



TOBB UNIVERSITY OF ECONOMICS AND TECHNOLOGY

BIL372 DATABASE SYSTEMS TERM PROJECT REPORT

“MY RECIPES”

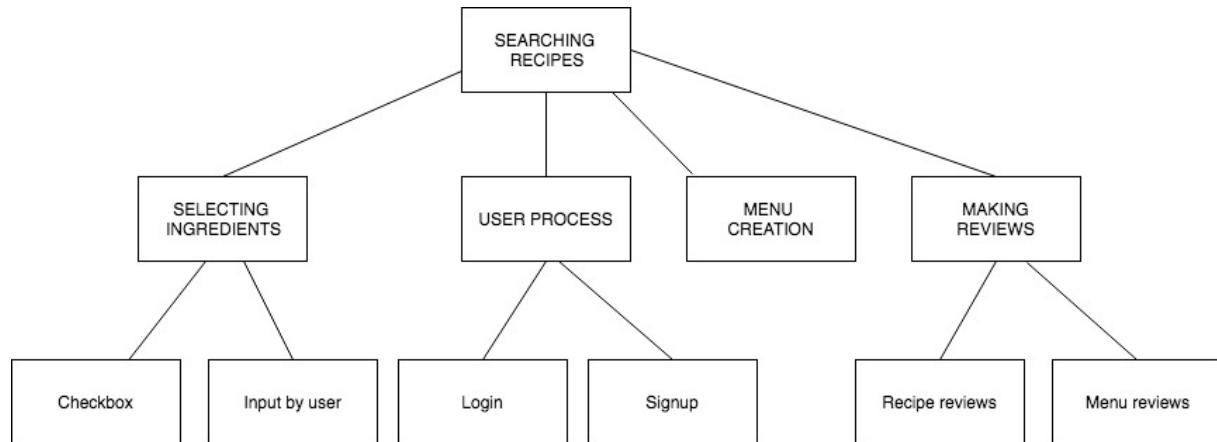
LEBAP AKMYRADOW
MUSTAFA TOKMAK
OSMAN URAL KESER
UTKU ÇUHADAROĞLU

Introduction

A recipe system was created for our Project. The system has been designed and implemented such that users can find the best fitting recipes according to their existing ingredients without signing up. The menu is created according to the ingredients selected by the members. The members also added the ability to comment and review on the recipes.

