American International University-Bangladesh (AIUB)

Project Name: Cooking Recipe Portal

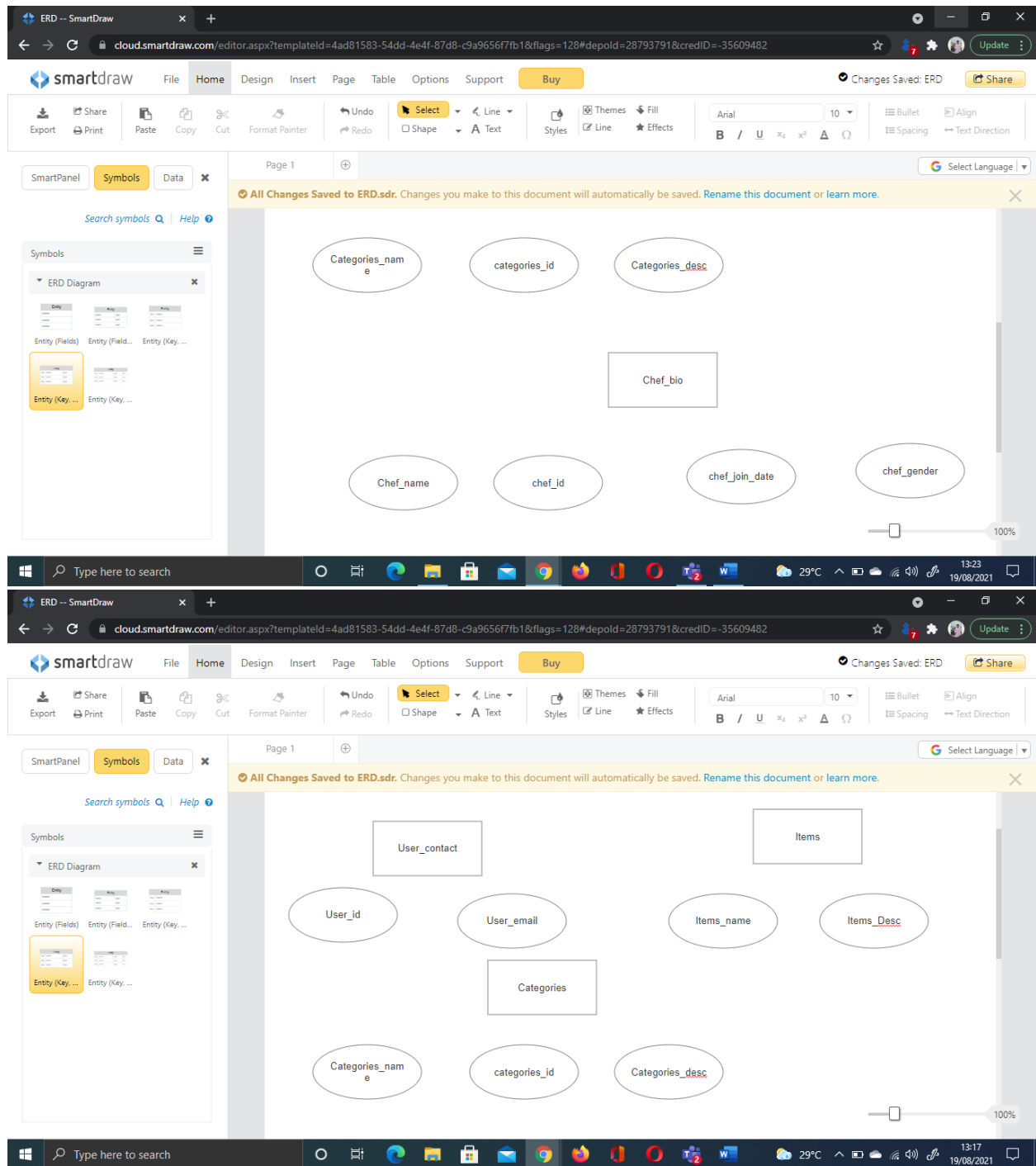| Name	ID
SANJANA AHMED SHUSME	20-42589-1
UDAY KUMAR SARKAR PRANTO	20-42941-1
MD ASIF KHAN	20-43075-1
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Scenario:

