uOttawa

University of Ottawa
Faculty of Engineering
School of Electrical Engineering and Computer Science

e-Hotels
Final Deliverable

CSI 2132
Prof. Verena Kantere
Mar 30, 2024

Group 100:
Lisa Korolyov - 300137056
Huda Mohammed - 300316481

DBMS and Programming Languages

PostgreSQL was the DBMS used.

We were unable to get the application working in time, so we have decided to implement the modifications and queries directly on the DBMS instead of the web app, thus there are no programming languages used.

Setup Instructions

Step 1: Setting Up the Database

1. Open pgAdmin 4
2. Inside of your desired database, create a new schema called 'projectGroup100'.
   To do this:
   a. Right-click on 'Schemas'
   b. Hover over 'Create' and select 'Schema…' from the dropdown. A window should pop up.
   c. In the 'Name' field, type 'projectGroup100'.
   d. Click 'Save'.

Step 2: Creating the tables

1. Under 'Schemas', right-click on 'projectGroup100'.
2. Select 'Query Tool'
3. Copy the code from 'creating_relations.sql' and paste it into the query tool
4. Execute the query

Step 3: Populating the tables

1. Clear the query
2. Copy the code from 'populate_db.sql' and paste it into the query tool
3. Execute the query

Step 4: Creating the indexes

1. Clear the query
2. Copy the code from 'indexes.sql' and paste it into the query tool
3. Execute the query

Step 5: Creating the views

1. Right-click on 'projectGroup100'
2. Hover over 'Create'
3. Select 'View…' in the dropdown. A window should pop up.
4. In the 'Name' field enter 'View1'
5. Go to the 'Code' tab
6. Copy the code from 'view1.sql' and paste it into the code tab
7. Click 'Save'
8. Repeat for View2 and View3 using view2.sql and view3.sql, respectively.

Step 6: Running the queries

- Clear the query
- Copy the code from 'query1.sql' and paste it into the query tool
- Execute the query
- Repeat for queries 2-5 with the respective .sql files.

Step 7: Modifying the database

1. Clear the query
2. Copy the code from 'trigger1.sql' and paste it into the query tool
3. Execute the query
4. Repeat for trigger 2 with the respective .sql file.

DDLs Used for Database Creation

- Create
  - For every table to be created, we needed to use the 'create' function
- Alter
  - After creating a table, if any adjustments were needed, alter was used to change any minor details instead of creating a new table
- Drop
  - After creating a table, drop was used when we needed to delete a certain table or a specific row from a table