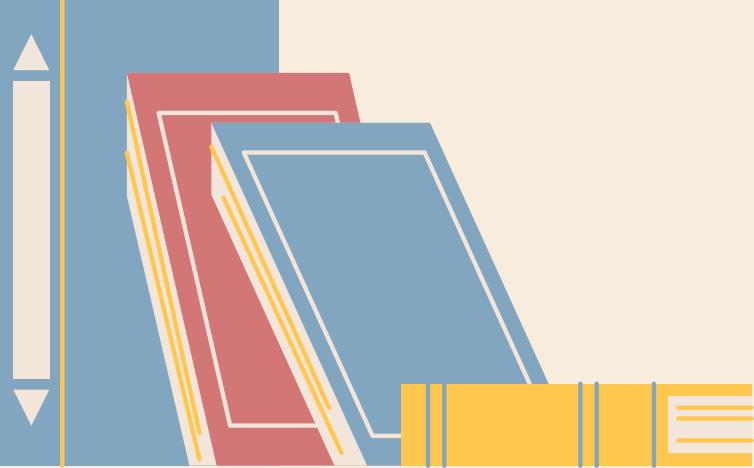# BOOK STORE

SQL PROJECT OVERVIEW

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Project Overview

This project analyzes book sales data using SQL to answer key questions related to genre-wise sales, pricing trends, customer spending, and ordering patterns. The analysis demonstrates how SQL can be used to extract meaningful insights from a relational database.

Dataset Overview

The dataset is organized as a relational database and includes the following tables:

- Customers
- Books

  These tables capture book details, order information, customer data, pricing, and genre classification.

Scope of This Document

This document presents selected SQL queries and their outputs to highlight important analytical questions and results. The complete set of SQL queries used in this project is available in the project repository as SQL (.sql) files

Tools Used

- SQL (MySQL)

Retrieve the total number of books sold for each genre

```sql
SELECT
    b.genre, SUM(o.quantity) AS Total_quantity
FROM
    orders AS o
        JOIN
    books AS b ON b.Book_ID = o.Book_ID
GROUP BY b.Genre
ORDER BY total_quantity DESC;
```

genre	Total_quantity
Mystery	504
Science Fiction	447
Fantasy	446
Romance	439
Non-Fiction	351
Biography	285
Fiction	225

Mystery and **Science Fiction** genres lead overall sales, indicating higher reader demand compared to other genres.

Find the average price of books in the "Fantasy" genre

```sql
SELECT
    genre, ROUND(AVG(price), 2) AS average_price
FROM
    books
GROUP BY genre
HAVING (genre = 'fantasy');
```

genre	average_price
Fantasy	25.98

The average price of Fantasy books is **$25.98.**

Find the most frequently ordered book

```sql
SELECT
    b.book_id, b.title, COUNT(o.order_id) AS frequency
FROM
    orders AS o
        JOIN
    books AS b ON o.Book_ID = b.Book_ID
GROUP BY b.Book_ID , b.title
HAVING frequency =  (
    SELECT MAX(order_count)
    FROM (
        SELECT COUNT(order_id) AS order_count
        FROM orders
        GROUP BY book_id
    ) AS t );
```

book_id	title	frequency
31	Implemented encompassing conglomeration	4
73	Realigned multi-tasking installation	4
88	Robust tangible hardware	4
120	Integrated secondary access	4
273	Devolved zero administration process improvem...	4
333	Advanced responsive extranet	4
491	Pre-emptive intangible adapter	4

Show the top 3 most expensive books of 'Fantasy' Genre

```sql
SELECT * FROM books
WHERE genre = 'fantasy'
ORDER BY price DESC
LIMIT 3;
```

Book_ID	Title	Author	Genre	Published_Year	Price	Stock
240	Stand-alone content-based hub	Lisa Ellis	Fantasy	1957	49.9	41
462	Innovative 3rdgeneration database	Allison Contreras	Fantasy	1988	49.23	62
238	Optimized even-keeled analyzer	Sherri Griffith	Fantasy	1975	48.97	72

Stand-alone content-based hub is the costliest Fantasy book at ₹49.90, followed by **Innovative 3rd-generation database** and **Optimized even-keeled analyzer**.

Find the customer who spent the most on orders

```sql
SELECT
    c.customer_id,
    c.name,
    ROUND(SUM(o.total_amount), 0) AS total_spent
FROM
    customers AS c
        JOIN
    orders AS o ON c.customer_id = o.customer_id
GROUP BY c.customer_id , c.name
ORDER BY total_spent DESC
LIMIT 1;
```

customer_id	name	total_spent
457	Kim Turner	1399

Kim Turner (Customer ID 457) is the highest spender with a total spend of **$1,399.**

Conclusion

This project demonstrates the application of SQL to analyze book sales data and extract meaningful insights from a relational database. By using joins, aggregations, subqueries, and sorting operations, key metrics such as genre-wise sales distribution, average pricing, most frequently ordered books, highest-priced books, and top-spending customers were identified. The analysis highlights how structured SQL queries can be effectively used to answer business-focused questions related to sales performance, customer behavior, and pricing trends using real-world transactional data.