Forbes Billionaires Dataset 2022

The World's Billionaires is an annual ranking by documented net worth of the wealthiest billionaires in the world, compiled and published in March annually by the American business magazine Forbes.

Each year, Forbes employs a team of over 50 reporters from a variety of countries to track the activity of the world's wealthiest individuals and sometimes groups or families – who share wealth. Preliminary surveys are sent to those who may qualify for the list.

EDA Process

In [1]:
```
#importing neccessary libraires

import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
%matplotlib inline
import plotly.express as px
import plotly.io as pio
```

In [2]:
```
df = pd.read_csv('Forbes Billionaires.csv')
df
```

Out[2]:

	Rank	Name	Networth	Age	Country	Source	Industry
0	1	Elon Musk	219.0	50	United States	Tesla, SpaceX	Automotive
1	2	Jeff Bezos	171.0	58	United States	Amazon	Technology
2	3	Bernard Arnault & family	158.0	73	France	LVMH	Fashion & Retail
3	4	Bill Gates	129.0	66	United States	Microsoft	Technology
4	5	Warren Buffett	118.0	91	United States	Berkshire Hathaway	Finance & Investments
...	...	...	...	...	...	...	...
2595	2578	Jorge Gallardo Ballart	1.0	80	Spain	pharmaceuticals	Healthcare
2596	2578	Nari Genomal	1.0	82	Philippines	apparel	Fashion & Retail
2597	2578	Ramesh Genomal	1.0	71	Philippines	apparel	Fashion & Retail
2598	2578	Sunder Genomal	1.0	68	Philippines	garments	Fashion & Retail
2599	2578	Horst-Otto Gerberding	1.0	69	Germany	flavors and fragrances	Food & Beverage

2600 rows × 7 columns

In [3]:
```
# checking the information of the dataframe
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 2600 entries, 0 to 2599
Data columns (total 7 columns):
 #   Column    Non-Null Count  Dtype  
---  ------    --------------  -----  
 0   Rank      2600 non-null   int64  
 1   Name      2600 non-null   object 
 2   Networth  2600 non-null   float64
 3   Age       2600 non-null   int64  
 4   Country   2600 non-null   object 
 5   Source    2600 non-null   object 
 6   Industry  2600 non-null   object 
dtypes: float64(1), int64(2), object(4)
memory usage: 142.3+ KB
```

Let's see who has the highest net worth

In [4]:
```
# checking any null values
df.isnull().sum()
```

Out[4]:
```
Rank        0
Name        0
Networth    0
Age         0
Country     0
Source      0
Industry    0
dtype: int64
```

We haven't got any null values in the dataset. The data is clean

In [5]:
```
# checking the data type of each column
df.dtypes
```

Out[5]:
```
Rank          int64
Name         object
Networth    float64
Age           int64
Country      object
Source       object
Industry     object
dtype: object
```

In [6]:
```
df.loc[df.Networth == df['Networth'].max()]
```

Out[6]:

	Rank	Name	Networth	Age	Country	Source	Industry
0	1	Elon Musk	219.0	50	United States	Tesla, SpaceX	Automotive

Let's see who is the youngest billionaire

In [7]:
```
df.loc[df.Age == df['Age'].min()]
```

Out[7]:

	Rank	Name	Networth	Age	Country	Source	Industry
1311	1292	Kevin David Lehmann	2.4	19	Germany	drugstores	Fashion & Retail

And who's the oldest among them

In [8]:
```
# Youngest Billionaire
df.loc[df.Age == df['Age'].max()]
```

Out[8]:

	Rank	Name	Networth	Age	Country	Source	Industry
1681	1645	George Joseph	1.8	100	United States	insurance	Finance & Investments

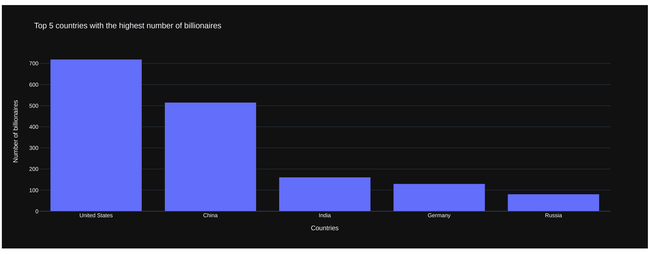
Let's see which country the billionaires belong to