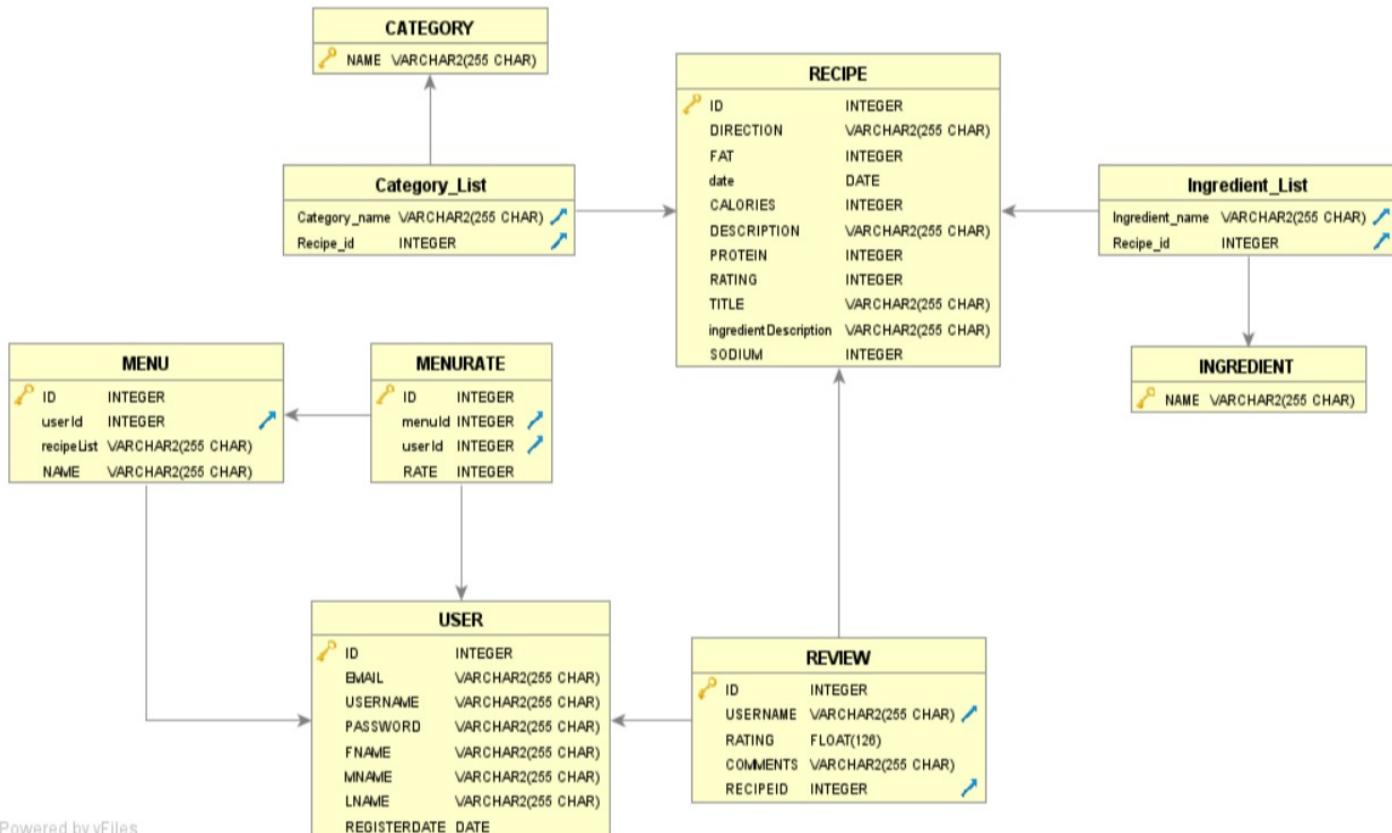
System Overview

HIPPO



Non-member users input the ingredients into the system and the system displays a list of recipes that matches best according to the given ingredients. Users create menus by signing up using their e-mail address, name, surname, date of birth and gender information. All members can comment and review on the recipes. Admin has the privilege of adding and removing the recipes to the system.

Database Schema



FUNCTIONS

Main SQL Query Sample

```
{  
  
    "username": "vinerra",  
    "password": "123123",  
    "keywords": ["ing1"],  
    "categories": false  
  
}
```

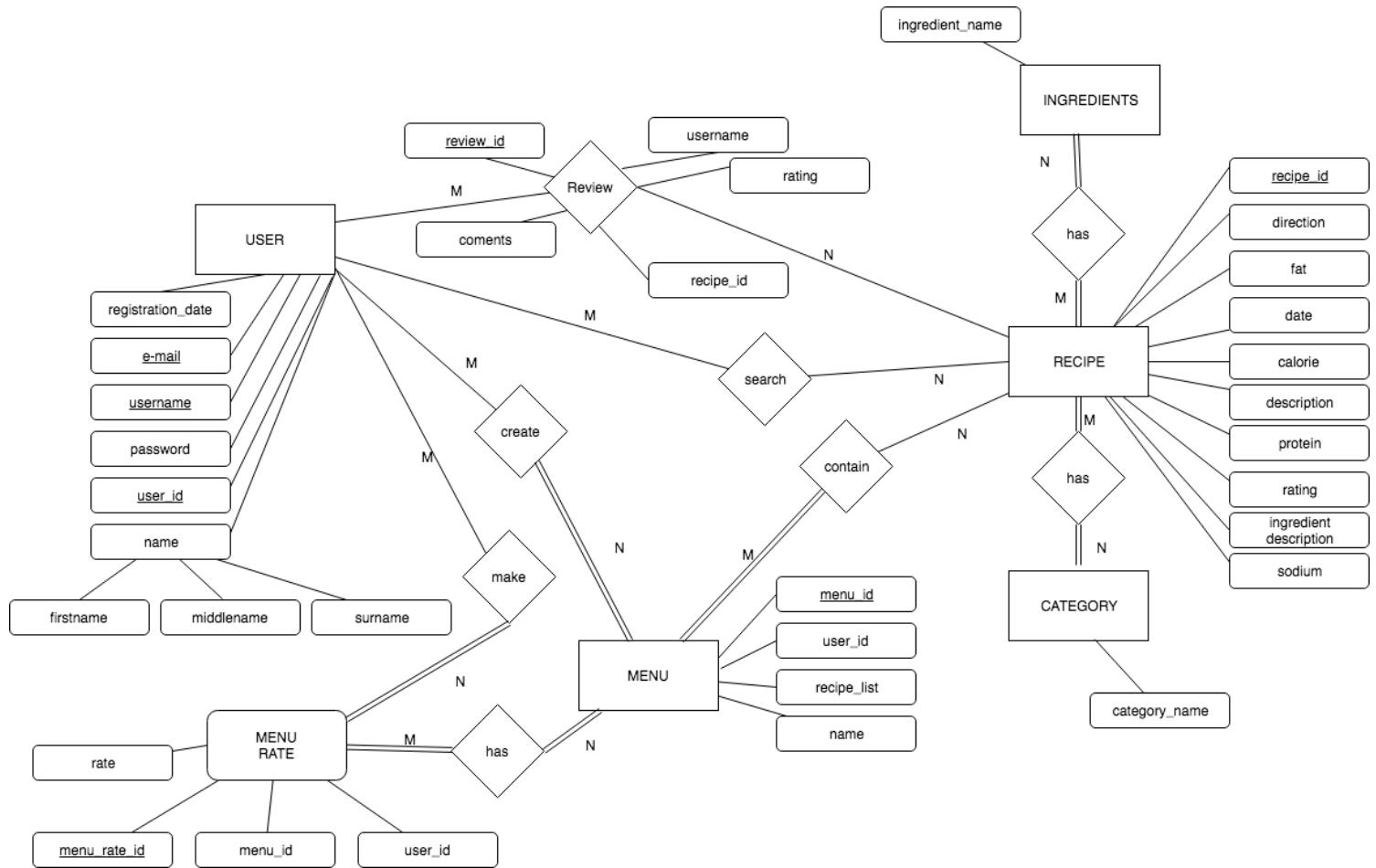
```
[  
  {  
      "direction": "asdasd",  
      "id": 3095,  
      "date": "20191125",  
      "fat": 111,  
      "calories": 123,  
      "description": "Test",  
      "protein": 123,  
      "rating": 11,  
      "title": "Ma",  
      "ingredientList": [  
          "ing1",  
          "ing2"  
      ],  
      "ingredientDescription": "description",  
      "sodium": 6,  
      "categoryList": [  
          "cat2",  
          "cat1"  
      ]  
  },  
  {  
      "direction": "asdasd",  
      "id": 73727,  
      "date": "20191125",  
      "fat": 111,  
      "calories": 123,  
      "description": "Test",  
      "protein": 123,  
      "rating": 2,  
      "title": "fasfasf",  
      "ingredientList": [  
          "ing1",  
          "ing2"  
      ],  
      "ingredientDescription": "description",  
      "sodium": 6,  
      "categoryList": [  
          "cat1",  
          "cat2"  
      ]  
  }  
]
```

Future Work

In the future, our project can be improved and new Technologies can be embedded that would make it easier for end users. One example for these new Technologies is Image recognition and image processing. Instead of inputting ingredients through search bar or checkbox, users can take a photo of ingredients using our mobile app. Afterward, through Image recognition, our mobile app would recognize the ingredients automatically and search our database for the best matching recipes.

APPENDIX

Appendix A- EER Diagram



Appendix B - DDL Script Sample

```

CREATE TABLE "DB_ADMIN"."USER"
(
    "ID" NUMBER(*,0) DEFAULT "DB_ADMIN"."ID_SEQ"."NEXTVAL" NOT NULL ENABLE,
    "EMAIL" VARCHAR2(255 CHAR),
    "USERNAME" VARCHAR2(255 CHAR),
    "PASSWORD" VARCHAR2(255 CHAR),
    "FNAME" VARCHAR2(255 CHAR),
    "MNAME" VARCHAR2(255 CHAR),
    "LNAME" VARCHAR2(255 CHAR),
    "REGISTERDATE" DATE,
    PRIMARY KEY ("ID")
)
USING INDEX PCTFREE 10 INITTRANS 2 MAXTRANS 255
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1
BUFFER_POOL DEFAULT FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "USERS" ENABLE,
    UNIQUE ("USERNAME")
USING INDEX PCTFREE 10 INITTRANS 2 MAXTRANS 255
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1
BUFFER_POOL DEFAULT FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "USERS" ENABLE
) SEGMENT CREATION IMMEDIATE
PCTFREE 10 PCTUSED 40 INITTRANS 1 MAXTRANS 255
NOCOMPRESS LOGGING
STORAGE(INITIAL 65536 NEXT 1048576 MINEXTENTS 1 MAXEXTENTS 2147483645
PCTINCREASE 0 FREELISTS 1 FREELIST GROUPS 1
BUFFER_POOL DEFAULT FLASH_CACHE DEFAULT CELL_FLASH_CACHE DEFAULT)
TABLESPACE "USERS" ;

