Deliverable 2

Course Project

Matthieu Frenette (mfren089@uottawa.ca)
Félix Meunier (fmeun013@uottawa.ca)
Leah Young (lyoun074@uottawa.ca)

Paula Branco
CSI2132 – A02

Application Implementation

Software Information

- PostgreSQL (pgAdmin)
- Java

Installation Instructions

1. Download the .zip file containing this report, Java application folder, and addendum files.
2. From the command line, run `java -jar Customer_App.jar` for the customer application or a for the employee application.
3. Follow in-app instructions.

Point Answers

Point 4

A

Point 5

See db_sql_queries.txt in addendum_files for all SQL queries used to create the database.

Point 6

See roomgen.txt, empgen.txt, amengen.txt in addendum_files for INSERT queries on sample population data for tables room, employee, and amenities.

Point 7

See the employee and customer applications.

Point 8

Note: Any **#** is to be replaced by specific data or conditions inputted by users.

1. Query 1: Details of currently rented rooms in a specific hotel
   SELECT parent_hotel_brand.brand_name AS "Hotel chain",CONCAT(customer.first_name, ' ',customer.last_name) AS "Customer name", room.capacity as "Room type", room.price as "Room price", renting.arrival_date as "Rental start date", room.view as "Room view" FROM renting, customer, room, parent_hotel_brand
   WHERE renting.customer_sin = customer.sin_number AND renting.brand_id = room.brand_id
   AND renting.franchise_id = room.franchise_id
   AND renting.room_number = room.room_number AND parent_hotel_brand.brand_id = renting.brand_id
   AND renting.archived = false AND renting.brand_id = **#** AND renting.franchise_id = **#**
   ORDER BY room.price ASC, renting.arrival_date DESC

See query1.txt in addendum_files.

2. Query 2: CustomerListView
   CREATE VIEW CustomerListView AS SELECT DISTINCT customer.*
   FROM (SELECT customer.*,renting.brand_id,renting.franchise_id FROM customer INNER JOIN renting ON customer.sin_number = renting.customer_sin
   ORDER BY renting.brand_id ASC, renting.franchise_id ASC) AS customer_renting INNER JOIN customer ON customer_renting.sin_number = customer.sin_number;

See query2.txt in addendum_files.

3. Query 3: Cheapest hotel rooms
   SELECT * FROM room
   WHERE room_number = (SELECT DISTINCT MIN(room_number) FROM room
   WHERE room_number NOT IN
   (SELECT MAX(room_number) FROM
   (SELECT * from room r1
   WHERE price =

(SELECT DISTINCT MIN(price) FROM room
WHERE brand_id=r1.brand_id AND franchise_id=r1.franchise_id GROUP BY brand_id, franchise_id)
ORDER BY brand_id, franchise_id) as r2 GROUP BY brand_id, franchise_id)
GROUP BY brand_id, franchise_id)
ORDER BY brand_id, franchise_id;

See query3.txt in addendum_files.

4. Query 4: rooms in Ottawa
   SELECT room.* FROM room
   INNER JOIN hotel_franchise
   ON room.brand_id=hotel_franchise.brand_id AND
   room.franchise_id=hotel_franchise.franchise_id
   WHERE hotel_franchise.city='Ottawa'
   ORDER BY hotel_franchise.star_category, room.price;

See query4.txt in addendum_files.

5. Query 5: rentings on 10th day
   SELECT room.* FROM room
   INNER JOIN renting ON room.brand_id=renting.brand_id AND
   room.franchise_id=renting.franchise_id AND room.room_number=renting.room_number
   WHERE renting.arrival_date='2021-##-10';

See query5.txt in addendum_files.

6. Query 6: customer phone number update (requires old phone number as well)
   UPDATE inst_customer_phone
   SET phone_number='##########'
   WHERE sin_number='#########' AND phone_number='##########';

See query6.txt in addendum_files.

7. Query 7: category hotels (Tested with small sample size; try again when more rentings are made)
   SELECT hotel_franchise.star_category, COUNT(hotel_franchise.franchise_id)
   FROM hotel_franchise INNER JOIN renting ON hotel_franchise.brand_id=renting.brand_id AND
   hotel_franchise.franchise_id=renting.franchise_id
   GROUP BY hotel_franchise.star_category
   ORDER BY COUNT(hotel_franchise.franchise_id) DESC;

See query7.txt in addendum_files.

8. Query 8: find second highest salary from the employee table
   SELECT MAX(salary) FROM employee WHERE salary < (SELECT MAX(salary) FROM employee)

See query8.txt in addendum_files.