Cooking Recipe Portal is a portal where Chefs can post recipes. All recipes are stored in a table and Ingredients of the All Recipes in another table. All the recipes are divided into main Categories like Breakfast, Lunch, Dinner etc. Those categories are also divided into Food items like Rice, Juice, Ice-Cream etc. For Example, The **Rice** item, there are all rice related recipes. A user can easily find recipes through searching. Otherwise they can go to the category section. For example: If a user goes to the **Lunch** category, he can find all food items which are generally taken in **Lunch**. Then if he selects an item For Example, **Curry.** There he can find all **Curry** related recipes. Users can see the profile of the Chef and all ingredients related to a particular Recipe.

In our Portal we have,
5 Chefs Profile, 5 Users Profile, 5 Main Categories, 10 Items, 10 Recipes, 30 Recipe Ingredients List.
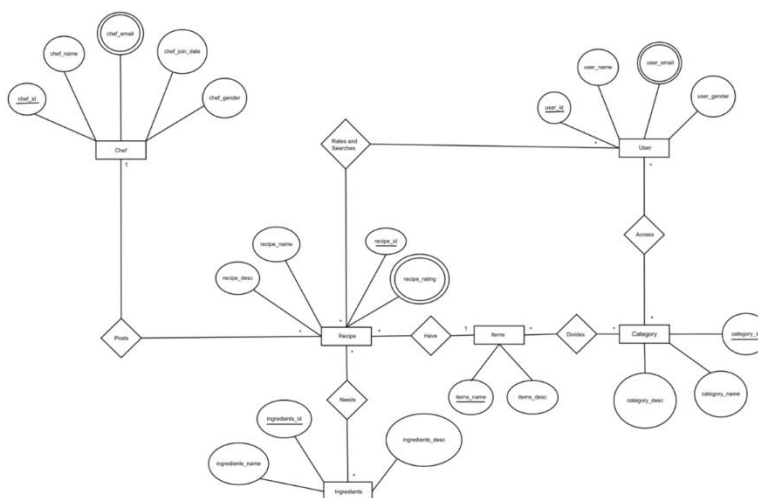
Entity Relationship Diagram (ER Diagram):

S

Normalization Final List :

NB :
"**Green** Colour For Primary Key
Multiple Green Colour For Composite Primary Key
Red Colour For Foreign Key"

1. **Chef_id**, Chef_name, Chef_join_date, Chef_gender
2. **Chef_id, Chef_email**
3. **Recipe_id**, Recipe_name, Recipe_desc, **Chef_id**, **Items_name**
4. **Recipe_id**, Recipe_Rating, **User_id**
5. **Ingredients_id**, Ingredients_name, Ingredients desc
6. **RI_id**, **Recipe_id**, **Ingredients_id**
7. **User_id**, User_name, User_gender
8. **User_id, User_email**
9. **UR_id**, **User_id**, **Recipe_id**
10. **Category_id**, Category_id, Category_desc
11. **UC_id**, **User_id**, **Category_id**
12. **Items_name**, Items_desc
13. **CI_id**, **Category_id**, **Items_name**

Table Create Screenshot

Chef Contact

SQL Commands

127.0.0.1:8080/apex/f?p=4500:1003:2380112903731764::NO:::

ORACLE Database Express Edition

Home   Logout   Help

User: SCOTT

Home > SQL > SQL Commands

☑ Autocommit Display 10000 ▾   Save   Run

```
4.INSERT INTO chef_bio( chef_id,chef_name,chef_join_date,chef_gender) VALUES ('C0004' ,'Michelle Rousseau' , '2-Jan-2020' ,'Male')

5.INSERT INTO chef_bio( chef_id,chef_name,chef_join_date,chef_gender) VALUES ('C0005' ,'Suzanne Rousseau' , '5-Jan-2020' ,'Female')
DESC Chef_Bio
Create table Chef_Contact(
Chef_id varchar2 (5),
Chef_email varchar2 (35)
)
```

Results Explain Describe Saved SQL History

Table created.

