University of British Columbia, Department of Computer Science

CPSC 304

Cover Page for Project Part __3____

Date: ___Apr 2nd, 2022_____

Project Group Number on Canvas: _66_____

Group Members:

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia.

Description of the final project:

The final project that we are modeling is the quarantine hotel management system. That is, we focus on the management system that can tracking people who are in hotel quarantine.

In this system, we are using the CPSC department's Oracle database system, using PHP as user interface to display the queries provided by the system.

The system is mainly uses for the quarantine department staff who can access/manage the quarantined peoples' data and search/update for related information. This system provides the following functions:

1. Adding/deleting quarantine people into/from the system
2. Counting the number of quarantine people
3. Showing the quarantine people information by different attribute
4. Displaying the volunteers' information and assigned people
5. Updating/Searching the Meal information
6. Searching the people who order meals

Due to SQLPLUS does not support the "update on cascade", we remove this from our code. Other than that, the rest of the schemas are the same.

List of all SQL queries used:

1. Insert: Add new quarantine people into the database (table) by providing their information

```
INSERT INTO QQ
VALUES (:bind1, :bind2, :bind3, :bind4, :bind5, :bind6, :bind7, :bind8)
```

2. Delete: Delete quarantine people from the database (table) by providing the ID

```
DELETE FROM QQ
WHERE ID ='" . $id_to_delete . "'
```

3. Update: Update the price of meal

```
UPDATE MOP SET Price='" . $new_price . "'
WHERE Price='" . $old_price . "'
```

4. Selection: Find the volunteer information by select the minimum and maximum age

```
SELECT *
FROM VAW
WHERE Age >'" . $minAge . "' AND Age <'" . $maxAge . "'
```

5. Projection: Show the selected information for quarantine people

```
SELECT ID FROM QQ
```

6. Join: Find volunteer and the assigned quarantine people by the vaccination status

```
SELECT qp.ID, qp.QName, qp.Phone, qp.VaccinationStatus, qp.Check_inTime,
qp.Check_outTime, qp.HAddress, qp.HName, a.VolunteerID
FROM QQ qp, Assist a
WHERE qp.ID = a.ID AND qp.VaccinationStatus = 1
```

7. Aggregation: Count the total number of quarantine people

```
SELECT Count(*) FROM QQ
```

8. Nested Aggregation with Group By: Find the mealtime that the average price of meal is the minimum over all mealtimes

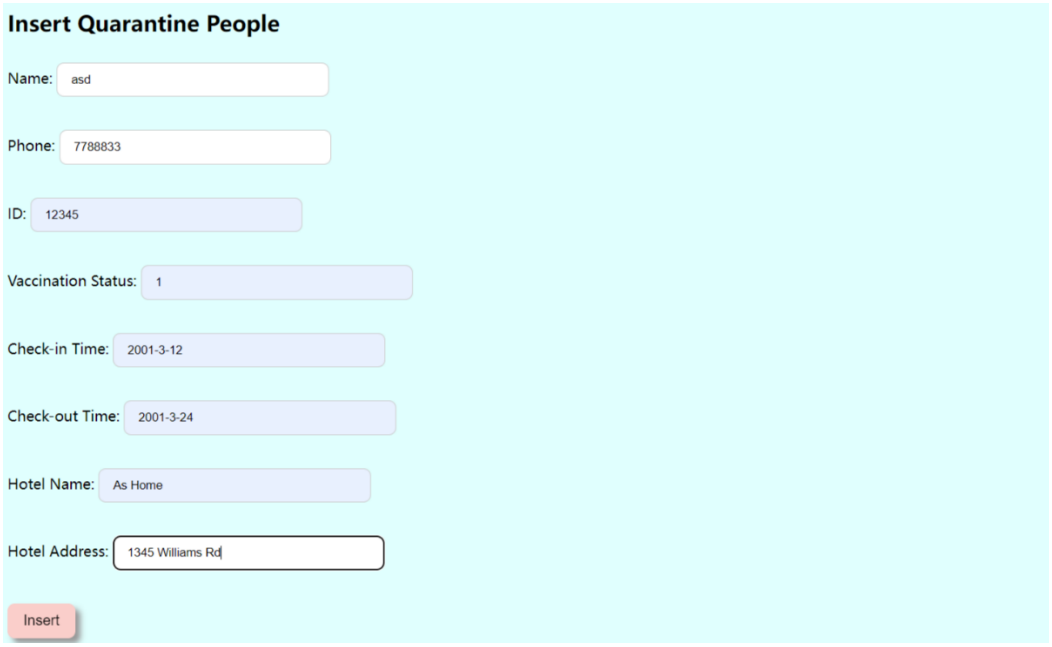
```
SELECT M.Mealtime, AVG(M.Price)
FROM MOP M
GROUP BY M.Mealtime Having AVG(M.Price) <= ALL
    (SELECT AVG(M2.Price)
    FROM MOP M2
    GROUP BY M2.Mealtime)
```