In [9]:
```
# creating a pie-chart of the countries where billionaires are from
# plt.pie(df.Country.value_counts(), labels=df.Country.value_counts().head(20).index, autopct='%1.1f%%')
df['Country'].value_counts().head(20).plot(kind = 'pie', figsize = (6,6))
```

Out[9]:
```
<AxesSubplot:ylabel='Country'>
```

Let's look at the net worth of billionaires in the top 5 countries

In [10]:
```
pio.templates.default = "plotly_dark"
dfg = df['Country'].value_counts().head(5)
dfg
# plotting the bar-chart in plotly
import plotly.graph_objects as px
fig = px.Figure(data=[px.Bar(x=dfg.index, y=dfg)], layout=px.Layout(title='Top 5 countries with the highest number of billionaires'))
# adding labels
fig.update_xaxes(title_text='Countries')
fig.update_yaxes(title_text='Number of billionaires')
fig.show()
```

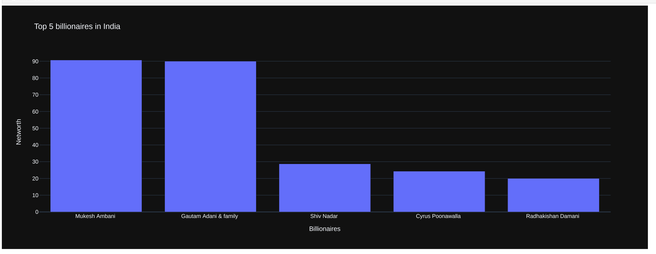


We can see that the billionaires are mostly from the US, China, and India.

Now let's see the distribution of billionaires in India and get some insights.

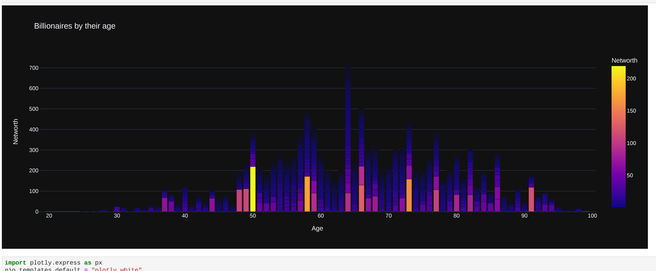
In [11]:
```
# getting the top 5 billionaires in India
#  who has maximum networth and plotting a bar-chart in plotly

df.loc[df.Country == 'India'].sort_values(by = 'Networth', ascending = False).head(5)
# plotting the bar-chart in plotly
import plotly.graph_objects as px
# setting x axis as names of billionaires
x = df.loc[df.Country == 'India'].sort_values(by = 'Networth', ascending = False).head(5)['Name']
fig = px.Figure(data=[px.Bar(x=x, y=df.loc[df.Country == 'India'].sort_values(by = 'Networth', ascending = False).head(5).Networth)], layout=px.Layout(title='Top 5 billionaires in India'))
# adding labels
fig.update_xaxes(title_text='Billionaires')
fig.update_yaxes(title_text='Networth')
# adding a legend
fig.update_layout(legend=dict(x=0, y=1.05))
fig.show()
```

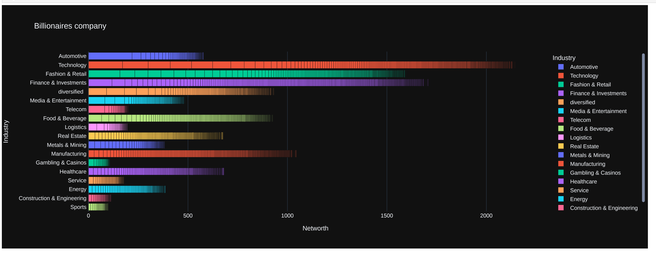


Let's look at Billionaire distribution by Age and Net Worth

In [12]:
```
import plotly.express as px
pio.templates.default = "plotly_dark"
fig = px.bar(df, x = "Age", y = "Networth",color='Networth', title = "Billionaires by their age")
fig.show()
```



In [13]:
```
import plotly.express as px
pio.templates.default = "plotly_white"
Cumilative_Net_Industry=df.groupby(['Industry']).sum().sort_values('Networth',ascending = False)
Cumilative_Net_Industry.reset_index(inplace = True)
pio.templates.default = "plotly_dark"
fig = px.bar(df, x = "Networth", y = "Industry",color='Industry', title = "Billionaires company")
fig.show()
```



In [ ]:

In [ ]: