Project Final Report

Team members: Gahyun Song, Wensheng Xu **Application**: Restaurant Rating Application

Video Demostration Link: https://youtu.be/gE8pa0Prq_w

Code and database dump: https://github.com/gahyun8876/CSE412

Queries used for searching: (bold and underlined parts are user inputs)

Search for restaurant:

SELECT DISTINCT restaurant.restaurant_id, restaurant.restaurant_name, restaurant.address, restaurant.average cost, restaurant.customer rating

FROM restaurant INNER JOIN (menu INNER JOIN food ON menu.menu_id = food.menu_id AND menu.restaurant_id = food.restaurant_id) ON restaurant.restaurant_id = menu.restaurant_id AND restaurant_id = food.restaurant_id AND menu.menu_id = food.menu_id

WHERE restaurant.restaurant_name LIKE '%Restaurant Name%'

AND restaurant.address LIKE '%Restaurant Address%'

AND menu.food_type LIKE '%Food Type%'

AND restaurant.customer_rating > Rating

AND restaurant.average_cost < <u>Average Cost</u>

AND food.food_name '%Food Name%';

Get average rating:

SELECT AVG(score) FROM rating WHERE rating.restaurant id = 'Restaurant ID';

Count rating:

SELECT COUNT(DISTINCT phone number) FROM rating WHERE rating.restaurant id = 'Restaurant ID';

Queries used for updates: (bold and underlined parts are user inputs)

Delete existing rating:

DELET FROM rating WHERE phone_number = 'Phone Number' AND restaurant_id = 'Restaurant ID';
Add new rating:

INSERT INTO rating(phone_number, restaurant_id, score) VALUES('Phone Number', 'Restaurant ID', Score);

Update average rating for restaurant:

With subquery AS (

SELECT AVG(score) AS average FROM rating INNER JOIN restaurant

ON rating.restaurant id = restaurant.restaurant id

WHERE rating.restaurant_id = 'Restaurant ID')

UPDATE restaurant SET customer_rating = subquery.average FROM subquery

WHERE restaurant_id = 'Restaurant ID';

Add new user:

INSERT INTO users(phone number) VALUES('Phone Number');

User Manual For Restaurant Rating Application

There are 2 parts of main functions.

- 1. Searching a restaurant function
 - a. Users can search for a restaurant by several conditions.
 - Restaurant Name
 - Restaurant Address
 - Food Type
 - Average Rating
 - Average Cost
 - Food Name
 - b. Users also can search for restaurants with more than one condition.
 - c. Users can search for restaurants with keywords instead of the full name of the restaurant food.
 - d. After users type information on the section that they want to search with, click the 'Search a restaurant' button.
 - e. Users have to enter their phone number when searching if they want to rate a restaurant.

2. Rating a restaurant function

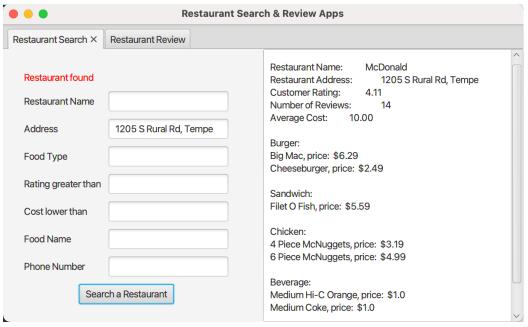
- a. Users have to select a restaurant.
- b. Users select a score in order to rate a restaurant.
 - Scale: (Poor) 1 5 (Wonderful)
- c. Users click the 'Submit Review' button.
- d. If a user rates a restaurant multiple times, the latest record will be used to calculate the average rating of the restaurant and older records will be deleted.
- e. The new user's phone number will be added to the users list when they rate a restaurant.

