occasions table (One to many table) Each row is separate event that the user will or has attended with the specific recipe OccasionsID Primary key for the Occasions table eventType Details exact kind of event (Wedding, Birthday party, Sweet 16, Cinco de Mayo) eventDate Self-explanatory userGrocerID Creates one to many relationship; One grocer can have many events Relationships Recipes table is linked to the Ingredients table and it is also linked to the Users table Recipes can have many ingredients and Users can have many recipes Many-to-many Users can have multiple recipes One-to-many Recipes can have multiple users One user can have many occasions – One to many One user can have many grocery lists – One to many GroceryIngredients is a junction table that links the ingredients to a grocery list that the user will use to

shop at the supermarket

## **Create Tables in SQL Code**

```
create table userGroceryMain (
       userGrocerID SERIAL PRIMARY KEY,
       name VARCHAR(55),
              email VARCHAR(55),
               password VARCHAR(55),
              recipePublic boolean
);
CREATE TABLE groceries (
groceriesID SERIAL PRIMARY KEY,
usergrocerID INT REFERENCES userGroceryMain(userGrocerID),
groceryItemName VarChar(255)
);
CREATE TABLE occasions (
occasionsID SERIAL PRIMARY KEY,
eventType VARCHAR(255),
eventDate VARCHAR(255),
userGroceryID INT REFERENCES userGroceryMain(userGroceryID)
);
CREATE TABLE ingredients (
ingredientsID SERIAL PRIMARY KEY,
ingredientAmount FLOAT,
ingredientName VARCHAR(255),
ingredientPrice FLOAT
);
CREATE TABLE groceryingredients (
       groceryIngredientsID SERIAL PRIMARY KEY,
       groceriesID INT REFERENCES groceries(groceriesID),
```

```
ingredientsID INT REFERENCES ingredients(ingredientsID),
);

CREATE TABLE userSavedRecipies (
    recipeID SERIAL PRIMARY KEY,
    ingredientsID INT REFERENCES ingredients(ingredientsID),
    userGrocerID INT REFERENCES userGroceryMain(userGrocerID),
    recipeName VARCHAR(255),
    instructionsText text
);
```