9. Division: Find people who order in all mealtime

```
SELECT Q.Qname
FROM QQ Q
WHERE NOT EXISTS (SELECT DISTINCT M.Mealtime
        FROM MOP M
        WHERE NOT EXISTS (SELECT M2.Mealtime
                FROM MOP M2
                WHERE M2.Mealtime =  M.Mealtime AND M2.ID = Q.ID))
```

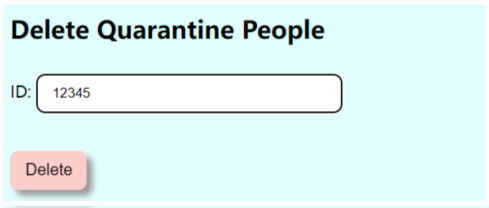
Screenshots of the sample output:

1. Insert: Add new quarantine people into the database (table) by providing their information



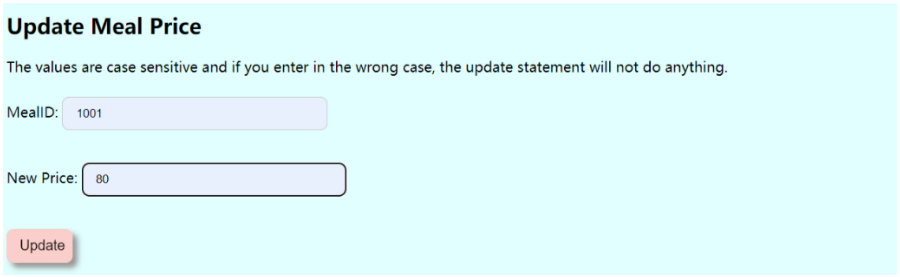
ID	QName	Phone	VaccinationStatus	Check_inTime	Check_outTime	HName	HAddress
12345	asd	7788833	1	2001-3-12	2001-3-24	As Home	1345 Williams Rd
E3579124	Robert Wang	17788987114	3	2021-10-10	2021-10-24	As Home	1345 Williams Rd
G9123574	Juvenal Rais	16046867812	2	2021-11-8	2021-11-15	7 Days	268 14 Ave
L3546594	Itai Tomic	12359741455	2	2021-11-10	2021-11-17	Holiday Inn	134 Broadway St
342687952	Augustina Gupta	17787555169	3	2021-12-9	2021-12-16	Super 8	10118 Gilbert Rd
798563128	Rozalija Banner	16048187970	1	2021-12-10	2021-12-17	As Home	1345 Williams Rd
EG5134124	Gracey Mcneill	19887117784	3	2021-10-10	2021-10-24	As Home	1345 Williams Rd
LX91489574	Kiara Hastings	16867604812	2	2021-11-8	2021-11-15	7 Days	268 14 Ave
789142857	Kaydan Lam	12351455974	2	2021-11-10	2021-11-17	Holiday Inn	134 Broadway St
742578891	Aled Reilly	17787732519	3	2021-12-9	2021-12-16	Super 8	10118 Gilbert Rd
127985638	Alaw Sampson	16049741970	2	2021-12-10	2021-12-17	Sheraton	4606 Ferguson Rd

2. Delete: Delete quarantine people from the database (table) by providing the ID



ID	QName	Phone	VaccinationStatus	Check_inTime	Check_outTime	HName	HAddress
E3579124	Robert Wang	17788987114	3	2021-10-10	2021-10-24	As Home	1345 Williams Rd
G9123574	Juvenal Rais	16046867812	2	2021-11-8	2021-11-15	7 Days	268 14 Ave
L3546594	Itai Tomic	12359741455	2	2021-11-10	2021-11-17	Holiday Inn	134 Broadway St
342687952	Augustina Gupta	17787555169	3	2021-12-9	2021-12-16	Super 8	10118 Gilbert Rd
798563128	Rozalija Banner	16048187970	1	2021-12-10	2021-12-17	As Home	1345 Williams Rd
EG5134124	Gracey Mcneill	19887117784	3	2021-10-10	2021-10-24	As Home	1345 Williams Rd
LX91489574	Kiara Hastings	16867604812	2	2021-11-8	2021-11-15	7 Days	268 14 Ave
789142857	Kaydan Lam	12351455974	2	2021-11-10	2021-11-17	Holiday Inn	134 Broadway St
742578891	Aled Reilly	17787732519	3	2021-12-9	2021-12-16	Super 8	10118 Gilbert Rd
127985638	Alaw Sampson	16049741970	2	2021-12-10	2021-12-17	Sheraton	4606 Ferguson Rd

