ICCS261 Proposal report term project

Section 1: Topic and problem statement

- Video Games Sales Ranking

- What best contributes to the ranking of video games sales

- I am interested in game development and would like to know what makes a game a top seller

- Find the contributing factor that make a video game a top seller

Section 2: Introduction and relevant literature

The video game industry is a multi-billion dollar sector, with millions of titles released across various platforms. Identifying what makes a game a top seller can provide valuable insights. So I want to analyse the historical sales data to find key attributes that contribute to high number of sales.

Factors Influencing Video Game Sales: A Statistical Analysis from causeweb.org dives into the factors such as genre and platform and the impact it have on sales

Section 3: Describe your research data

In this section, you need to describe a plan for how the research activities will be carried out, for example,

- https://www.kaggle.com/datasets/gregorut/videogamesales/data

- The dataset contains a list of video games with sales greater than 100,000 copies. It was generated by a scrape of vgchartz.com.
    - Rank: Ranking of overall sales
    - Name: Name of the game
    - Platform: Platform of the game's release (e.g., PC, PS4)
    - Year: Year of the game's release
    - Genre: Genre of the gamePublisher: Publisher of the game
    - NA_Sales: Sales in North America (in millions)
    - EU_Sales: Sales in Europe (in millions)
    - JP_Sales: Sales in Japan (in millions)
    - Other_Sales: Sales in the rest of the world (in millions)
    - Global_Sales: Total worldwide sales

- Variables/Features

    - Independent Variables: Platform, Year, Genre, Publisher

    - Dependant Variable: Global_Sales

Section 4: Exploratory data analysis

- Perform EDA with your data and report the summary statistics/interesting pattern with appropriate graphical representation and adequate description.

- https://colab.research.google.com/drive/1PGpIBxi3rz-U0x8GSDPkZF0Haxp_U_rk
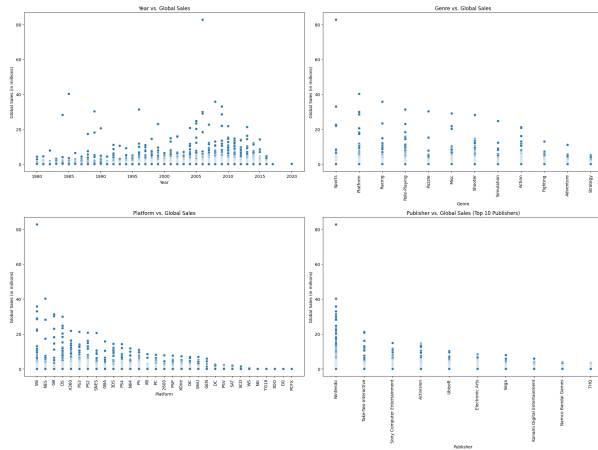
- From the EDA i perform on this data set it seem that there are clear trends with the Genre, Platform and Publisher with Sport games, games developed for the Wii and games made by Nintendo being most likely to be the top seller.
- It also seem like most top seeling games were produce in 2010

Section 5: Research design

- From the EDA, what are you going to do with your data?

  - Since I have alread done a Correlation Analysis I will do Regression Analysis and the Classification model to see the impact of various factor on global sales and find the significant predicators. And to categorize games into different sales performance categories and understand the characteristics of top-selling games.