

Project: Investigate a Relational Database

Your project will include:

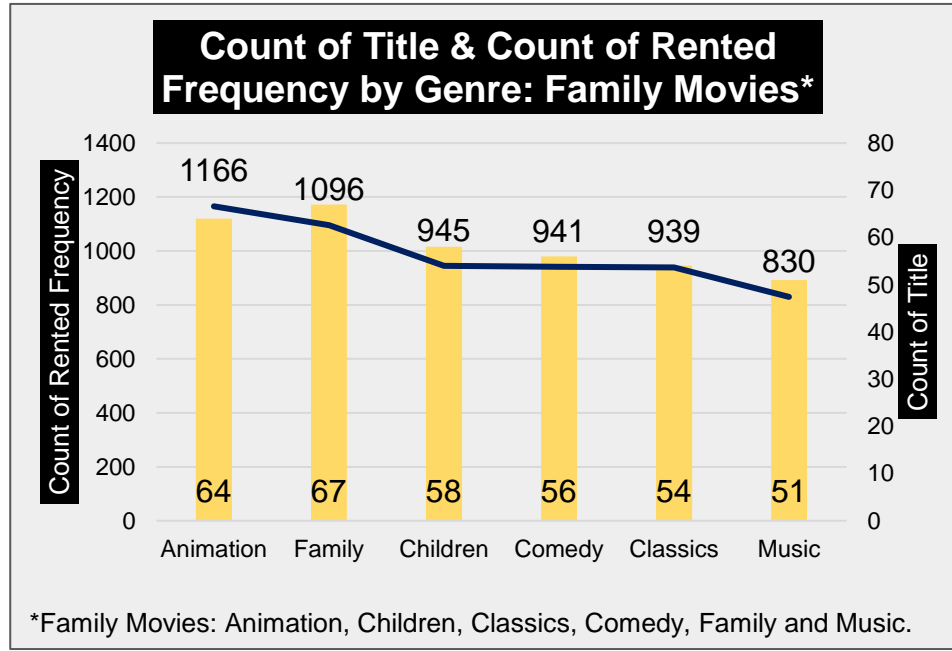
- A set of slides in PDF with a question, visualization, and small summary on each slide.
- A set of files in SQL with your queries needed to answer each of the four questions.

Remember:

- The questions you ask are up to you.
- **All four** of your final submitted queries should contain a **JOIN** and **AGGREGATION**.
- **At least two** of your final submitted queries should contain either a **subquery** OR a **CTE**.
- **At least one** of your final submitted queries should contain a **Window Function**.
- **At least one** column generated by the Window Function should be included in one of your final visualization.

How many titles were being rented out in total for each category of family movies*?

Ref: 8_12-Workspace-Question-Set#1_1.sql

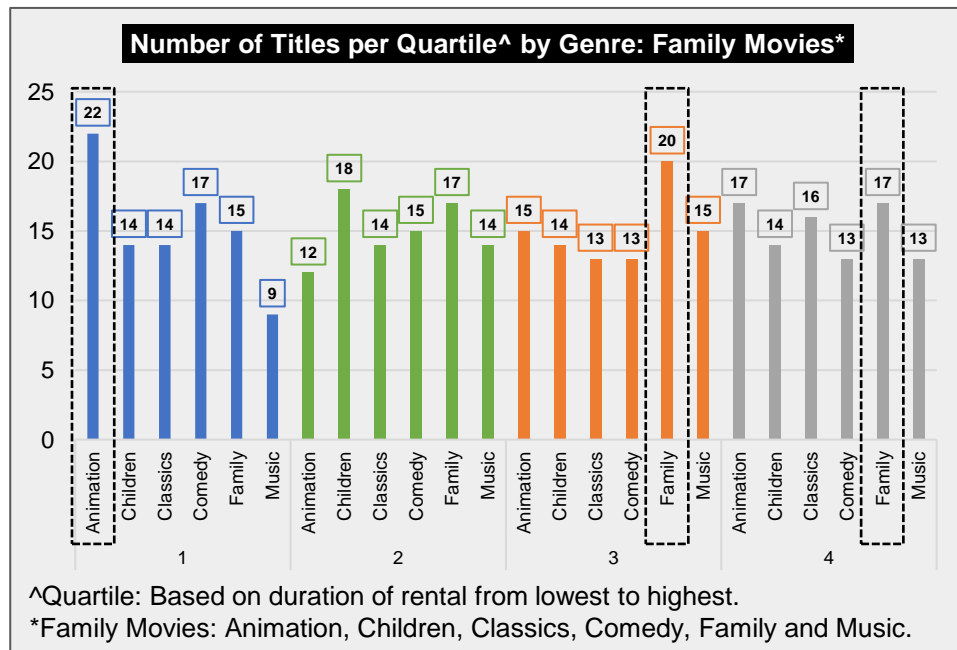


Animation category was the **most popular** one for being rented the most at 1,166 times as compared to **Music** which had the **lowest rentals** at 830 times of all.

What were the movie title counts for each quartile^ among the category of family movies*?

