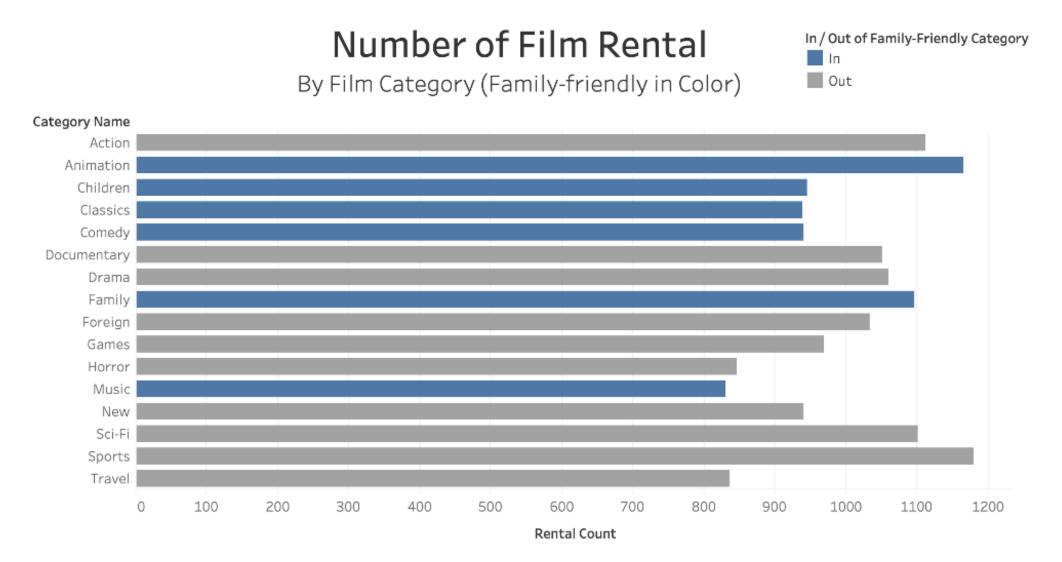
Investigation of a Relational Database with SQL

Project Presentation by George Nie (May 2020)

Programming for Data Science with Python Nanodegree

Q1: What is the number rental records for each film category?

Question derived from Udacity Question Set 1 - Question 1



Sum of Rental Count for each Category Name. Color shows details about In / Out of Family-Friendly Category.

Remark:

For family-friendly film categories (in blue), "Animation" films are the ones that have been rented the most.

For non family-friendly film categories (in grey), "Sports" films are the ones that have been rented the most.

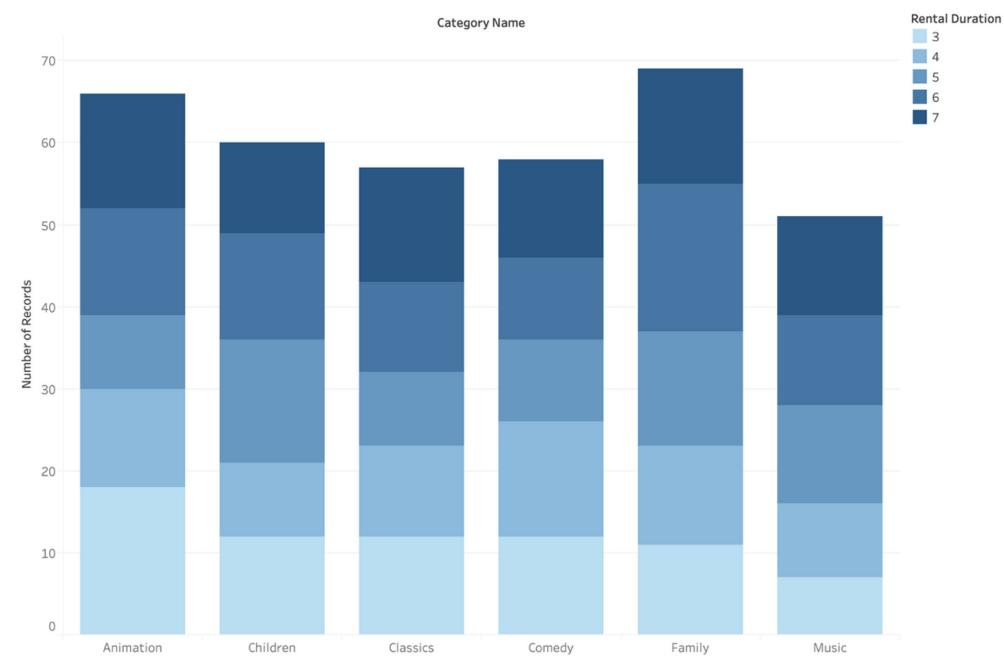
Overall speaking, "Sports" films have the highest rental records.

Q2: For family-friendly films, what are insights behind their rental duration?

Question derived from Udacity Question Set 1 - Question 2

Number of Film

by Family-friendly Category & Rental Duration



Number of Records for each Category Name. Color shows details about Rental Duration.

