

# Video Games Sales

## Matplotlib Dashboard Assignment ¶ (<http://localhost:8888/notebooks/Downloads/.ipynb/Dashboard-Assignment>)

Data Visualization 9655

Source: <https://www.kaggle.com/gregorut/videogamesales>  
(<https://www.kaggle.com/gregorut/videogamesales>)

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```
In [224]: import matplotlib.pyplot as plt  
import pandas as pd  
import numpy as np
```

```
In [225]: df = pd.read_csv('/Users/ccyms/Desktop/vgsales.csv', index_col=['Rank'])
df
```

Out[225]:

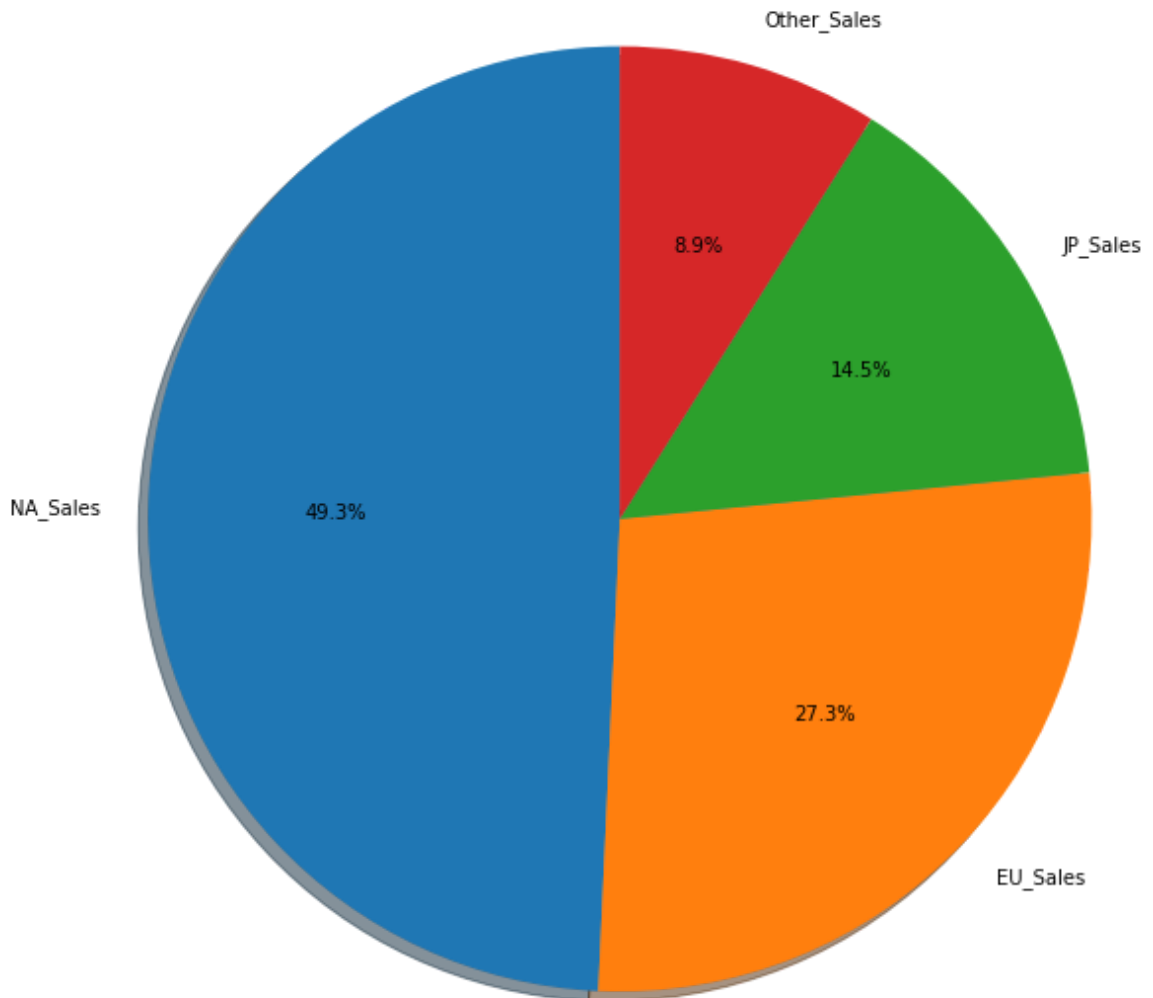
	Name	Platform	Year	Genre	Publisher	NA_Sales	EU_Sales	JP_Sales	Other_
<b>Rank</b>									
1	Wii Sports	Wii	2006.0	Sports	Nintendo	41.49	29.02	3.77	
