PES UNIVERSITY Department of Computer Science & Engineering



DBMS - UE20CS301 Mini Project Online Food Ordering System

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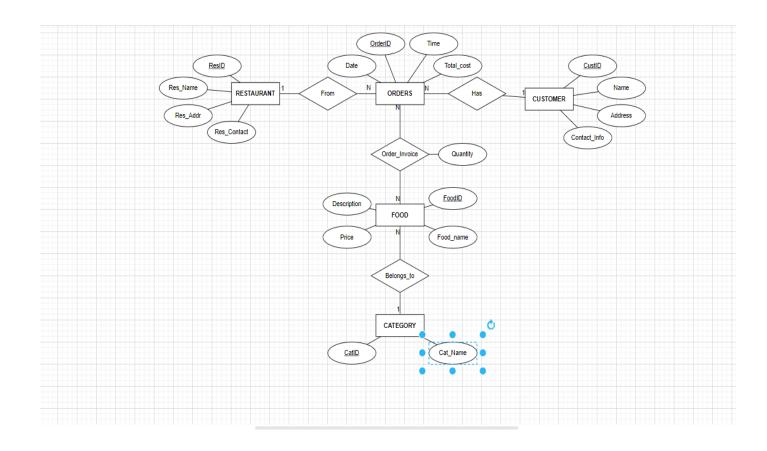
Table of Contents

SI.No	Title	Page No
1	Short Description and Scope of the Project	1
2	ER Diagram	2
3	Relational Schema	3
4	DDL statements	4-7
5	Populating the database	8-9
6	Join queries	10-11
7	Aggregate queries	12-13
8	Set queries	13-15
9	Functions and Procedure	16-17
10	Triggers and Cursors	18-19
11	Developing a Frontend	20-23

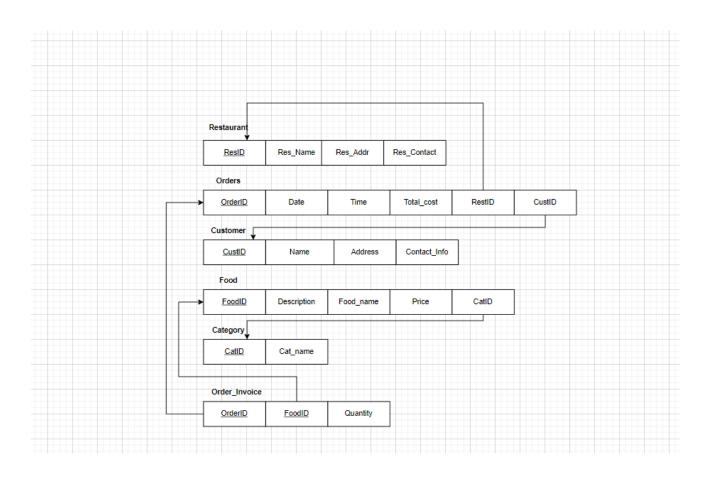
1. Short Description and Scope of the Project

The main objective of online food ordering system is to create a system that allows to order food online. The next important objective is to make the process of ordering quick, easy and convenient. The system is user friendly so that any person using it will not face any difficulties in operating it. The system has facilities that allows users to view menu card, select the category of the food, select the food under the given category in a particular restaurant, adjust the quantity of selected food, select address for food delivery and make the final payment. Data redundancy is reduced and less time consuming which increases the efficiency of the system.

2. ER Diagram



3. Relational Schema



4. DDL statements - Building the database

1) To create table 'category'

```
-- Table structure for table `category`
--

CREATE TABLE `category` (
   `catID` int(11) NOT NULL,
   `Name` varchar(50) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;

--
-- Dumping data for table `category`
--
```

2) To create table 'customer'

```
CREATE TABLE `customer` (
  `customer_id` int(4) NOT NULL,
  `customer_name` varchar(20) NOT NULL,
  `contact_number` varchar(11) NOT NULL,
  `address` varchar(30) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

3) To create table 'foods'

```
CREATE TABLE `foods` (
   `food_id` int(7) NOT NULL,
   `food_name` varchar(20) NOT NULL,
   `price_per_unit` decimal(5,2) NOT NULL,
   `catID` int(10) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

4) To create table 'order_food'

```
CREATE TABLE `order_food` (
    `order_id` int(4) NOT NULL,
    `customer_id` int(4) NOT NULL,
    `restaurant_id` int(3) NOT NULL,
    `total_cost` int(10) DEFAULT NULL,
    `order_time` timestamp NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp(),
    `order_status` varchar(10) DEFAULT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

5) To create table 'order_invoice'