Remark:

For Animation, most people rent for 3 days;

For Children films, most people rent for 5 days;

For Classics, most people rent for 7 days;

For Comedy, most people rent for 4 days;

For Family, most people rent for 6 days;

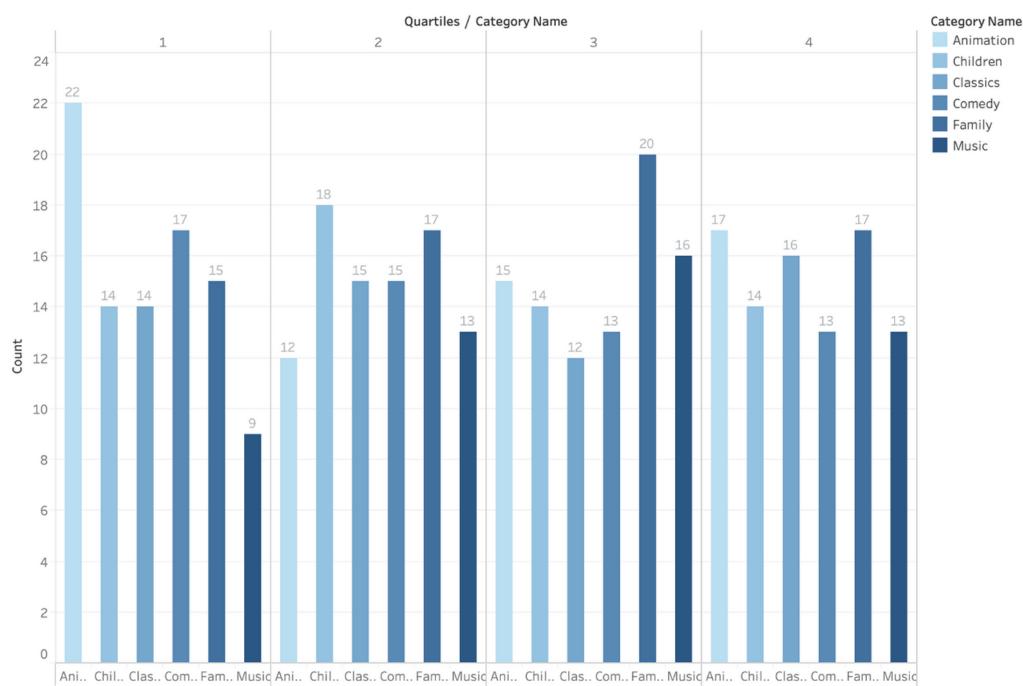
For Music films, most people rent for 5 or 7 days.

Q3: What is the number of rental records by film category & rental length?

Question derived from Udacity Question Set 1 - Question 3

Number of Film

By Family-friendly Category & Rental Length Category (Standard Quartile)



Remark:

For the 1st quartile of rental length, Animation films are rented the most;

For the 2nd quartile of rental length, Children films are rented the most;

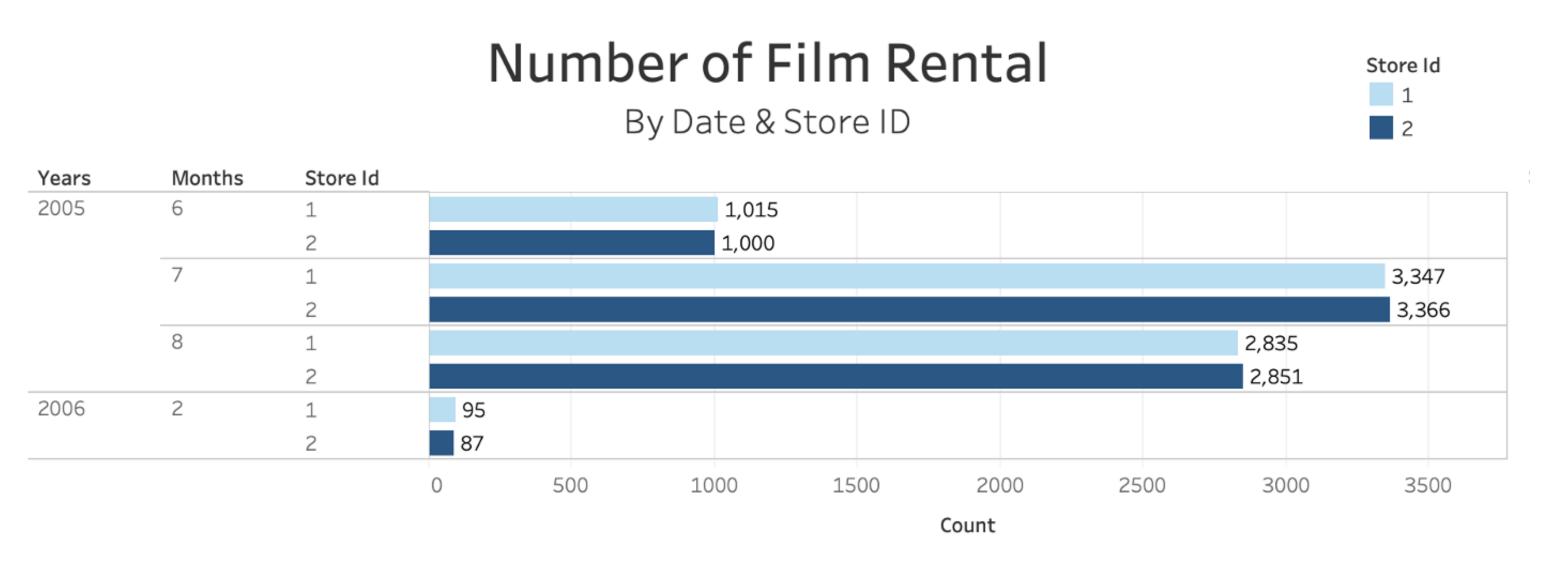
For the 3rd Quartile of rental length, Family films are rented the most;

For the 4rd Quartile of rental length, Animation and Family are rented the most.

Sum of Count for each Category Name broken down by Quartiles. Color shows details about Category Name

Q4: What is the number of rental records by date and store?

Question derived from Udacity Question Set 2 - Question 1



Sum of Count for each Store Id broken down by Years and Months. Color shows details about Store Id.

Remark:

During July 2005, there is an significant increase in film rental in both stores as compared to other months of 2005; June 2005 has the least movie rental records.

There is no significant difference of the number of film rental between Store 1 and Store 2