2	Super Mario Bros.	NES	1985.0	Platform	Nintendo	29.08	3.58	6.81	
3	Mario Kart Wii	Wii	2008.0	Racing	Nintendo	15.85	12.88	3.79	
4	Wii Sports Resort	Wii	2009.0	Sports	Nintendo	15.75	11.01	3.28	
5	Pokemon Red/Pokemon Blue	GB	1996.0	Role-Playing	Nintendo	11.27	8.89	10.22	
...	...	...	...	...	...	...	...	...	...
16596	Woody Woodpecker in Crazy Castle 5	GBA	2002.0	Platform	Kemco	0.01	0.00	0.00	
16597	Men in Black II: Alien Escape	GC	2003.0	Shooter	Infogrames	0.01	0.00	0.00	
16598	SCORE International Baja 1000: The Official Game	PS2	2008.0	Racing	Activision	0.00	0.00	0.00	
16599	Know How 2	DS	2010.0	Puzzle	7G//AMES	0.00	0.01	0.00	
16600	Spirits & Spells	GBA	2003.0	Platform	Wanadoo	0.01	0.00	0.00	

16598 rows × 10 columns

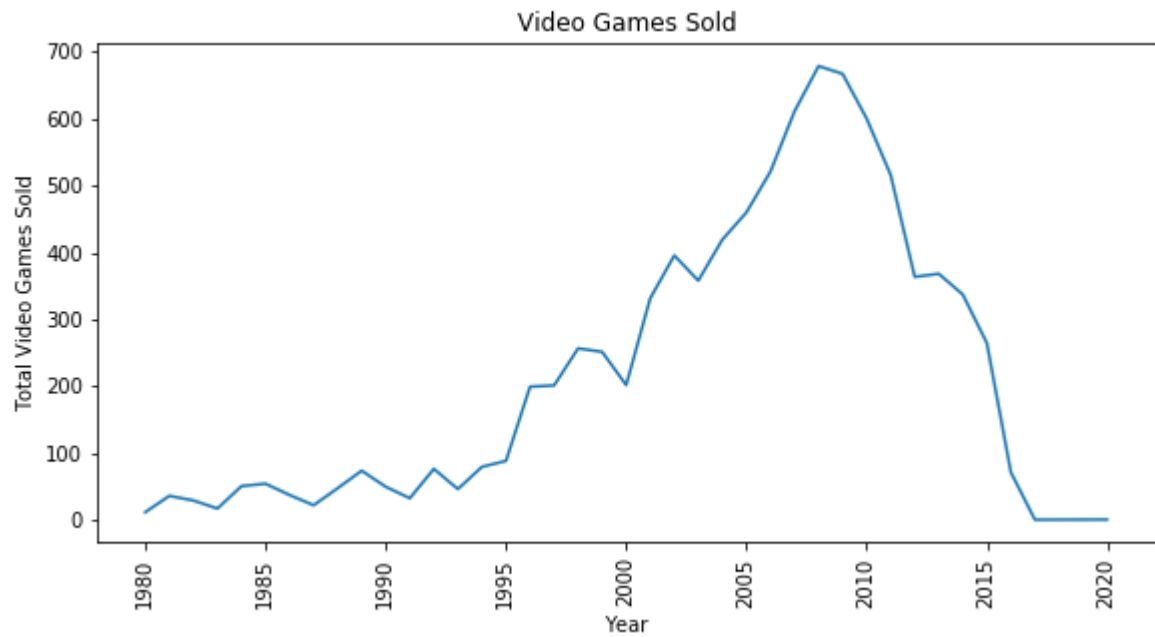


