

```

setwd("")
#install necessary libraries
#install.packages('dplyr')
#install.packages('fpp3')
#install.packages('igraph')
#install.packages('stringr')
library(dplyr)
library(fpp3)
library(igraph)
library(stringr)
library(ggplot2)

#Bring in the dataset
animation<- read.csv('Animation_Movies.csv')

str(animation)

head(animation)

#Lets break down the genres, we dont want to have something that is just animation as the
main genre

anims<- animation %>% separate(genres, into= c('genre1','genre2'), sep = ',')
anims<- filter(anims, genre1 != 'Animation')
str(anims)
colSums(is.na(anims))
#No NA

#Split the Production companies

#Since most of this will be animations, lets make sure to take out
anims <- anims %>% separate(production_companies, into =
c('Main_production','co_production' ),sep = ',')
str(anims)

anims<-anims[, -c(5,10,12, 13,15,16,18,19)]
str(anims)
colSums(is.na(anims))

ggplot(anims, aes(x = genre1, fill = genre1)) +
  geom_bar() +
  scale_fill_manual(values = rainbow(length(unique(anims$genre1)))) +
  labs(title = "Bar Graph of Category Counts",
       x = "Category",
       y = "Count") +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))

#create graphs based on which genres show up the most, as the main and the sub-genre

#No NA values found!
anims$vote_average

rating <- anims[,c(2,3)]
rating

cind <- rating %>%
  filter(str_detect(title, "cinderella"))

str(cind)

```

```
#What if we wanted to only sort it off of adventure movies?
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```
adventure<- anims %>%
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```
  filter(str_detect(genrel, "Adventure"))
```

```
names(adventure)
```

```
str(adventure)
```

```
#We are narrowed down to 704 entries for adventure
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```
#Let's gather all the variables that we can calculate
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```
adventures<- adventure[,c(1:4,7:8,11,17,20:23)]
```

```
str(adventures)
```

```
names(adventures)
```

```
#logistic regression
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```
logis<- glm(popularity~ vote_average + vote_count +runtime + budget, data = adventures,  
            family = 'poisson')
```

```
summary(logis)
```

```
exp(coef(logis))
```