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Company: Team 4

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Executive Summary

Overview

For this deliverable, our team created a variety of database tools that make it significantly easier for our client to manipulate data by utilizing PL/SQL. The iterative nature of our functions facilitates our client's ease of use by making our data more accessible. Some examples of this include extracting hotel features from the database, as well as handling SQL exceptions while inputting data.

Proposed Solution

Rather than opt for our usual data querying approaches, our group leveraged the programming functionality of PL/SQL methods to analyze our data of interest. Our tools give us the ability to filter customers based on their number of reservations as well as access data specific to individual customers using their customer ID. These functions allow our client to quickly return relevant information in a clean and concise manner. We utilized substitution variables to give our client the ability to input new client IDs to the database, obtain detailed information about them, and even enter new customer information into the database.

PL/SQL methods can also be used to check data integrity and handle coding exceptions. This can be seen in our project as we output relevant error messages based on the situation. If our client were to attempt to input a new client which does not follow certain parameters, the method would rollback the change and output an error message. Lastly, we also created a function that provides an easy way to compute the total number of hotel rooms that a customer has booked. This function further enhances ease-of-use as it allows for a cleaner query for our clients.

Final Thoughts and Implementation

These PL/SQL blocks allow for the creation of database features that would otherwise be impossible or very difficult to implement. By enhancing the usability of our data querying tools, our client is able to extract actionable insights that will benefit both the customer and the consumer.