# Data Visualization: Assignment 1

Student: Baris Surmelioglu

## Orginal Image

#### **Ad-free Streaming Service Costs**

\*As of January 2024.

Subscription	Cost
AppleTV	\$6.99
Discovery+	\$8.99
Disney+	\$13.99
MAX	\$15.99
Hulu	\$17.99
Netflix	\$15.49
Paramount+	\$11.99
Peacock	\$11.99
Prime Video	\$8.99

URL: <a href="https://www.forbes.com/home-improvement/internet/streaming-stats/">https://www.forbes.com/home-improvement/internet/streaming-stats/</a>

Context: It's the top of streaming app that people use nowadays, it was taken form Forbes. In the whole report is explained who are the customers, and different perspectives of them, as which is the streaming app that has the most users, which one is more probable to cancel the subscription, if you have to choose and so on, this topic is important because in this new world of technology we can enjoy of different categories of entertainment just with a device and an internet connection.

#### Faults:

- The title is not so attractive, and maybe confuse in certain way.
- There is no presented from which country they took the costs.
- There is not a specification of which kind of plan they took into consideration.

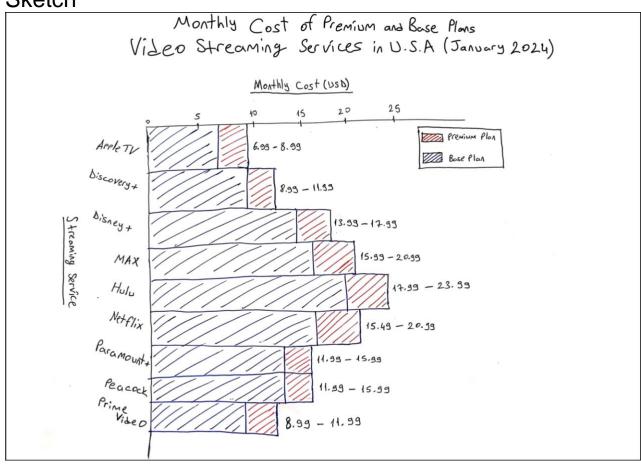
#### Implications:

- In the title doesn't make a reference to which streaming app they are talking to, it can be video, music, streaming apps such as Twitch, YouTube, Kick and so on, so this might be difficult to understand from which category they are doing the table.
- As you don't know from which country was taken these prices, this can differ and
  confuse to people that maybe try to have one of the streaming app, because the
  costs of these apps differ depending on the country (taxes), and the availability of
  these apps, due to in some countries you can't download some apps or the
  content is different from others .parts of the world.
- As we don't know which plan they are taking into consideration, the basic, familiar and so on, so we can't know to which the cost that is shown in the table refers to, and this is like a misinformation.

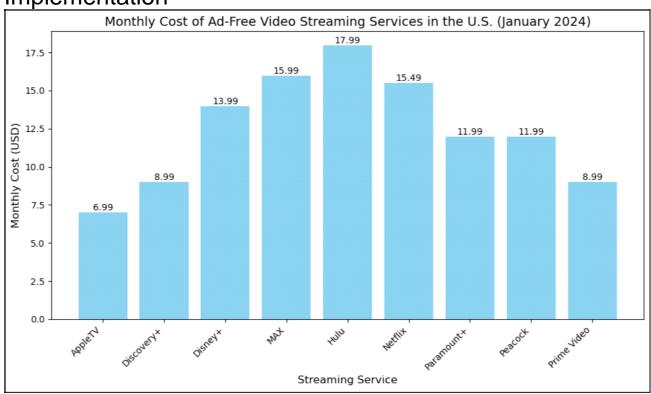
#### Possible improvements:

- Get a better title specifying the type of streaming apps.
- Write the country where they took into consideration to create the table
- Write a range of costs, from the cheapest plan to the expensive one.
- To get a better representation, It would be better change from the table to a bar chart, where the x-axis represents the streaming app's names, y-axis the costs (\$), and a legend specifying the costs of each one.

## Sketch



**Implementation** 



## Implementation code

```
import matplotlib.pyplot as plt
services = ['AppleTV', 'Discovery+', 'Disney+', 'MAX', 'Hulu', 'Netflix', 'Paramount+', 'Peacock', 'Prime Video']
costs = [6.99, 8.99, 13.99, 15.99, 17.99, 15.49, 11.99, 11.99, 8.99] # USD
plt.figure(figsize=(10, 6))
bars = plt.bar(services, costs, color='skyblue')
plt.title('Monthly Cost of Ad-Free Video Streaming Services in the U.S. (January 2024)', fontsize=14)
plt.xlabel('Streaming Service', fontsize=12)
plt.ylabel('Monthly Cost (USD)', fontsize=12)
plt.xticks(rotation=45, ha='right')
for bar in bars:
  yval = bar.get_height()
  plt.text(bar.get_x() + bar.get_width()/2, yval, round(yval, 2), ha='center', va='bottom', fontsize=10)
plt.tight_layout()
plt.show()
```