```
In [236]: NA_Sales = np.sum(df['NA_Sales'])
EU_Sales = np.sum(df['EU_Sales'])
JP_Sales = np.sum(df['JP_Sales'])
Other_Sales = np.sum(df['Other_Sales'])
values = [NA_Sales, EU_Sales, JP_Sales, Other_Sales]
label = ['NA_Sales', 'EU_Sales', 'JP_Sales', 'Other_Sales']
fig = plt.figure(figsize=(11,11))
plt.pie(values, labels=label, autopct='%1.1f%%', shadow=True, startangle=90)
plt.title('Video Games Sales by Region')
plt.show()
pie = plt
```

Video Games Sales by Region

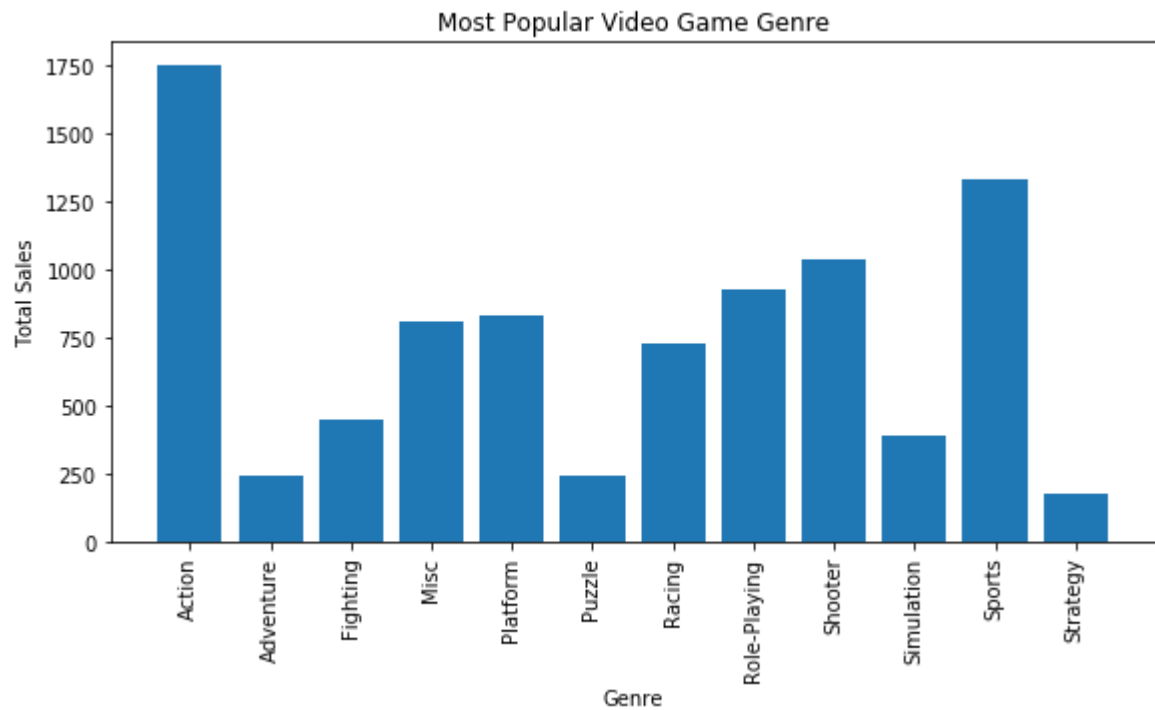