0.02 seconds

Language: en-us

Recipe Info

SQL Commands

127.0.0.1:8080/apex/f?p=4500:1003:2380112903731764::NO:::

ORACLE Database Express Edition

Home   Logout   Help

User: SCOTT

Home > SQL > SQL Commands

☑ Autocommit Display 10000 ▾   Save   Run

```
Create table Recipe_Info(

Recipe_id varchar2(5),
Recipe_name varchar2(50),
Recipe_desc varchar2(1200),
Chef_id varchar2(5),
Items_name varchar2(20)
)
```

Results Explain Describe Saved SQL History

Table created.

0.01 seconds

Language: en-us

Categories

Category Item

Ratings

The first screenshot shows the SQL Commands interface with the following code:

```
Create table Categories(
Category_id varchar2 (6),
Category_name varchar2 (20),
Category_desc varchar2 (500))

Alter table  Categories add constraint Cat_IDpk primary key(Category_id)

insert into Categories values('CT0001','Breakfast','Start your day with an easy pancake or omelet breakfast and many more')

insert into Categories values('CT0002','Lunch','Looking for a recipe for Lunch? We have a lot for you')
```

Results: Table created. 0.01 seconds

The second screenshot shows:

```
Create table Category_Item(

        CI_id varchar2 (6),
        Category_id varchar2 (6),
        Items_name varchar2 (30)
)

        Alter table  Category_Item  add constraint CatIt_IDpk primary key(CI_id)

Alter table Category_item add constraint CatIt_CIDfk foreign key(category_id) references categories(category_id)
```

Results: Table created. 0.01 seconds

☑ Autocommit Display [10000 ▼]   Save   Run

```
Create table Ratings(
Recipe_id varchar2(5),
Recipe_rating number(3,2),
User_id varchar2 (5)
)

Alter table Ratings add constraint Rat_IDRatck primary key(Recipe_id,Recipe_rating)

Alter table Ratings add constraint Rat_IDRatfk foreign key(User_id) references User_bio(User_id)

desc Ratings
```

Results Explain Describe Saved SQL History

Table created.

0.00 seconds

User Recipe

☑ Autocommit Display [10000 ▼]   Save   Run

```
Create table User_Recipe(

UR_id varchar2 (6),
User_id varchar2 (5),
Recipe_id varchar2 (5)
)

Alter table  User_Recipe add constraint URcp_IDpk primary key(Ur_id)
```

Results Explain Describe Saved SQL History

Table created.

0.01 seconds

Recipe Ingredients

ORACLE Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

Autocommit Display 10000

Save Run

```
create table Recipe_Ingredients(
RI_id varchar2 (6),
Recipe_id varchar2(5),
Ingredient_id number(4)
)
```

Results Explain Describe Saved SQL History

Table created.

0.00 seconds

Application Express 2.1.0.00.39
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Language: en-us

User Category

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User: SCOTT

Home > SQL > SQL Commands

Autocommit Display 10000

Save Run

```
insert into Recipe_Ingredients values ('RI0027','R0009',1002)
insert into Recipe_Ingredients values ('RI0028','R0009',1003)

insert into Recipe_Ingredients values ('RI0029','R0010',1002)
insert into Recipe_Ingredients values ('RI0030','R0010',1008)

Create table User_Category(
UC_id varchar2 (6),
User_id varchar2 (5),
Category_id varchar2 (6)
)
Alter table User_Category add constraint UCat_IDpk primary key(UC_id)
```

Results Explain Describe Saved SQL History

Table created.

0.00 seconds

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Language: en-us

Chef Bio

User Contact

User Bio

ingredients_info

Items

← → C ① 127.0.0.1:8080/apex/f?p=4500:1003:2109603627271301::NO:::

ORACLE Database Express Edition

Home Logout Help

User: SCOTT

Home > SQL > SQL Commands

☑ Autocommit **Display** [10 ▾]   Save Run

```
desc items
```

Results Explain Describe Saved SQL History

Object Type **TABLE** Object **ITEMS**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ITEMS	ITEMS_NAME	Varchar2	30	-	-	1	-	-	-
	ITEMS_DESC	Varchar2	300	-	-	-	✓	-	-
								1 - 2	

Application Express 2.1.0.00.39

Language: en-us

29°C
3:36 PM
8/19/2021

Add Constraints And Sequences

User: SCOTT

Home > SQL > **SQL Commands**

☑ Autocommit   **Display** 50   Save   Run

```
alter table  User_Contact add constraint Mango primary key(User_id,User_email)
```

Results   Explain   Describe   Saved SQL   History

Table altered.

