

Steam® Video Game Data Analysis

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I. OBJECTIVE

The objective of this project is to utilize data analysis and data archaeology techniques to generate clean data sets from two different Steam APIs in order to compare video game interest between the initial period for the Covid-19 pandemic and other recent years where the population was not under quarantine.

II. MOTIVATION

Covid-19 changed the way people lived their lives in 2020. The virus, which according to the Center of Disease Control and Prevention (CDC) has killed almost 700,000 people, was able to place the world in a global state of quarantine last year. The virus was able to affect not only health but people's lifestyles as well. The team carries a passion for video games. The situational changes that Covid-19 presented last year, presents an opportunity to make assumptions and test them. The assumption being that the virus and quarantine have motivated many people to become involved with video games and to spend money in them as well. With important information on how to utilize visual tools and application in Python, the team wishes to explore this idea, and to proof how much Covid-19 affected and benefited the Video Game Industry during the times of quarantine in the year 2020.

III. DISCUSSION OF DATA TO BE OBTAINED

Using the Steam API, we will collect data of video game activity, by genre. This data will be from the COVID-19 time period, which spans from early Spring 2020 to late Summer 2021. In addition, we will need to collect historical data to compare with the COVID-19 video game analysis data. This data will help determine factors like how did COVID-19 impact gaming in terms of user play time and which video game genre had the biggest increase. Additionally, we will plot the data using a library like matplotlib to better assess the results. Plots may include pie charts to show the top video game genres that were popular during COVID-19.

IV. GROUP MEMBER RESPONSIBILITIES

V. TIME-LINE OF MILESTONES

We have setup goals to achieve by certain date. Here are those goals:

- Request access to API from Steam by **October 8**.
- Request access to API from ISteamUserStats by **October 8**.
- Request access to API from ISteamUser by **October 8**.
- Data cleaning and retrieve data set with help of numpy by **October 15**.
- Generate list of Apps IDs by **October 29**.

- Generate the most used apps during Covid-19 by **November 5**.
- Generate the plot of the most used apps data by **November 5**.
- Compare data before Covid-19 and during Covid-19 by **November 12**.
- Generate the plot of the comparison data by **November 12**.

VI. EXPECTED OUTCOMES

Covid-19 has had an impact on almost every industry and/or market that exists since its appearance in late 2019. For this reason, we are excited about the potential outcomes we expect from this project. We think we will be able to gain valuable insights into how Covid-19 has affected the online gaming industry and more specifically how it has affected the Steam® platform. Listed below is some of the aforementioned expected outcomes but we anticipate these to evolve as we continue development on this project.

- Increase in the amount of game purchases on the Steam® platform
- Increase in the amount of time spent playing games offered by Steam® for their average consumer
- Increase in the amount of games added/offered in the Steam® store

REFERENCES