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Project Name: Grubmaster

Group 35 - Step 6 (Final)

URL: http://flip3.engr.oregonstate.edu:9097/

SUMMARY:

The feedback and subsequent changes we made to Grubmaster can be broken down into three categories – database design, SQL, and user interface.

Database Design

Fortunately, our initial design didn't require significant changes to our entities, so our most significant feedback and changes in database design were related to specific attributes of a few entities. For example, in our earliest designs we had a number of summary statistics (e.g. city_restaurants_total) included as entity attributes. We later recognized that these would be handled by MySQL and removed them from our DB design.

SQL

We had to make a few slight changes to our SQL queries as we built out Grubmaster. Early on, we had designated several attributes as UNIQUE in our DDL (e.g. user_email). We decided to remove most UNIQUE labels because they caused problems when trying to add or update new records when NULL fields were allowed. For example, a User is not required to have an e-mail address, but when that attribute was UNIQUE, a new user couldn't be added if there was already a user that had the string 'NULL' as their email address. Additionally, we also adjusted Reviews so that it could accept a NULL user ID, to address the case where a review is added but the user has deleted their account. As a result, reviews can be edited but not deleted.

User Interface

Over the course of the term we made numerous UI changes to Grubmaster in response to peer feedback. In an early draft of the project, the page for each entity displayed all forms available to that entity, so several pages (e.g. Restaurants, Users) were very cluttered because so many forms were displayed on their pages. We decided to handle this with forms that are hidden by default and either appear after clicking a button (e.g. 'Add Restaurant') or send the user to a new page (e.g. 'Edit Restaurant'). Several users also suggested that we include more information to our homepage explaining how to use our application, which we subsequently did. We also made some minor design and styling changes to make the pages appear more visually appealing and make the pages more stylistically consistent.

A major UI omission and subsequent change we made based on feedback from our grader was the inclusion of a separate page for the Restaurant_has_cuisines intersection table. In our original design we used this table to facilitate M:N relationships in our database, but did not originally include a standalone page for the table.

<u>Updated Project Overview:</u>

Grubmaster is a new web application that strives to connect consumers/foodies with local restaurants throughout the United States. Through the Grubmaster application, Users can search for Restaurants by their City, Cuisine, rating, and leave Reviews for restaurants, and Restaurants can request to list their details on the platform. Grubmaster currently has 50 restaurants listed in each of the following cities: Portland, Seattle, San Francisco, and Los Angeles that currently serves 100 users. A database-driven website will allow Grubmaster to more efficiently track restaurant details and user engagement. Specifically, user engagement will be tracked by the number of reviews currently on the platform and the number of reviews associated with each user, with the goal of each user leaving at least one review for a restaurant of their choice.

Updated Database Outline:

Restaurants: Records details about available restaurants, including their name, website, email, and city.

Column Name	Datatype	Constraints	PK	FK
restaurant_id	int	NOT NULL, AUTO_INCREMENT, unique	Х	
restaurant_name	varchar(45)	NOT NULL		
restaurant_website	varchar(75)			
restaurant_email	varchar(75)			
city_id	int	NOT NULL		Y, ref Cities

Cuisines: Records the name of the available cuisines on our website.

Column Name	Datatype	Constraints		FK
cuisine_id	int	NOT NULL, AUTO_INCREMENT, unique	х	
cuisine_name	varchar(50)	NOT NULL		

Cities: Lists the locations we currently have available restaurants for and cities where we currently have customers from.

Column Name	Datatype	Constraints		FK
city_id	int	NOT NULL, AUTO_INCREMENT, unique	х	
city_name	varchar(50)	NOT NULL		

<u>Users:</u> Records details about users currently on the platform. Users can browse the platform without registering for an account, but cannot leave a review without first registering.