< Searching >

- Search by using single condition:
 - -> Search with Restaurant Name

	Restaurant Searc	ch & Review Apps	
Restaurant Search X	Restaurant Review		
Restaurant found		Restaurant Name: McDonald Restaurant Address: 1205 S Rural Rd, Tempe	^
Restaurant Name	McDonald	Customer Rating: 4.11 Number of Reviews: 14	
Address		Average Cost: 10.00	
Food Type		Burger: Big Mac, price: \$6.29 Cheeseburger, price: \$2.49	
Rating greater than		- · · ·	
Cost lower than		Sandwich: Filet O Fish, price: \$5.59	
Food Name		Chicken: 4 Piece McNuggets, price: \$3.19	
Phone Number		6 Piece McNuggets, price: \$4.99	
Sea	rch a Restaurant	Beverage: Medium Hi-C Orange, price: \$1.0 Medium Coke, price: \$1.0	· ·

-> Search with Restaurant Address



-> Search with Food Type

Restaurant Search & Review Apps			
Restaurant Search ×	Restaurant Review		
Restaurant found		Sandwich: Filet O Fish, price: \$5.59	
Restaurant Name		Chicken: 4 Piece McNuggets, price: \$3.19 6 Piece McNuggets, price: \$4.99	
Address		6 Piece McNuggets, price: \$4.99	
Food Type	Sandwich	Beverage: Medium Hi-C Orange, price: \$1.0 Medium Coke, price: \$1.0	
Rating greater than			
Cost lower than		Restaurant Name: Shawarma Paradise	
Food Name		Restaurant Address: 1045 E Lemon St, Tempe Customer Rating: 4.26	
Phone Number		Number of Reviews: 9 Average Cost: 10.00	
Seal	rch a Restaurant	Sandwich: Chicken Shawarma Sandwich, price: \$5.99	

-> Search with average rating of a restaurant

• • •	Restaurant	Search & Review Apps	
Restaurant Search ×	Restaurant Review		
Restaurant found		Restaurant Name: Thai Basil Restaurant Address: 1111 S Rural Rd, Tempe Customer Rating: 4.51	
Restaurant Name		Number of Reviews: 9 Average Cost: 20.00	
Address		Noodle:	
Food Type		Pad Thai, price: \$16.95 Chow Mein, price: \$16.95 Spicy Noodles, price: \$16.95	
Rating greater than	4.2	Drunken Noodles, price: \$16.95	
Cost lower than		Rice: Thai Fried Rice, price: \$16.95	
Food Name		Spicy Fried Rice, price: \$16.95 Pineapple Fried Rice, price: \$16.95	
Phone Number		Curry:	
Sear	rch a Restaurant	Red Curry, price: \$16.95 Green Curry, price: \$16.95 Yellow Curry, price: \$16.95	

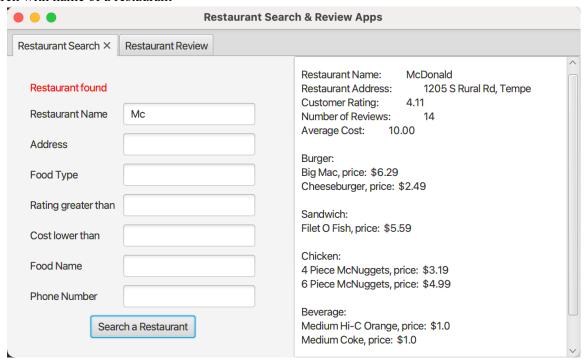
Restaurant Search & Review Apps			
Restaurant Search X	Restaurant Review		
Restaurant found Restaurant Name		Restaurant Name: McDonald Restaurant Address: 1205 S Rural Rd, Tempe Customer Rating: 4.11 Number of Reviews: 14 Average Cost: 10.00	
Address		Burger:	
Food Type		Big Mac, price: \$6.29 Cheeseburger, price: \$2.49	
Rating greater than		Sandwich:	
Cost lower than	15	Filet O Fish, price: \$5.59	
Food Name		Chicken: 4 Piece McNuggets, price: \$3.19 6 Piece McNuggets, price: \$4.99	
Phone Number		Beverage:	
Sea	rch a Restaurant	Medium Hi-C Orange, price: \$1.0 Medium Coke, price: \$1.0	