Ref: 8_12-Workspace-Question-Set#1_2.sql

Ref: 8_12-Workspace-Question-Set#1_3.sql

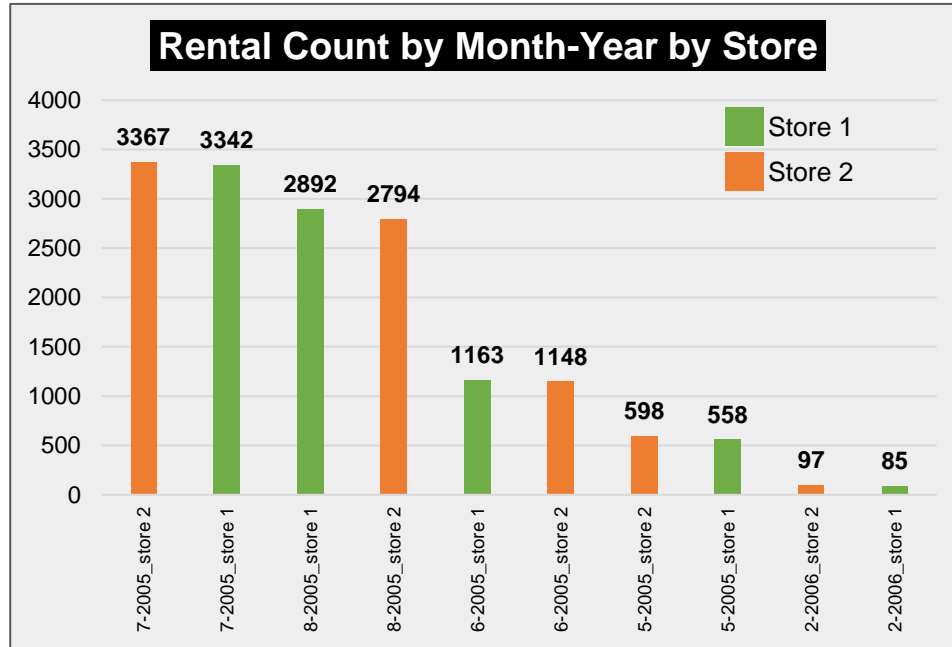


Looking at the quartiles in terms of rental duration across all family movies* categories –

Animation genre had relatively **lower rental duration** in general and hence dominating the first quarter w/ most titles; whereas movies from the **Family category** seemed to have **higher duration of rental** on average w/ more titles in the third and fourth quarters.

What were the rental counts per store?

Ref: 8_13-Workspace-Question-Set#2_1.sql



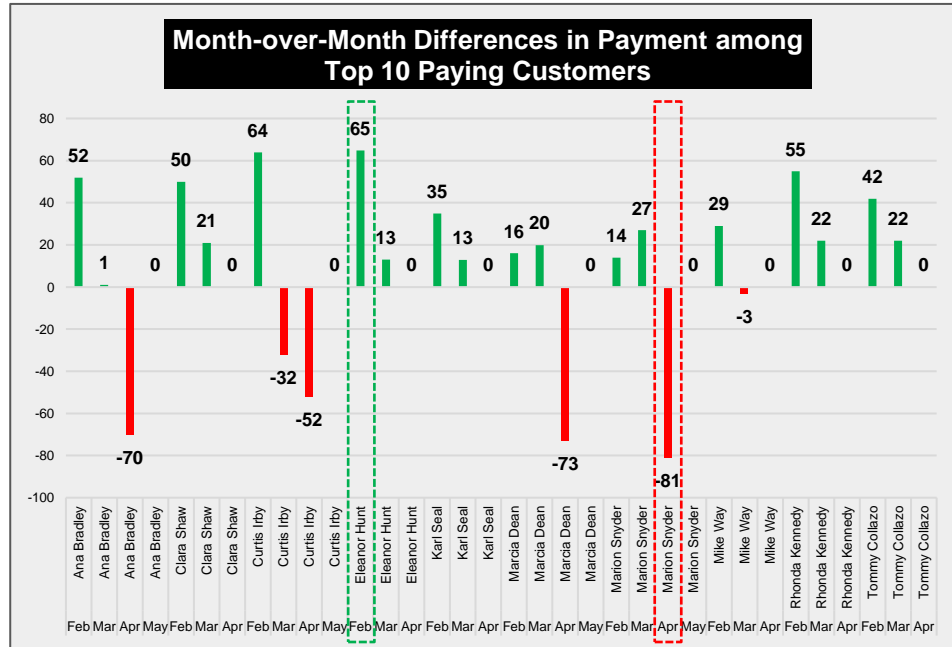
Generally, the rental counts were quite consistent between store 1 and store 2 w/ no material differences during each time unit.

July of year 2005 had the **highest rental counts** of all across both stores, followed by the subsequent month in August; **February in 2006** seemed to be **extremely quiet** w/ less than 100 rentals from each store.

What were the MoM lead differences in payment among the top 10 paying customers?

Ref: 8_13-Workspace-Question-Set#2_2.sql

Ref: 8_13-Workspace-Question-Set#2_3.sql



Looking across all the top 10 paying customers, **Eleanor Hunt** had the **biggest positive lead difference** of \$65 in Mar-07 v. the prior month.

On the other hand, **Marion Snyder** had the **biggest negative lead difference** of -\$81 in May-07 v. the month before.