Column Name Datatype	Constraints	PK	FK
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user_id	int	NOT NULL, AUTO_INCREMENT, unique		
user_first_name	varchar(50)	NOT NULL		
user_last_name	varchar(50)	NOT NULL		
user_email	varchar(100)	NOT NULL, unique		
user_city_id	int	NOT NULL		Y, ref Cities

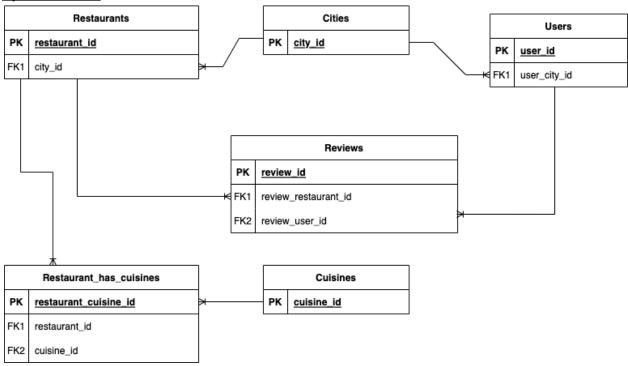
Reviews: Records details about restaurant reviews recorded on our platform. Reviews include specific ratings for each restaurant and the number of reviews currently associated with each user.

Column Name	Datatype	Constraints	PK	FK
review_id	int	NOT NULL, AUTO_INCREMENT, unique	х	
review_rating	int	NOT NULL, 1-5		
review_date	datetime	NOT NULL		
review_restaurant_id	int	NOT NULL		Y, ref Restaurants
review_user_id	int			Y, ref Users

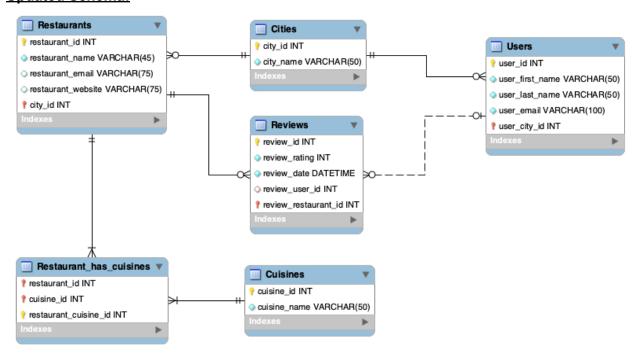
Restaurant_has_cuisines (intersection table)

Column Name	Datatype	Constraints		FK
restaurant_cuisine_id	int	NOT NULL, AUTO_INCREMENT, unique	х	
restaurant_id	int	NOT NULL		
cuisine_id	int	NOT NULL		

Updated ERD:



Updated Schema:



In this schema:

- Yellow key = Primary key
- Red key = Foreign key, identifying relationship (table cannot be identified without the foreign key)
- Blue Diamond = Not Null
- Red Diamond = Foreign key, non-identifying relationship

Sample Data:

Restaurants Sample Data

restaurant _id	restaurant_name	restaurant_website	restaurant_email	city_id
1	Savor	https://savor.menu/		1 (San Francisco)
2	Marufuku Ramen	https://www.marufukuramen .com/sanfrancisco		1 (San Francisco)
3	Screen Door Eastside	https://screendoorrestauran t.com/		2 (Portland)
4	Republique	https://republiquela.com/	info@republiquela.com	3 (Los Angeles)

Cuisines Sample Data

cuisine_id	cuisine_name
1	Mediterranean
2	Japanese
3	Cajun
4	French
5	Ramen
6	Southern
7	Vegetarian

Cities Sample Data

city_id	city_name			
1	San Francisco			
2	Portland			
3	Los Angeles			
4	San Diego			
5	Seattle			

