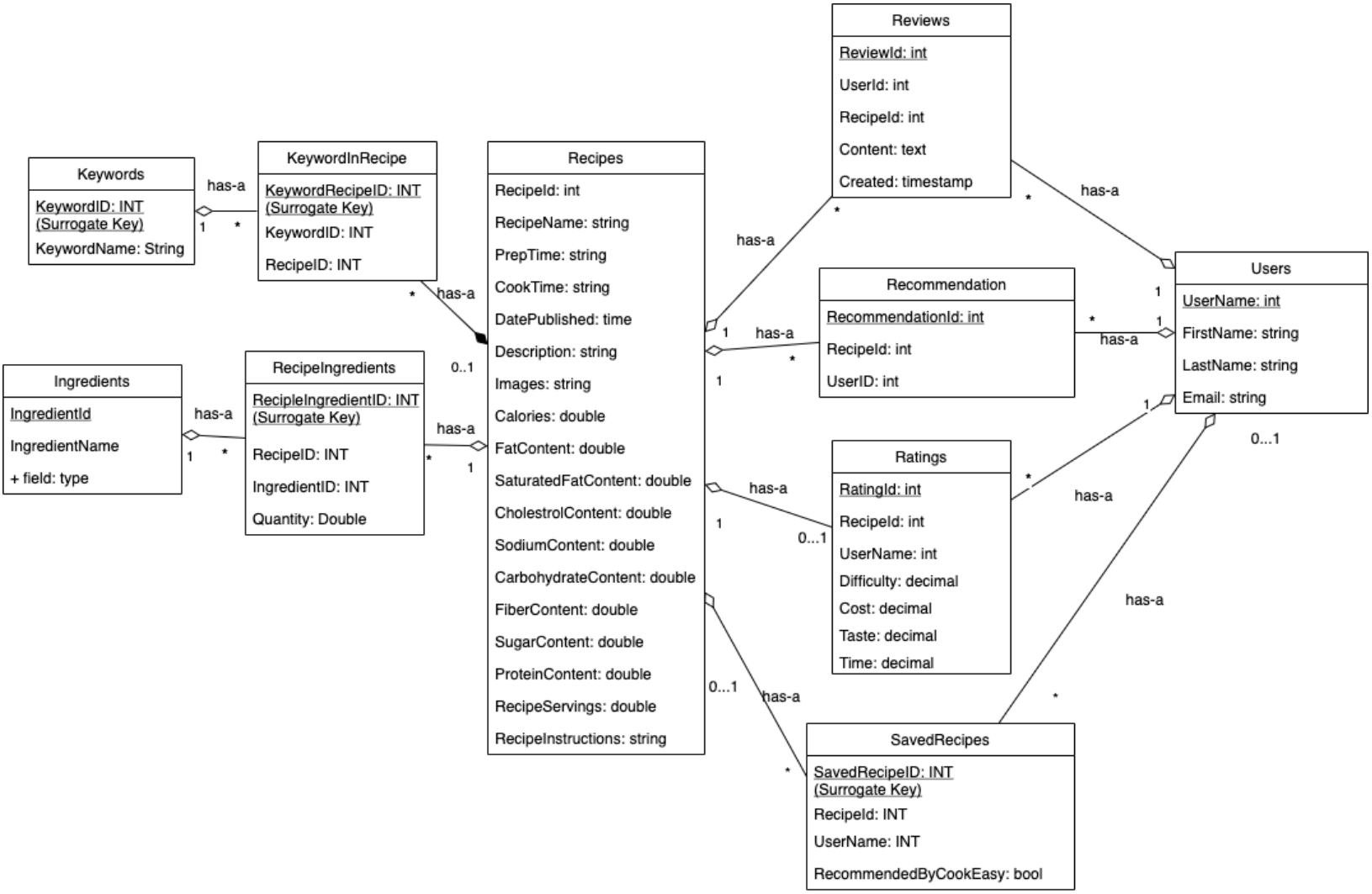
Project Milestone 2

UML:



Create Table Statements:

```
CREATE SCHEMA IF NOT EXISTS CookEasyDatabase;
USE CookEasyDatabase;

DROP TABLE IF EXISTS Keywords;
DROP TABLE IF EXISTS KeywordInRecipe;
DROP TABLE IF EXISTS Ingredients;
```

```
DROP TABLE IF EXISTS RecipeIngredients;
DROP TABLE IF EXISTS Recipes;
DROP TABLE IF EXISTS Users;
DROP TABLE IF EXISTS Reviews;
DROP TABLE IF EXISTS Recommendation;
DROP TABLE IF EXISTS Ratings;
DROP TABLE IF EXISTS SavedRecipes;

CREATE TABLE Keywords (
        KeywordID INT AUTO_INCREMENT,
        KeywordName VARCHAR(255),
  CONSTRAINT pk_Keywords_KeywordID
                PRIMARY KEY (KeywordID)
);

CREATE TABLE Ingredients (
        IngredientID INT AUTO_INCREMENT,
  IngredientName VARCHAR(255),
  CONSTRAINT pk_Ingredients_IngredientID
                PRIMARY KEY (IngredientID)
);

CREATE TABLE Recipes (
        RecipeID INT,
  RecipeName VARCHAR(255),
  PrepTime VARCHAR(255),   #NEED TO UNDERSTAND THIS BETTER
  CookTime VARCHAR(255),  #NEED TO UNDERSTAND THIS BETTER
  DatePublished DATE,
  # Description VARCHAR(255),
  Description LONGTEXT,      # change to LONGTEXT because the text is too long          by
LinLi
  # Images VARCHAR(1024),
  Images LONGTEXT,
  Calories DECIMAL (6, 1),      # change from (2, 1) to (6, 1) because we need more digits      by
LinLi
  FatContent DECIMAL (6, 1),
  SaturatedFatContent DECIMAL (6, 1),
  CholestrolContent DECIMAL (6, 1),
  SodiumContent DECIMAL (6, 1),
  CarbohydrateContent DECIMAL (6, 1),
  FiberContent DECIMAL (6, 1),
  SugarContent DECIMAL (6, 1),
```

```
  ProteinContent DECIMAL (6, 1),
  RecipeServings DECIMAL (6, 1),
  RecipeInstructions LONGTEXT,
  CONSTRAINT pk_Recipes_RecipeID
                PRIMARY KEY(RecipeID)
);

CREATE TABLE KeywordInRecipe (
        KeywordRecipeID INT AUTO_INCREMENT,
  KeywordID INT,
  RecipeID INT,
  CONSTRAINT pk_KeywordInRecipe_KeywordRecipeID
                PRIMARY KEY (KeywordRecipeID),
        CONSTRAINT fk_KeywordInRecipe_KeywordID
                FOREIGN KEY (KeywordID)
    REFERENCES Keywords(KeywordID)
    ON UPDATE CASCADE ON DELETE CASCADE,
        CONSTRAINT fk_KeywordInRecipe_RecipeID
                FOREIGN KEY (RecipeID)
    REFERENCES Recipes(RecipeID)
    ON UPDATE CASCADE ON DELETE CASCADE