```
In [238]: yearlySales = df.groupby('Year').sum()['Global_Sales']
plt.figure(figsize=(8,4))
plt.plot(yearlySales.index, yearlySales)
plt.tight_layout()
plt.xticks(rotation=90)
plt.xlabel('Year')
plt.ylabel('Total Video Games Sold')
plt.title('Video Games Sold')
line = plt
```



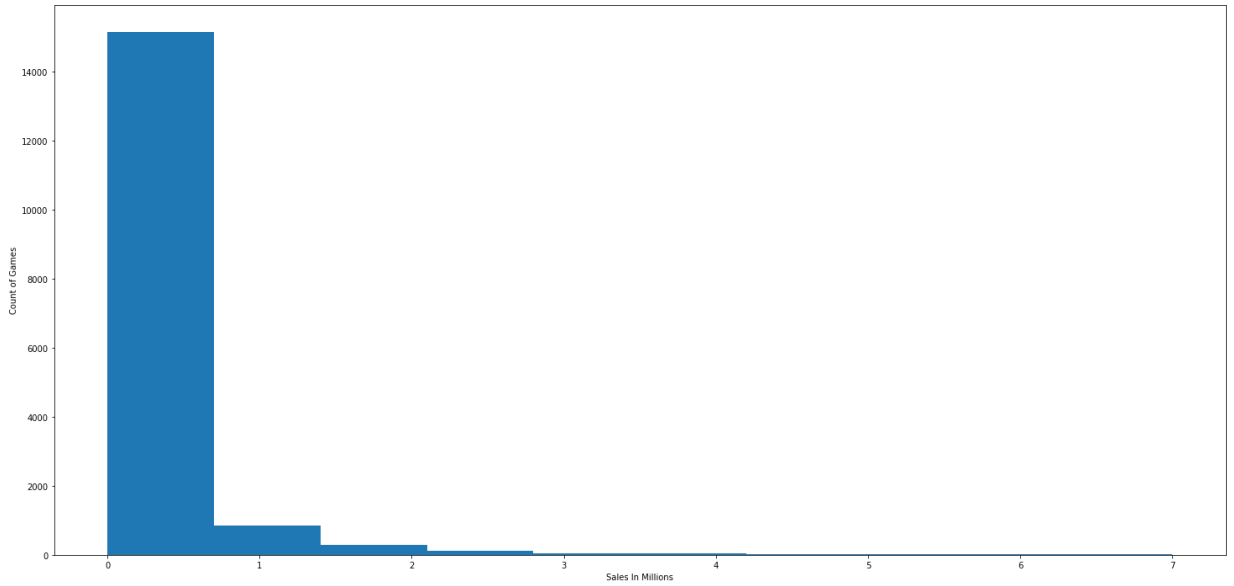
```
In [240]: genreSales = df.groupby('Genre').sum()['Global_Sales']
bar = plt.figure(figsize=(8,4))
plt.figure(figsize=(8,4))
plt.bar(genreSales.index, genreSales)
plt.tight_layout()
plt.xticks(rotation=90)
plt.xlabel('Genre')
plt.ylabel('Total Sales')
plt.title('Most Popular Video Game Genre')
plt.show()
```

<Figure size 576x288 with 0 Axes>



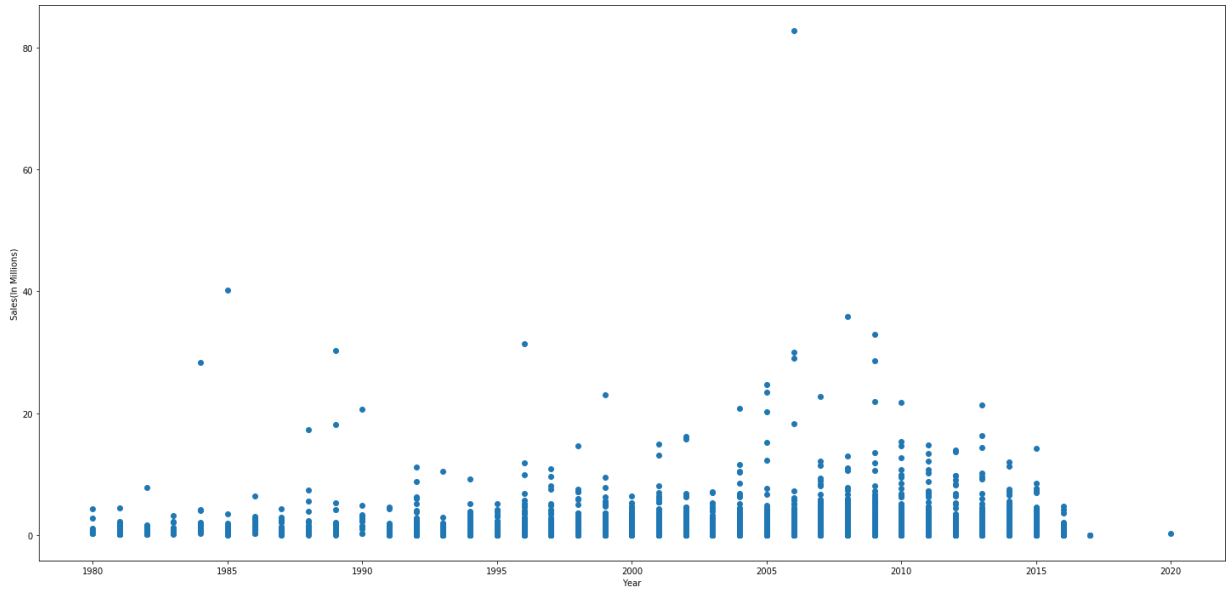
```
In [272]: plt.hist(df['NA_Sales'], range = (0,7))  
plt.xlabel('Sales In Millions')  
plt.ylabel('Count of Games')
```