Users Sample Data

user_id (PK)	user_first_name	user_last_name	user_email	user_city_id (FK)
1	Michael	Scott	mscott@gmail.com	3 (Los Angeles)
2	Pamela	Beesly	pbeesly@gmail.com	3 (Los Angeles)
3	Jim	Halpert	jhalpert@gmail.com	3 (Los Angeles)
4	Dwight	Schrute	dschrute@aol.com	2 (Portland)
5	Angela	Martin	amartin@yahoo.com	1 (San Francisco)

Reviews Sample Data

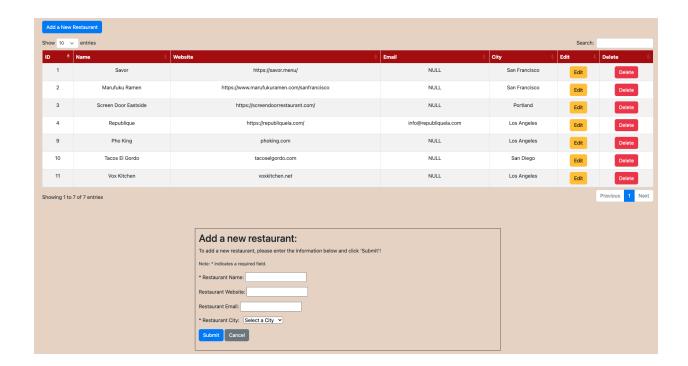
review_id (PK)	review_rating	review_restaurant_date	review_user_id (FK)	restaurant_id (FK)
1	3	10-05-2022	1 (Michael Scott)	4
2	4	02-10-2022	4 (Dwight Schrute)	3
3	5	04-20-2020	3 (Jim Halpert)	4
4	4	05-24-2021	2 (Pamela Beesly)	4

Restaurant_has_cuisines Data:

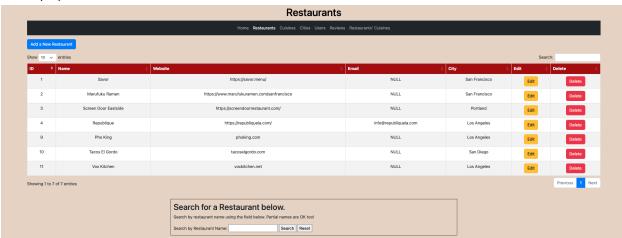
restaurant_cuisine_id	restaurant_id	cuisine_id
1	1 (Savor)	(1) Mediterranean
2	1 (Savor)	(7) Vegetarian
3	2 (Marufuku Ramen)	(2) Japanese
4	2 (Marufuku Ramen)	(5) Ramen
5	2 (Marufuku Ramen)	(7) Vegetarian
6	3 (Screen Door Eastside)	(3) Cajun
7	3 (Screen Door Eastside)	(6) Southern
8	4 (Republique)	(4) French

CRUD Operations Screen Captures:

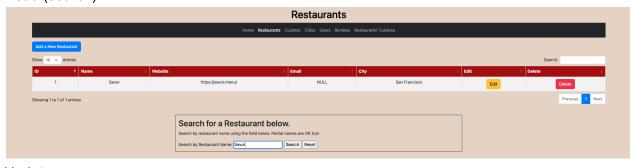
Restaurants



Read (all)



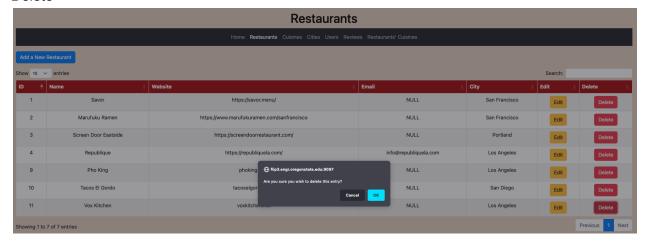
Read (search)