```

Appendix C – Website GUI Screenshots



@mail Password Login Signup

Search

- Dairy +
- Vegetables +
- Bakery +
- Fruits +
- Spices +
- Meats +
- Fish +
- Seafood +
- Oils +
- Seasonings +



BREAKFAST

Bake English muffins to create a crispier version of classic French toast. Layer muffin halves with tart lemon sugar and strawberries, with more berries.



LUNCH

Peppery watercress is a perfect counterpoint to the bold flavors of the dressing on this super-size and satisfying sandwich. Perfect for your today lunch.



DESFRT



DINNFR



Sign up

@mail

Password

First name

Last name

Birth date
mm/dd/yyyy

Gender

Male Female Other

Submit



Dairy +

Vegetables +

Fruits +

Baking & Grains +

Added Sweetener +

Spices +

Meats +

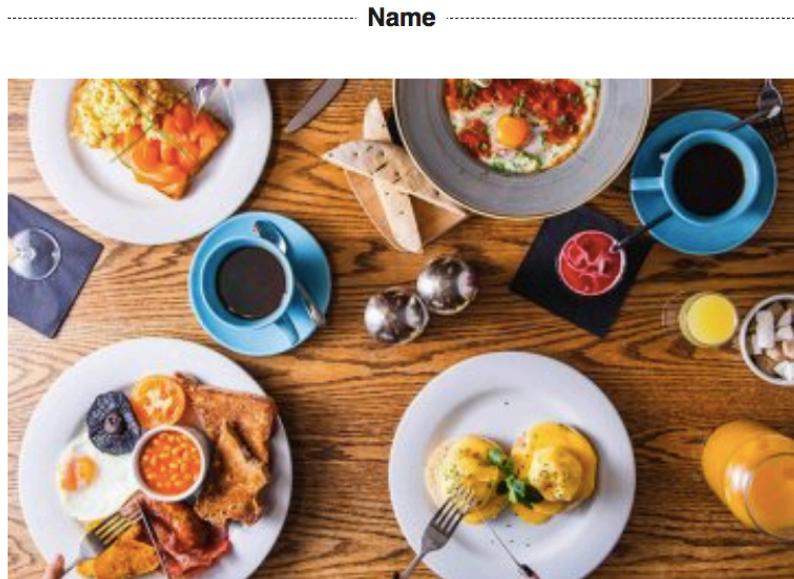
Fish +

Seafood +

Condiments +

Oils +

Seasonings +



NAME

Little text

We have Developed a recipes of shrimp mixed with vegetables. And it got a good response of you and we bereave your taste. Well let us see what behind of this crazy tasty dishes.



Search

Dairy -

- Eggs
- Parmesan cheese
- Butter
- Milk
- Shredded cheddar cheese
- Monterey Jack cheese
- Black olives
- Cheese
- Sweetened condensed milk
- 1% low-fat milk
- Mozzarella cheese
- Fresh parmesan cheese
- Plain yogurt
- Unsalted butter
- Parmigiano-reggiano cheese
- Honey
- Cottage cheese
- Angel Food cake
- Vanilla instant pudding mix
- Whipping cream
- Cherry pie filling
- Heavy cream
- Heavy whipping cream
- Fudge cake mix
- Phyllo dough
- Jalapeno olive

Vegetables +

@mail

Password

Login

Signup



BREAKFAST

Bake English muffins to create a crispier version of classic French toast. Layer muffin halves with tart lemon sugar and strawberries, with more berries.



LUNCH

Peppery watercress is a perfect counterpoint to the bold flavors of the dressing on this super-size and satisfying sandwich. Perfect for your today lunch.



DESSERT

Thinly sliced apples create rich, moist layers of fruit within the cake. Top with your choice of Browned Butter Frosting, Cream Cheese Frosting.



DINNER

Layered with brandy, dry sherry and sweet onions, Ina Garten's soup staple is best soaked up with crusty bread. Take a delicious dinner now.

Appendix D – Mobile app GUI Screenshots