0.01 seconds

Application Express 2.1.0.00.39

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ORACLE Database Express Edition   Home   Logout   Help

User: SCOTT

Home > SQL > **SQL Commands**

☑ Autocommit   **Display** 50   Save   Run

```
ALTER TABLE user_bio
ADD CONSTRAINT UB_bio
primary KEY (user_id)
```

Results   Explain   Describe   Saved SQL   History

Table altered.

0.00 seconds

Application Express 2.1.0.00.39

Language: en-us   Copyright © 1999, 2006, Oracle. All rights reserved.

User: SCOTT

Home > SQL > SQL Commands

☑ Autocommit Display 50 ⌄   Save   Run

```
Alter table User_Category add constraint UCat_IDpk primary key(UC_id)

Alter table User_Category add constraint UCat_UIDfk foreign key (User_id) references User_Bio(User_id)

Alter table User_Category add constraint UCat_UIDfk1 foreign key (Category_id) references Categories(Category_id)
```

Results Explain Describe Saved SQL History

Table altered.

0.02 seconds

User: SCOTT

Home > Object Browser

Sequences ⌄

ABC
INGREDIENTS_LIST

INGREDIENTS_LIST   Create ▼

Object Details Grants Dependencies SQL

Alter Drop

Min Value	1
Max Value	9999
Increment By	1
Cycle Flag	Y
Order Flag	N
Cache Size	0
Last Number	1011

aiub-logo.svg ^

View

Questions Related to Project:

1. A Particular Recipe got How much Average Rating

Query:

Select Recipe_name, AVG(Recipe_Rating) "Average Rating"
From Recipe_info, Ratings
Where Recipe_info.Recipe_id = Ratings.Recipe_id and Recipe_info.Recipe_id= 'R0001'
Group by Recipe_name

2. A Particular Chef posted How much Recipes

Query:

Select Chef_name, count(Recipe_id)
From Recipe_Info,chef_bio
Where Recipe_Info.chef_id = chef_bio.chef_id and chef_bio.chef_id = 'C0001'
Group by chef_name

3. Which Recipe Gets Highest Average Rating

Query:

Select recipe_name,avg(recipe_rating) "Rating"
From recipe_info, ratings
Where recipe_info.recipe_id = ratings.recipe_id
Group by recipe_name
Order by avg(recipe_rating) desc

4. Users Can See the Profile of Chefs

Query:

create or replace view UserSeesChef as
select *
from chef_bio
with read only

select * from UserSeesChef

5. How experienced a particular chef is in Days.

Query:

select Chef_name, Trunc((SYSDATE-Chef_Join_Date)) "Chef's Experience in Days"
from Chef_bio
order by (SYSDATE-Chef_Join_Date) desc

6. How much Ingredients have used in every Recipe

Query:

Select Recipe_name, Count(Ingredient_id)
From Recipe_Ingredients,Recipe_Info
Where Recipe_Ingredients.Recipe_id=Recipe_Info.Recipe_id
Group by Recipe_name

7. Which items belong to a particular Category.

Query:

Select items_name
From category_item
Where category_id = 'CT0001'

8. Which recipes are belongs to a particular Item

Query:

Select Items_name, Recipe_Name
From Recipe_info
Where Items = 'Juice'

9. Search a Recipe where Item name Ends with 'S'

Query:

Select Recipe_name,Items_name
From Recipe_Info
Where Items_name like '%S'

10. Find the recipes who get the equal rating which is items wise highest rating.

Query:

Select recipe_name, recipe_rating
From recipe_info, ratings
Where recipe_info.recipe_id=ratings.recipe_id and recipe_rating in (select max(recipe_rating)
From ratings, recipe_info
where ratings.recipe_id=recipe_info.recipe_id
Group by items_name)