```
CREATE TABLE `order_invoice` (
   `order_id` int(11) NOT NULL,
   `food_id` int(11) NOT NULL,
   `Quantity` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

6) To create table 'restaurant'

7) Alter Statements

```
ALTER TABLE `category`
 ADD PRIMARY KEY (`catID`);
ALTER TABLE `customer`
 ADD PRIMARY KEY (`customer_id`);
ALTER TABLE `foods`
 ADD PRIMARY KEY (`food_id`),
 ADD KEY `catID` (`catID`);
ALTER TABLE `order_food`
 ADD PRIMARY KEY (`order_id`),
 ADD KEY `restaurant_id` (`restaurant_id`),
 ADD KEY `customer_id` (`customer_id`);
ALTER TABLE `order_invoice`
 ADD PRIMARY KEY (`order_id`,`food_id`),
  ADD KEY `food_id` (`food_id`);
```

5. Populating the Database

1) Inserting into category table

```
INSERT INTO `category` (`catID`, `Name`) VALUES
(4001, 'North Indian'),
(4002, 'South Indian'),
(4003, 'Pizza'),
(4004, 'Burger');
```

2) Inserting into customer table

```
INSERT INTO `customer` (`customer_id`, `customer_name`, `contact_number`, `address`) VALUES
(1001, 'Aditya sharma', '9905673214', '01 SND, aundh, pune'),
(1002, 'Sharmila raman', '9945563231', '02 WBG, kothrud, pune'),
(1003, 'Praveen kumar', '9945656667', '03 QWE, wakad, pune'),
(1004, 'Mithali raj', '8618400612', '04 RTY, sanghavi, pune'),
(1005, 'Ishant sharma', '9901145211', '05 SGV, sanghavi, pune'),
(1006, 'Harshal patel', '7348923111', '06 ASD, ravet, pune'),
(1007, 'Uday patil', '9535888911', '07 BLA, baner, pune');
```

3) Inserting into foods table

```
INSERT INTO `foods` (`food_id`, `food_name`, `price_per_unit`, `catID`) VALUES
(9999411, 'allo paratha', '80.00', 4001),
(9999412, 'Dosa', '50.00', 4002),
(9999413, 'cheese pizza', '20.00', 4003),
(9999414, 'Veg Burger', '220.00', 4004);
```

4) Inserting into order_food table

```
INSERT INTO `order_food` (`order_id`, `customer_id`, `restaurant_id`, `total_cost`, `order_time`, `order_status`) VALUES (600, 1007, 105, 80, '2022-04-04 03:57:45', 'Delivered'), (601, 1002, 101, 20, '2022-04-04 04:45:22', 'Delivered'), (602, 1004, 104, 220, '2022-04-04 06:45:22', 'Pending'), (603, 1001, 105, 100, '2022-04-04 05:45:22', 'Pending'), (604, 1005, 107, 240, '2022-04-04 08:45:22', 'Pending'), (605, 106, 107, 60, '2022-04-04 07:45:20', 'Delivered'), (606, 1006, 106, 220, '2022-04-05 06:47:12', 'Cancelled'), (607, 1007, 106, 40, '2022-04-05 08:47:12', 'Delivered');
```

5) Inserting into order_invoice table

```
INSERT INTO `order_invoice` (`order_id`, `food_id`, `Quantity`) VALUES
(600, 9999411, 1),
(601, 9999413, 1),
(602, 9999414, 1),
(603, 9999412, 2),
(604, 9999411, 3),
(605, 9999413, 3),
(606, 9999414, 1),
(607, 9999413, 2);
```

6) Inserting into restaurant table

```
INSERT INTO `restaurant` (`restaurant_id`, `restaurant_name`, `rlocation`, `rrating`) VALUES
(101, 'hydrabadi spice', 'aundh', '4.5'),
(102, 'hotel green park', 'baner', '4.1'),
(103, 'saffron', 'pashan', '3.9'),
(104, 'thomson restro', 'sanghavi', '3.6'),
(105, 'laa unico', 'mukund nagar', '4.3'),
(106, 'blue water', 'ravet', '4.2'),
(107, 'jalsaa restaurant', 'wakad', '4.3');
```

6. Join Queries

Showcase at least 4 join queries

Write the query in English Language, Show the equivalent SQL statement and also a screenshot of the query and the results

