# Movie Booking SQL Project

Analyzing and managing movie booking data through SQL queries to understand customer trends, payment statuses, and show performance.

# Project Objective

## Data Management

Analyze and manage comprehensive movie booking data using SQL queries.

## Customer Insights

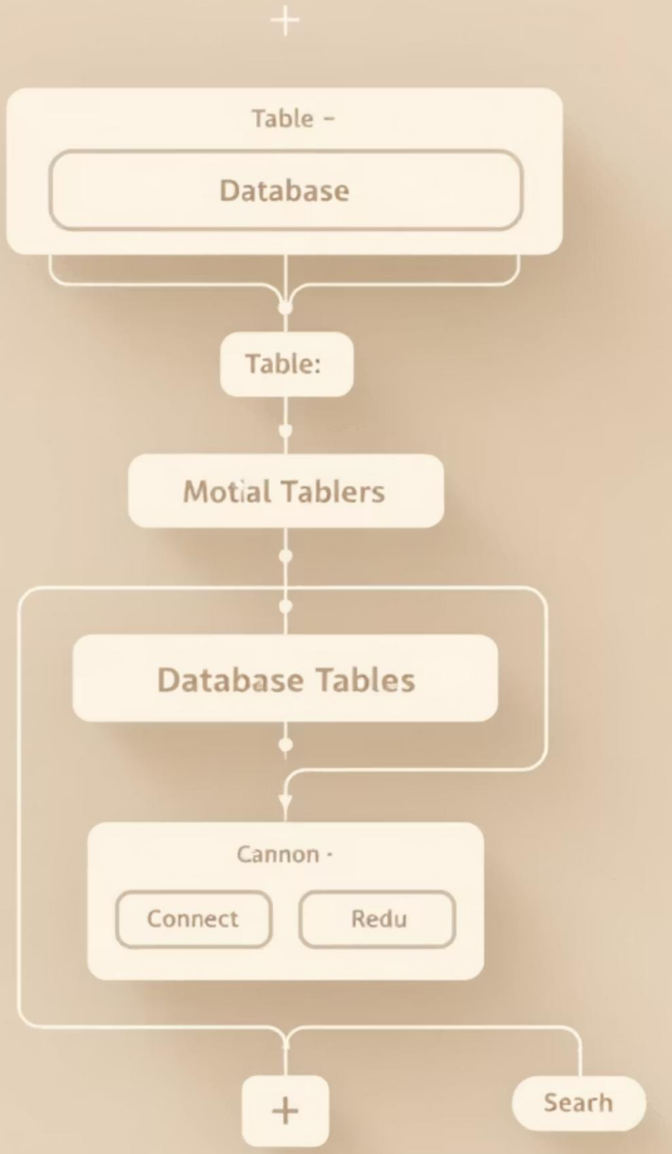
Understand customer booking trends and behavior patterns.

## Payment Tracking

Monitor payment statuses and transaction trends.

## Show Performance

Evaluate movie and show performance through database operations.




# Dataset Overview

## Data Source

**Dataset:**
movie_booking_basic_sql.xlsx

**Tables:** movie_booking, booking, payments, customers, shows, theatres

**Key Columns:** MovieID, ShowID, CustomerID, PaymentID, BookingDate, TicketPrice

## Data Coverage

- Customer information and profiles
- Movie details and metadata
- Booking records and history
- Payment transactions
- Show schedules and theatre data

# SQL Operations Performed

01

## SELECT Queries

Filtering and sorting movie and booking data for targeted analysis.

02

## GROUP BY & HAVING

Aggregation and analysis of grouped data sets.

03

## JOIN Operations

INNER, LEFT, and RIGHT joins for combining related tables.

04

## DELETE Queries

Cleaning outdated or invalid data from the database.

05

## Advanced Retrieval

DISTINCT, LIMIT, and OFFSET for sophisticated data extraction.

# Key Insights Discovered

## Popular Content

Most popular genres and top-performing movies identified through booking frequency analysis.

## Customer Behavior

Customers with multiple bookings analyzed to understand loyalty patterns.

## Payment Trends

Payment trends and pending transactions tracked for financial insights.

## Pricing Strategy

Ticket price ranges analyzed for better pricing and revenue optimization.

# Sample Query: Date Range Filtering

```
SELECT * FROM movie_booking WHERE ReleaseDate BETWEEN '2024-01-01' AND '2024-12-31';
```

This query retrieves all movies released in 2024, enabling year-specific analysis of new releases and their performance.

# Sample Query: Customer Analysis

```
SELECT CustomerID, COUNT(*) FROM movie_booking_booking
GROUP BY CustomerID HAVING COUNT(*) > 2;
```

Identifies frequent customers with more than two bookings, helping target loyalty programs and understand repeat customer behavior.

# Sample Query: Multi-Table JOIN

```
SELECT s.ShowID, m.Title, t.Name FROM movie_booking_shows s INNER JOIN movie_booking m ON s.MovieID =
m.MovieID INNER JOIN movie_booking_theatre t ON s.TheatreID = t.TheatreID;
```

Combines show, movie, and theatre data to create comprehensive reports linking movies to their screening locations.

# Business Impact

## Data Discovery

Uncover hidden patterns in booking behavior

## Strategic Insights

Generate actionable business intelligence

## Performance Growth

Optimize operations and revenue

# Conclusion

The Movie Booking SQL Project demonstrates the power of SQL for data management, reporting, and insights generation.

## Database Mastery

Effective use of SQL queries for complex data operations and analysis.

## Pattern Recognition

Deep analysis of booking patterns and customer behavior trends.

## Business Intelligence

Valuable insights for improving business performance and decision-making.