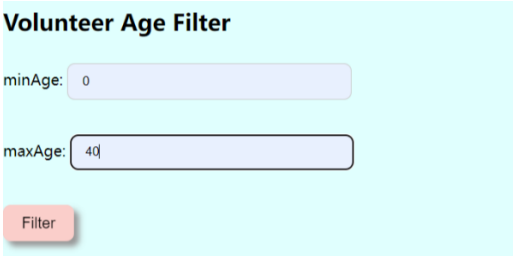
3. Update: Update the price of meal



Update successful!<

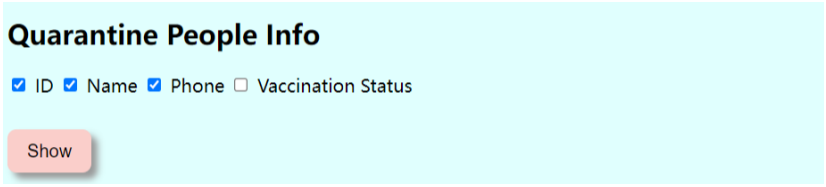
MealID	Price	Mealtime	ID	RName	RAddress
1001	80	0	E3579124	SuperDilicious	135 Williams Rd

4. Selection: Find the volunteer information by select the minimum and maximum age



VolunteerID	Age	VName	RecordID	HName	HAddress
101	22	Rob	100001	As Home	1345 Williams Rd
102	25	Bill	100002	7 Days	268 14 Ave
103	20	Kevin	100003	Holiday Inn	134 Broadway St
104	30	Leo	100009	Super 8	10118 Gilbert Rd
106	26	Annie	100004	Super 8	10118 Gilbert Rd
105	28	Sarah	100010	Sheraton	4606 Ferguson Rd

5. Projection: Show the selected information for quarantine people



ID	QName	Phone
E3579124	Robert Wang	17788987114
G9123574	Juvenal Rais	16046867812
L3546594	Itai Tomic	12359741455
342687952	Augustina Gupta	17787555169
798563128	Rozalija Banner	16048187970
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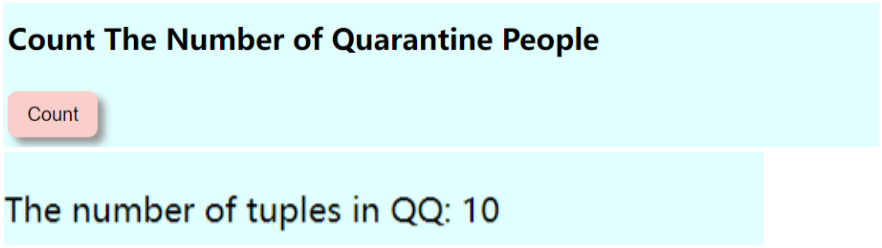
789142857	Kaydan Lam	12351455974
742578891	Aled Reilly	17787732519
127985638	Alaw Sampson	16049741970

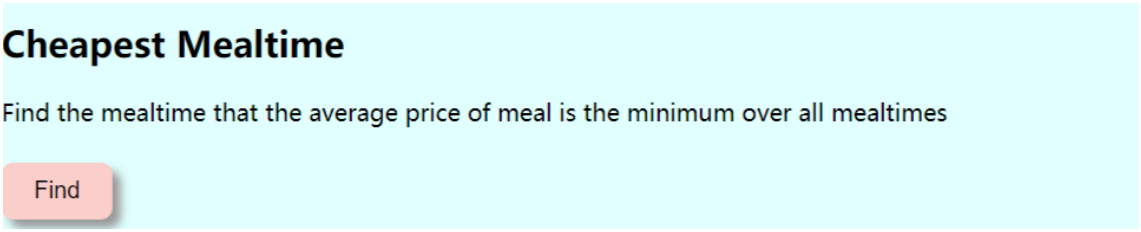
6. Join: Find volunteer and the assigned quarantine people by the vaccination status

ID	QName	Phone	VaccinationStatus	Check_inTime	Check_outTime	HAddress	HName	VolunteerID
342687952	Augustina Gupta	17787555169	3	2021-12-9	2021-12-16	10118 Gilbert Rd	Super 8	106
742578891	Aled Reilly	17787732519	3	2021-12-9	2021-12-16	10118 Gilbert Rd	Super 8	104

7. Aggregation: Count the total number of quarantine people



8. Nested Aggregation with Group By: Find the mealtime that the average price of meal is the minimum over all mealtimes



Mealtime	Averageprice
0	21.666666666666666666666666666666666666667

9. Division: Find people who order in all mealtime