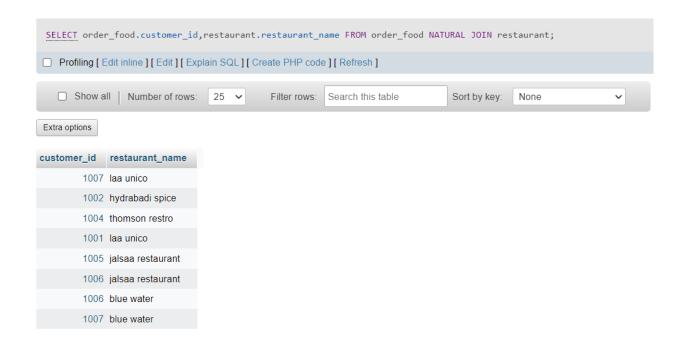
1) Update the total cost of each order using view table.



2) Find list of customers who have ordered after 11 am.



3) Find list of customer ids and the restaurant names they have ordered from.



4) Find the list of customers who have ordered from hydrabadi spice.



7. Aggregate Functions

Showcase at least 4 Aggregate function queries
Write the query in English Language, Show the equivalent SQL statement and also a screenshot of the query and the results

1) Find the list of customers who have made more than 1 order in a particular month.



2) Find the list of customers and their total number of orders from hydrabadi spice.



3) Find the number of orders whose order status is still pending.



4) Find the number of restaurants whose rating is more than 4.0.



8. Set Operations

Showcase at least 4 Set Operations queries Write the query in English Language, Show the equivalent SQL statement and also a screenshot of the query and the results

1) Find the list of customers names and ids who have ordered from restaurants hyderabadi spice and jalsaa restaurant.



2) Find the list of customers who have ordered either pizza category or burger category.



3) Find the list of customers who have ordered north Indian category and Pizza category.



4) Find the list of customers who have ordered cheese pizza and dosa.



9. Functions and Procedures

Create a Function and Procedure. State the objective of the function / Procedure. Run and display the results.

1) Write a function to check if the delivery of the order is past the delivery date or not.

```
DELIMITER $$
CREATE DEFINER=`root`@`localhost` FUNCTION `order_delivery_due_date`(`delivery_date` DATE) RETURNS varchar(50) CHARSET utf8mb4
BEGIN
DECLARE order value VARCHAR(50);
IF CURRENT DATE()>delivery date THEN
SET order_value ='Order Delivered';
ELSEIF CURRENT_DATE()<= delivery_date THEN</pre>
SET order value ='Order not Delivered';
SET order_value='Delivered but Customer didnt pay';
END IF;
RETURN order_value;
END$$
DELIMITER;
 SET @p0='2022-10-18'; SELECT `order_delivery_due_date`(@p0) AS `order_delivery_due_date`;
 Execution results of routine 'order_delivery_due_date'
  order_delivery_due_date
  Order Delivered
```

2) Write a procedure to find the total number of orders of a customer.

```
DELIMITER $$
CREATE PROCEDURE calculate_total_orders(IN ID int,out total_orders int)
BEGIN

DECLARE uid int;
SET uid = (SELECT customer.customer_id FROM customer WHERE ID=customer.customer_id);
set total_orders = (SELECT COUNT(*) FROM order_food WHERE order_food.customer_id = uid);
IF uid != NULL THEN

UPDATE order_food
set Total_orders = @total_orders WHERE order_food.customer_id = uid;
END IF;
END;$$
DELIMITER;
```

```
SET @p0='1006'; SET @p1='@M'; CALL `calculate_total_orders` (@p0, @p1); SELECT @p1 AS `total_orders`;

Execution results of routine `calculate_total_orders`

total_orders

2
```

10. Triggers and Cursors

Create a Trigger and a Cursor. State the objective. Run and display the results.

