netflix-analysis

April 12, 2024

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[]: from google.colab import files
     uploaded = files.upload()
    <IPython.core.display.HTML object>
    Saving netflix dataset.csv to netflix dataset.csv
[]: import numpy as np # linear algebra
     import pandas as pd # for data preparation
     import plotly.express as px # for data visualization
     from textblob import TextBlob # for sentiment analysis
[]: dff=pd.read_csv('netflix dataset.csv')
     dff.shape
[]: (8807, 12)
[]: z = dff.groupby(['rating']).size().reset_index(name='counts')
     pieChart = px.pie(z, values='counts', names='rating',
                       title='Distribution of Content Ratings on Netflix',
                       color_discrete_sequence=px.colors.qualitative.Set3)
     pieChart.show()
[]: dff['director']=dff['director'].fillna('No Director Specified')
     filtered_directors=pd.DataFrame()
     filtered_directors=dff['director'].str.split(',',expand=True).stack()
     filtered_directors=filtered_directors.to_frame()
     filtered_directors.columns=['Director']
     directors=filtered_directors.groupby(['Director']).size().
      →reset_index(name='Total Content')
     directors=directors[directors.Director !='No Director Specified']
     directors=directors.sort_values(by=['Total Content'],ascending=False)
     directorsTop5=directors.head()
     directorsTop5=directorsTop5.sort_values(by=['Total Content'])
     fig1=px.bar(directorsTop5,x='Total Content',y='Director',title='Top 5 Directors_
      ⇔on Netflix')
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fig1.show()
[]: dff['cast']=dff['cast'].fillna('No Cast Specified')
     filtered cast=pd.DataFrame()
     filtered_cast=dff['cast'].str.split(',',expand=True).stack()
     filtered_cast=filtered_cast.to_frame()
     filtered_cast.columns=['Actor']
     actors=filtered_cast.groupby(['Actor']).size().reset_index(name='Total Content')
     actors=actors[actors.Actor !='No Cast Specified']
     actors=actors.sort_values(by=['Total Content'],ascending=False)
     actorsTop5=actors.head()
     actorsTop5=actorsTop5.sort_values(by=['Total Content'])
     fig2=px.bar(actorsTop5,x='Total Content',y='Actor', title='Top 5 Actors on_
      →Netflix')
     fig2.show()
[]: df1=dff[['type','release_year']]
     df1=df1.rename(columns={"release_year": "Release Year"})
     df2=df1.groupby(['Release Year','type']).size().reset_index(name='Total_
      ⇔Content')
     df2=df2[df2['Release Year']>=2010]
     fig3 = px.line(df2, x="Release Year", y="Total Content", __
      ⇒color='type',title='Trend of content produced over the years on Netflix')
     fig3.show()
[]: dfx=dff[['release_year','description']]
     dfx=dfx.rename(columns={'release_year':'Release Year'})
     for index,row in dfx.iterrows():
         z=row['description']
         testimonial=TextBlob(z)
         p=testimonial.sentiment.polarity
         if p==0:
             sent='Neutral'
         elif p>0:
             sent='Positive'
         else:
             sent='Negative'
         dfx.loc[[index,2],'Sentiment']=sent
     dfx=dfx.groupby(['Release Year', 'Sentiment']).size().reset_index(name='Total__

→Content')
     dfx=dfx[dfx['Release Year']>=2010]
     fig4 = px.bar(dfx, x="Release Year", y="Total Content", color="Sentiment", 
      ⇔title="Sentiment of content on Netflix")
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fig4.show()			