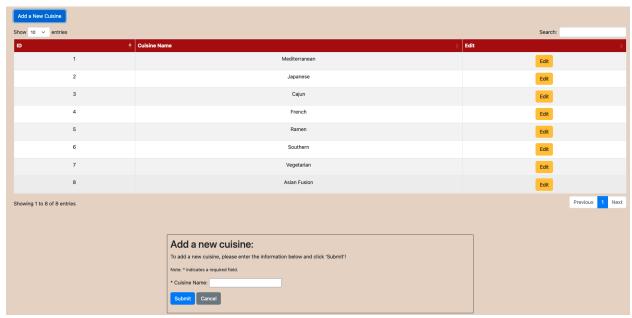
Update



Delete



Cuisines



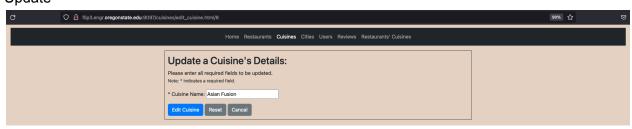
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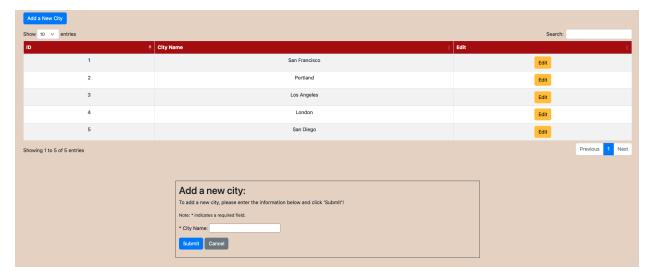
Read (search)



Update



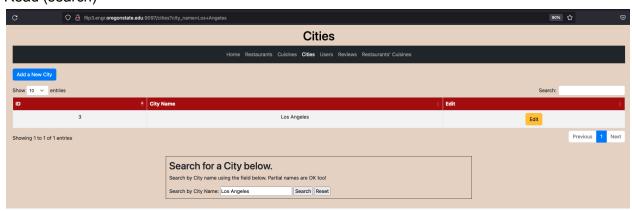
Cities



Read (all)



Read (search)

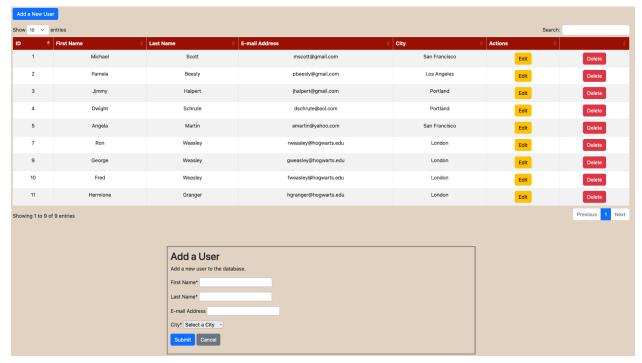


Update

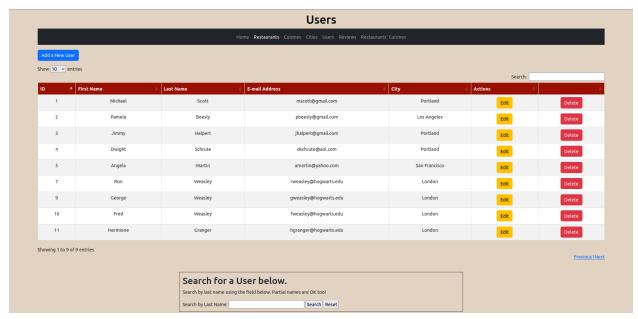


<u>Users</u>

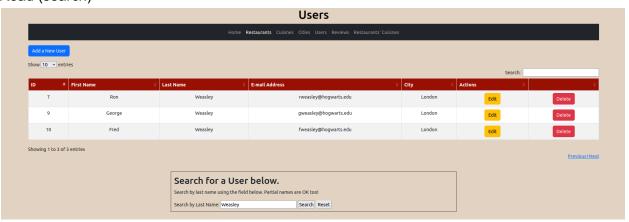
Create



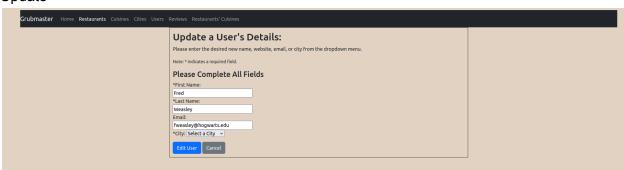
Read (all)