1) Create a trigger to show error message and stops the updation of order_invoice table if we update the value in the quantity column to a new value ten times greater than the current value.

```
DELIMITER $$

CREATE TRIGGER before_update_Accessories

BEFORE UPDATE

ON order_invoice FOR EACH ROW

BEGIN

DECLARE error_msg VARCHAR(255);

SET error_msg = ('The new quantity cannot be greater than 10 times the current quantity');

IF new.quantity > old.quantity * 10 THEN

SIGNAL SQLSTATE '45000'

SET MESSAGE_TEXT = error_msg;

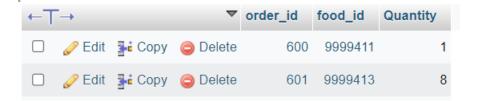
END IF;

END $$

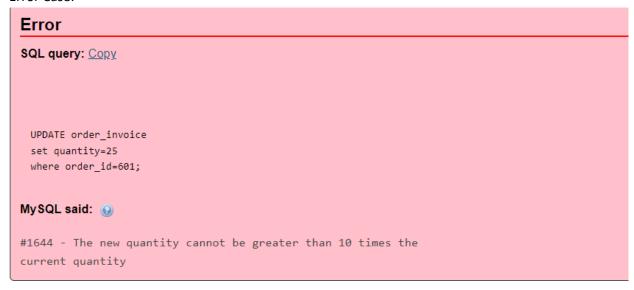
DELIMITER;
```

Normal case:





Error Case:



2) Write a procedure to find the total number of orders of a customer using a cursor.

```
BEGIN
   DECLARE uid int;
   DECLARE cursor1 CURSOR FOR SELECT customer.customer_id FROM customer WHERE ID=customer.customer_id;
   OPEN cursor1;
   FETCH cursor1 into uid;
   set total_orders = (SELECT COUNT(*) FROM order_food WHERE order_food.customer_id = uid);
   IF uid != NULL THEN
       UPDATE order_food
       set Total_orders = @total_orders WHERE order_food.customer_id = uid;
       CLOSE cursor1;
       END IF;
END
 SET @p0='1005'; SET @p1='@M'; CALL `total_orders`(@p0, @p1); SELECT @p1 AS `total_orders`;
 Execution results of routine `total_orders`
  total_orders
  1
```

11. Developing a Frontend

The frontend should support

- 1. Addition, Modification and Deletion of records from any chosen table
- 2. There should be an window to accept and run any SQL statement and display the result

1) Addition of record

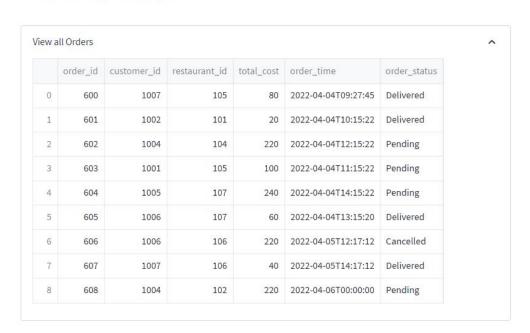
Online food ordering system

Enter Order Details:

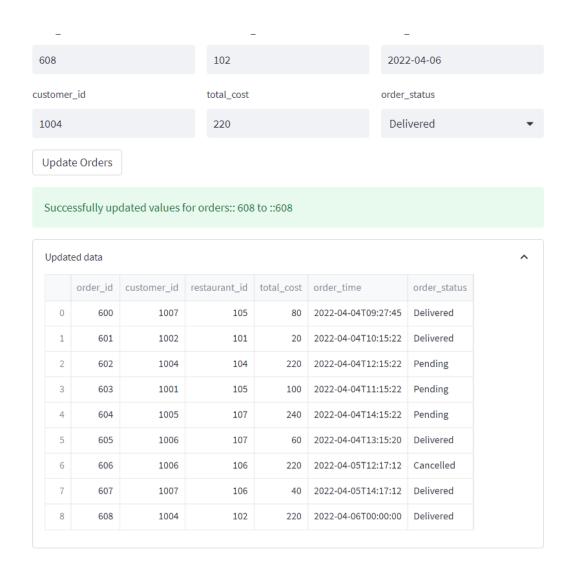


Made with Streamlit

View created tasks



2) Modification of record



3) Deletion of record



608

Do you want to delete ::608

Delete Order

Order has been deleted successfully

pdated data									
	order_id	customer_id	restaurant_id	total_cost	order_time	order_status			
0	600	1007	105	80	2022-04-04T09:27:45	Delivered			
1	601	1002	101	20	2022-04-04T10:15:22	Delivered			
2	602	1004	104	220	2022-04-04T12:15:22	Pending			
3	603	1001	105	100	2022-04-04T11:15:22	Pending			
4	604	1005	107	240	2022-04-04T14:15:22	Pending			
5	605	1006	107	60	2022-04-04T13:15:20	Delivered			
6	606	1006	106	220	2022-04-05T12:17:12	Cancelled			
7	607	1007	106	40	2022-04-05T14:17:12	Delivered			