```
Out[272]: Text(0, 0.5, 'Count of Games')
```



```
In [264]: plt.scatter(df.Year, df.Global_Sales)
plt.xlabel('Year')
plt.ylabel('Sales(In Millions)')
```

```
Out[264]: Text(0, 0.5, 'Sales(In Millions)')
```



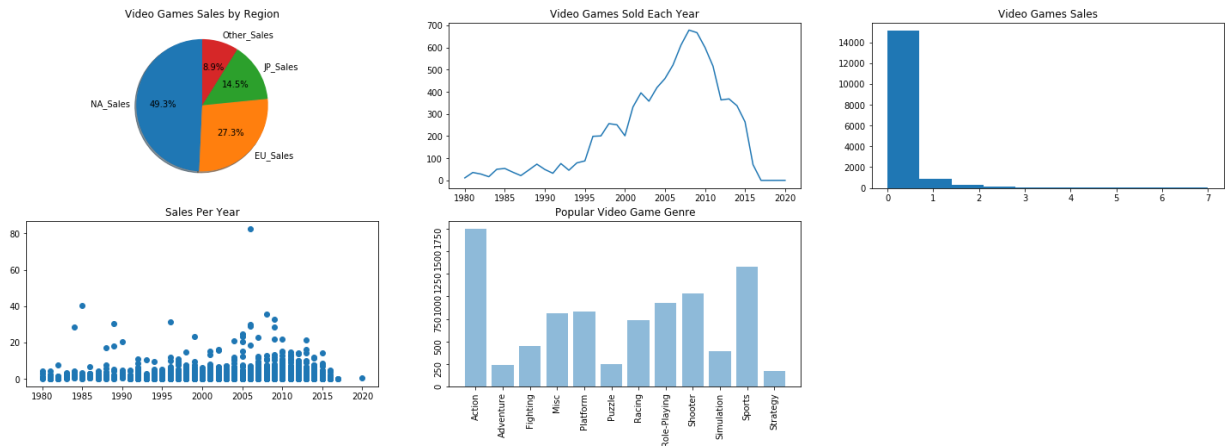
```

In [277]: fig = plt.figure()
# plt.rc('figure', figsize=(25,12))
ax1 = fig.add_subplot(3, 3, 1)
ax2 = fig.add_subplot(3, 3, 2)
ax3 = fig.add_subplot(3, 3, 3)
ax4 = fig.add_subplot(3, 3, 4)
ax5 = fig.add_subplot(3, 3, 5)

ax1.pie(values, labels= label, autopct='%1.1f%%', shadow=True, startangle=90)
ax2.plot(yearlySales.index, yearlySales)
ax3.hist(df['NA_Sales'], range = (0,7))
ax4.scatter(df.Year, df.Global_Sales)
ax5.bar(genreSales.index, genreSales, alpha=.5)
ax5.tick_params(labelrotation=90)

ax1.title.set_text('Video Games Sales by Region')
ax2.title.set_text('Video Games Sold Each Year')
ax3.title.set_text('Video Games Sales')
ax4.title.set_text('Sales Per Year')
ax5.title.set_text('Popular Video Game Genre')

```



Video Games have been around since the 1970s there are many genre of video games and there is many platform you can play the video games on. According the the data, it seems that video games are exterminly popular in North America. It makes up 49.3% of the video games sold. People also enjoy playing actions and sports games over other genre of games. If there are any developers looking to create games they should focus on targeting the North America audience and should focus on creating action or sports games. However the developer should be aware that creating video games should be a changelle because most video game will fall below a million dollars in sale. 15000 games only recieve less than a million in sale while only less than 2000 video games are successful in selling over a million dollars in copies.

In [ ]:

```


```