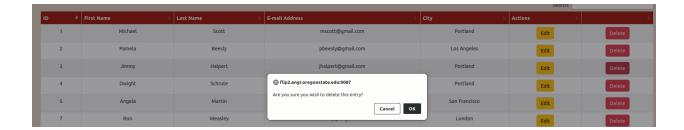
Read (search)



Update

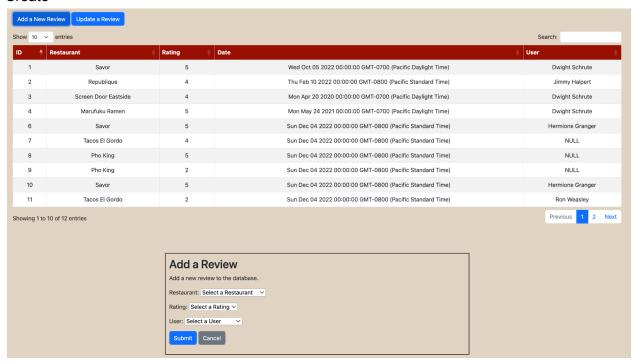


Delete

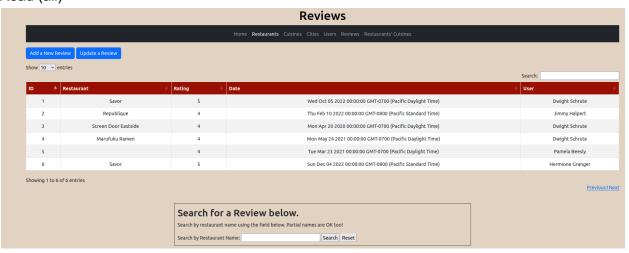


Reviews

Create



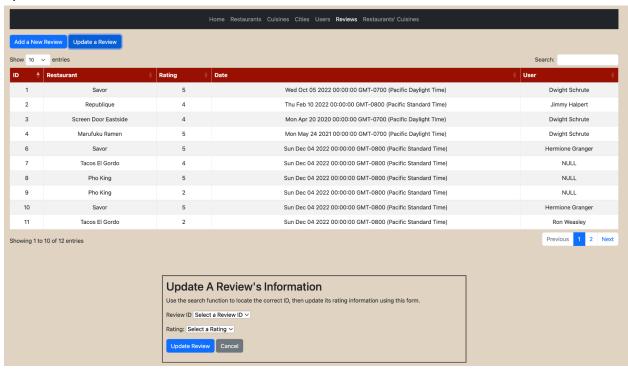
Read (all)



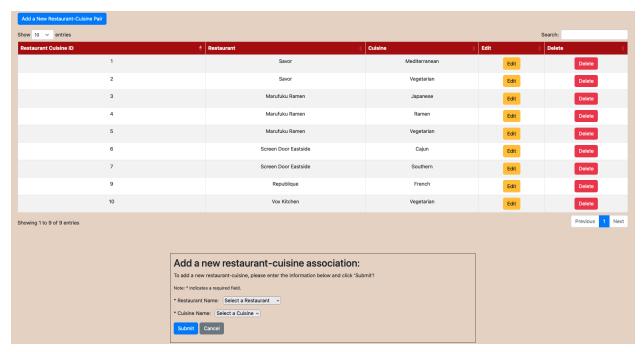
Read (search)



Update



Restaurants' Cuisines



Read (all)



Read (search)



Update



Delete