  );

CREATE TABLE RecipeIngredients (
        RecipeIngredientID INT AUTO_INCREMENT,
  RecipeID INT,
  IngredientID INT,
  Quantity Double,
  CONSTRAINT pk_RecipeIngredients_RecipeIngredientID
                PRIMARY KEY (RecipeIngredientID),
        CONSTRAINT fk_RecipeIngredients_RecipeID
                FOREIGN KEY (RecipeID)
    REFERENCES Recipes(RecipeID)
    ON UPDATE CASCADE ON DELETE CASCADE,
        CONSTRAINT fk_RecipeIngredients_IngredientID
                FOREIGN KEY (IngredientID)
    REFERENCES Ingredients(IngredientID)
    ON UPDATE CASCADE ON DELETE CASCADE
  );

CREATE TABLE Users (
  UserName VARCHAR(255),
```

```
  FIrstName VARCHAR(255),
  LastName VARCHAR(255),
  Email VARCHAR(255),
  CONSTRAINT pk_Users_UserName
                PRIMARY KEY(UserName)
);

CREATE TABLE SavedRecipes (
        SavedRecipeID INT AUTO_INCREMENT,
  RecipeId INT,
  UserName VARCHAR(255),
  RecommendedByCookEasy bool,
  CONSTRAINT pk_SavedRecipes_SavedRecipeID
                PRIMARY KEY(SavedRecipeID),
        CONSTRAINT fk_SavedRecipes_RecipeID
                FOREIGN KEY(RecipeID)
    REFERENCES Recipes(RecipeID)
    ON UPDATE CASCADE ON DELETE CASCADE,
        CONSTRAINT fk_SavedRecipes_UserName
                FOREIGN KEY(UserName)
    REFERENCES Users(UserName)
    ON UPDATE CASCADE ON DELETE CASCADE,
        CONSTRAINT uq_SavedRecipes_RecipeIDUserName
                UNIQUE (RecipeID, UserName)
);

CREATE TABLE Ratings (
        RatingId INT,
  RecipeId INT,
  UserName VARCHAR(255),
  Difficulty DECIMAL (2, 1),
  Cost DECIMAL (2, 1),
  Taste DECIMAL (2, 1),
  Time DECIMAL (2, 1),
  CONSTRAINT pk_Ratings_RatingID
                PRIMARY KEY(RatingID),
        CONSTRAINT fk_Ratings_RecipeID
                FOREIGN KEY(RecipeID)
    REFERENCES Recipes(RecipeID)
    ON UPDATE CASCADE ON DELETE CASCADE,
        CONSTRAINT fk_Ratings_UserName
                FOREIGN KEY(UserName)
```

```
    REFERENCES Users(UserName)
    ON UPDATE CASCADE ON DELETE SET NULL,
        CONSTRAINT uq_Ratings_RecipeIDUserName
            UNIQUE (RecipeID, UserName)
);

CREATE TABLE Recommendation (
        RecommendationId INT,
  RecipeId INT,
  UserName VARCHAR(255),
  CONSTRAINT pk_Recommendation_RecommendationID
            PRIMARY KEY (RecommendationID),
        CONSTRAINT fk_Recommendation_RecipeID
            FOREIGN KEY (RecipeID)
    REFERENCES Recipes(RecipeID)
    ON UPDATE CASCADE ON DELETE CASCADE,
        CONSTRAINT fk_Recommendation_UserName
            FOREIGN KEY (UserName)
    REFERENCES Users(UserName)
    ON UPDATE CASCADE ON DELETE SET NULL,
        CONSTRAINT uq_Recommendation_RecipeIDUserName
            UNIQUE (RecipeID, UserName)
);

CREATE TABLE Reviews (
        ReviewId INT,
  UserName VARCHAR(255),
  RecipeId INT,
  Content VARCHAR(255),
  Created TIMESTAMP,
  CONSTRAINT pk_Reviews_ReviewID
            PRIMARY KEY (ReviewID),
        CONSTRAINT fk_Reviews_UserName
            FOREIGN KEY (UserName)
    REFERENCES Users(UserName)
    ON UPDATE CASCADE ON DELETE SET NULL,
        CONSTRAINT fk_Reviews_RecipeID
            FOREIGN KEY (RecipeID)
    REFERENCES Recipes(RecipeID)
    ON UPDATE CASCADE ON DELETE CASCADE,
        CONSTRAINT uq_Reviews_RecipeIDUserName
            UNIQUE (RecipeID, UserName)
```

);

Insert Statements:

Insert Data:

```
LOAD DATA INFILE 'G:/NEU/CS 5200/datasets/Recipes and Reviews/recipes2_0.csv'
	INTO TABLE Recipes
	FIELDS TERMINATED BY ',' OPTIONALLY ENCLOSED BY '"'
	LINES TERMINATED BY '\r\n'
	IGNORE 1 LINES
	(RecipeID, RecipeName, @dummy, @dummy, CookTime, PrepTime, @dummy, @val1,
  Description, Images, @dummy, @dummy, @dummy, @dummy, @dummy, @dummy, Calories,
  FatContent, SaturatedFatContent, CholestrolContent, SodiumContent, CarbohydrateContent,
  FiberContent, SugarContent, ProteinContent, @valServ, @dummy, RecipeInstructions,
  @dummy, @dummy, @dummy, @dummy, @dummy, @dummy, @dummy, @dummy, @dummy,
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  , @dummy, @dummy, @dummy, @dummy, @dummy, @dummy, @dummy, @dummy, @dummy,
@dummy)
  SET DatePublished = substr(@val1, 1, 10),
  RecipeServings = CASE WHEN @valServ NOT IN ('NA', 'NaN', '--') THEN @valServ END;
```
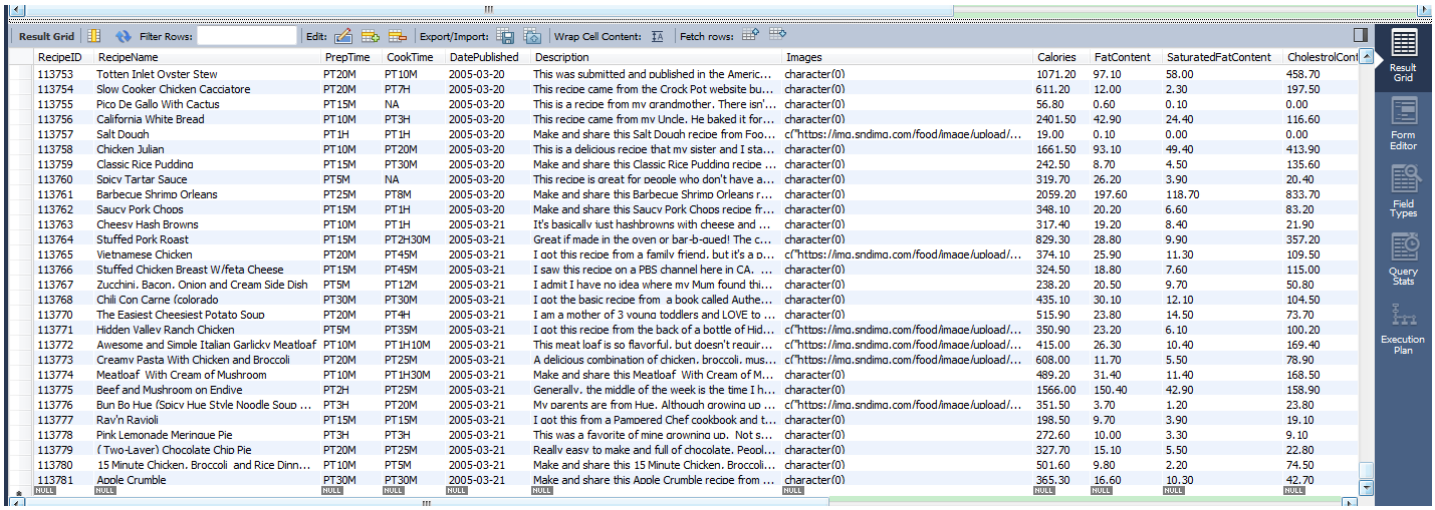

Row Counts:



Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Fetch rows:

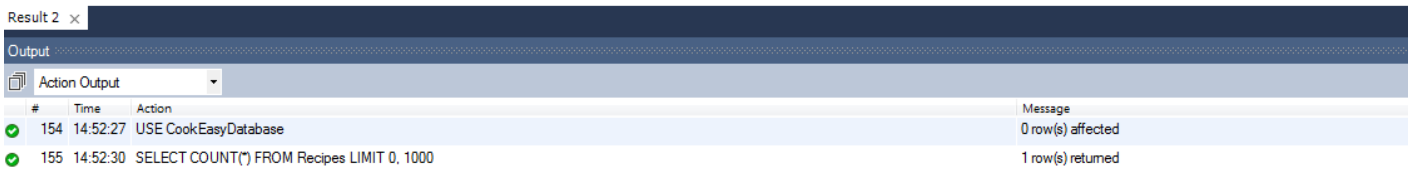
RecipeID	RecipeName	PrepTime	CookTime	DatePublished	Description	Images	Calories	FatContent	SaturatedFatContent	CholestrolCont
113753	Totten Inlet Oyster Stew	PT20M	PT10M	2005-03-20	This was submitted and published in the Americ...	character(0)	1071.20	97.10	58.00	458.70
113754	Slow Cooker Chicken Cacciatore	PT20M	PT7H	2005-03-20	This recipe came from the Crock Pot website bu...	character(0)	611.20	12.00	2.30	197.50
113755	Pico De Gallo With Cactus	PT15M	NA	2005-03-20	This is a recipe from my grandmother. There isn'...	character(0)	56.80	0.60	0.10	0.00
113756	California White Bread	PT10M	PT3H	2005-03-20	This recipe came from my Uncle. He baked it for...	character(0)	2401.50	42.90	24.40	116.60
113757	Salt Dough	PT1H	PT1H	2005-03-20	Make and share this Salt Dough recipe from Foo...	c("https://img.sndimg.com/food/image/upload/...	19.00	0.10	0.00	0.00
113758	Chicken Julian	PT10M	PT20M	2005-03-20	This is a delicious recipe that my sister and I sta...	character(0)	1661.50	93.10	49.40	413.90
113759	Classic Rice Pudding	PT15M	PT30M	2005-03-20	Make and share this Classic Rice Pudding recipe ...	character(0)	242.50	8.70	4.50	135.60
113760	Spicy Tartar Sauce	PT5M	NA	2005-03-20	This recipe is great for people who don't have a...	character(0)	319.70	26.20	3.90	20.40
113761	Barbecue Shrimp Orleans	PT25M	PT8M	2005-03-20	Make and share this Barbecue Shrimp Orleans r...	character(0)	2059.20	197.60	118.70	833.70
113762	Saucy Pork Chops	PT15M	PT1H	2005-03-20	Make and share this Saucy Pork Chops recipe fr...	character(0)	348.10	20.20	6.60	83.20
113763	Cheesy Hash Browns	PT10M	PT1H	2005-03-21	It's basically just hashbrowns with cheese and ...	character(0)	317.40	19.20	8.40	21.90
113764	Stuffed Pork Roast	PT15M	PT2H30M	2005-03-21	Great if made in the oven or bar-b-qued! The c...	character(0)	829.30	28.80	9.90	357.20
113765	Vietnamese Chicken	PT20M	PT45M	2005-03-21	I got this recipe from a family friend, but it's a p...	c("https://img.sndimg.com/food/image/upload/...	374.10	25.90	11.30	109.50
113766	Stuffed Chicken Breast W/feta Cheese	PT15M	PT45M	2005-03-21	I saw this recipe on a PBS channel here in CA. ...	character(0)	324.50	18.80	7.60	115.00
113767	Zucchini, Bacon, Onion and Cream Side Dish	PT5M	PT12M	2005-03-21	I admit I have no idea where my Mum found thi...	character(0)	238.20	20.50	9.70	50.80
113768	Chili Con Carne (colorado	PT30M	PT30M	2005-03-21	I got the basic recipe from a book called Authe...	character(0)	435.10	30.10	12.10	104.50
