Introduction to Data Management – HW3: Database Querying

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Problem Statement

We leverage data manipulation language to manipulate and retrieve chunks of data useful for analysis. The goal is to be able to write SQL queries to extract out MVOTs from the database to churn out insights from data.

Proposed Solution

We start out with looking at a snapshot of few the tables we have viz., *Customer_Payment*, *Customer*, *Reservation* using the SELECT statements. We also try to understand the tables better by filtering and structuring the data using clauses such as WHERE and ORDER BY as well as operators such as IN and LIKE. For the *Reservation* table we explore the date type variable operations. We compare and validate there being no change whether datetime manipulations are performed using logical operations versus clauses such as BETWEEN – AND. We create *aliases* for variables needed often during our querying and observe that only few clauses such as ORDER BY are able to take the created alias variable as an input. Post exploring individual tables, we try to access how to aggregate information from multiple tables using INNER JOINs. Special use of joins was during ascertaining overlap in terms of records in multiple tables and checking whether tables had customer records without any reservations using the NULL clause, etc.

Assumptions

We assume that the DDL Starter Script was formulated and run successfully before querying the data using SELECT statements.

Conclusion and Next Steps

The next step is to apply more DML operations to update the data and structure of the database.