-> Search with Food Name

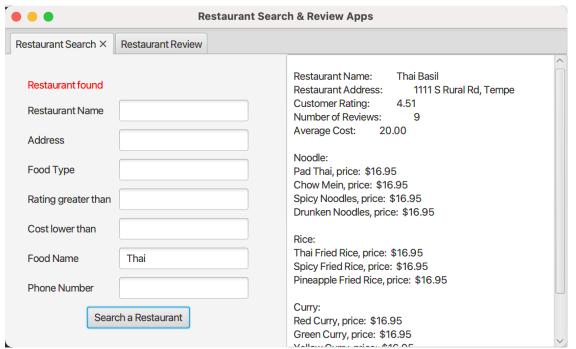
• • •	Restaurar	nt Search & Review Apps
Restaurant Search ×	Restaurant Review	
Restaurant found		Restaurant Name: Thai Basil Restaurant Address: 1111 S Rural Rd, Tempe
Restaurant Name		Customer Rating: 4.51 Number of Reviews: 9
Address		Average Cost: 20.00
Food Type		Noodle: Pad Thai, price: \$16.95 Chow Mein, price: \$16.95
Rating greater than		Spicy Noodles, price: \$16.95 Drunken Noodles, price: \$16.95
Cost lower than		Rice:
Food Name	Pad Thai	Thai Fried Rice, price: \$16.95 Spicy Fried Rice, price: \$16.95
Phone Number		Pineapple Fried Rice, price: \$16.95
Sear	rch a Restaurant	Curry: Red Curry, price: \$16.95 Green Curry, price: \$16.95
		Vollow Curry price: \$16.95

- Search by using keywords:

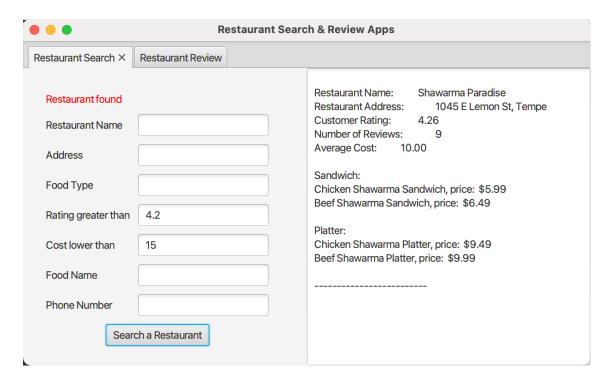
-> Search with name of a restaurant



-> Search with name of food name

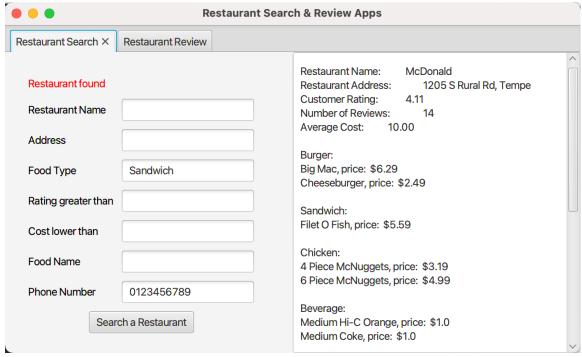


- Search by using multiple conditions:

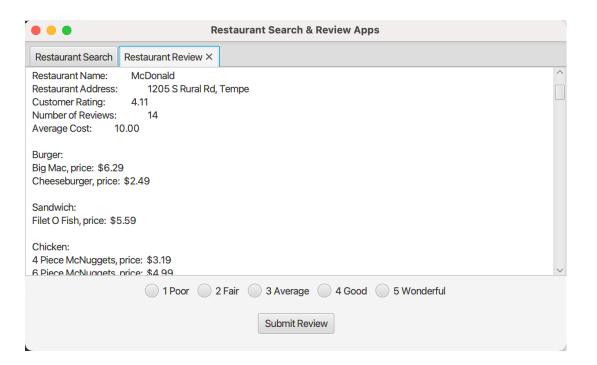


< Rating >

- -> Before rating:
 - Type information in one of the following conditions you want to search and your phone number.



• Go to 'Restaurant Review' page, select restaurant and score, and click 'Submit Review' button.



-> After rating: 'Number of Review' is increased by 1 and 'Customer Rating' is recalculated.