113770	The Easiest Cheesiest Potato Soup	PT20M	PT4H	2005-03-21	I am a mother of 3 young toddlers and LOVE to ...	character(0)	515.90	23.80	14.50	73.70
113771	Hidden Valley Ranch Chicken	PT5M	PT35M	2005-03-21	I got this recipe from the back of a bottle of Hid...	c("https://img.sndimg.com/food/image/upload/...	350.90	23.20	6.10	100.20
113772	Awesome and Simple Italian Garlicky Meatloaf	PT10M	PT1H10M	2005-03-21	This meat loaf is so flavorful, but doesn't requir...	c("https://img.sndimg.com/food/image/upload/...	415.00	26.30	10.40	169.40
113773	Creamy Pasta With Chicken and Broccoli	PT20M	PT25M	2005-03-21	A delicious combination of chicken, broccoli, mus...	c("https://img.sndimg.com/food/image/upload/...	608.00	11.70	5.50	78.90
113774	Meatloaf With Cream of Mushroom	PT10M	PT1H30M	2005-03-21	Make and share this Meatloaf With Cream of M...	character(0)	489.20	31.40	11.40	168.50
113775	Beef and Mushroom on Endive	PT2H	PT25M	2005-03-21	Generally, the middle of the week is the time I h...	character(0)	1566.00	150.40	42.90	158.90
113776	Bun Bo Hue (Spicy Hue Style Noodle Soup ...	PT3H	PT20M	2005-03-21	My parents are from Hue. Although growing up ...	c("https://img.sndimg.com/food/image/upload/...	351.50	3.70	1.20	23.80
113777	Ravi'n Ravioli	PT15M	PT15M	2005-03-21	I got this from a Pampered Chef cookbook and t...	character(0)	198.50	9.70	3.90	19.10
113778	Pink Lemonade Meringue Pie	PT3H	PT3H	2005-03-21	This was a favorite of mine growing up. Not s...	character(0)	272.60	10.00	3.30	9.10
113779	(Two-Layer) Chocolate Chip Pie	PT20M	PT25M	2005-03-21	Really easy to make and full of chocolate. Peopl...	character(0)	327.70	15.10	5.50	22.80
113780	15 Minute Chicken, Broccoli and Rice Dinn...	PT10M	PT5M	2005-03-21	Make and share this 15 Minute Chicken, Broccoli...	character(0)	501.60	9.80	2.20	74.50
113781	Apple Crumble	PT30M	PT30M	2005-03-21	Make and share this Apple Crumble recipe from ...	character(0)	365.30	16.60	10.30	42.70
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Result Grid | Form Editor | Field Types | Query Stats | Execution Plan

```
26 • SELECT COUNT(*) FROM Recipes;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

COUNT(*)
200000



Result 2

Output

Action Output

#	Time	Action	Message
154	14:52:27	USE CookEasyDatabase	0 row(s) affected
155	14:52:30	SELECT COUNT(*) FROM Recipes LIMIT 0, 1000	1 row(s) returned