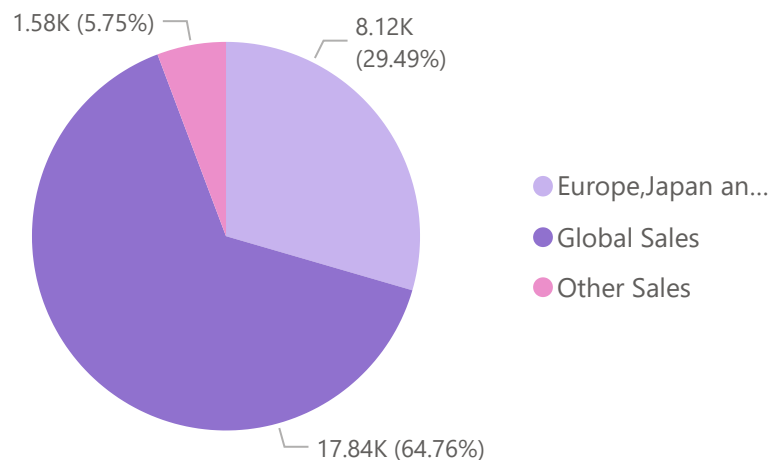
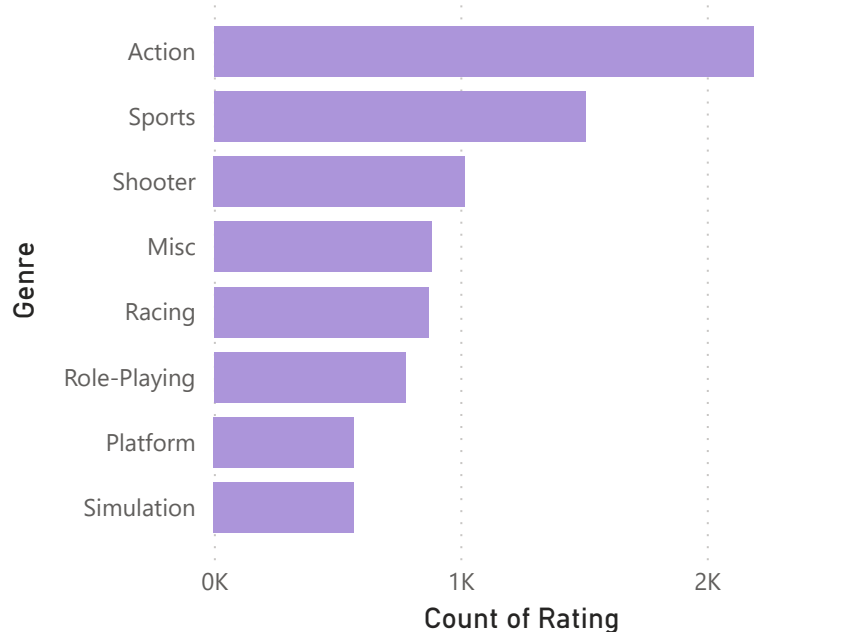


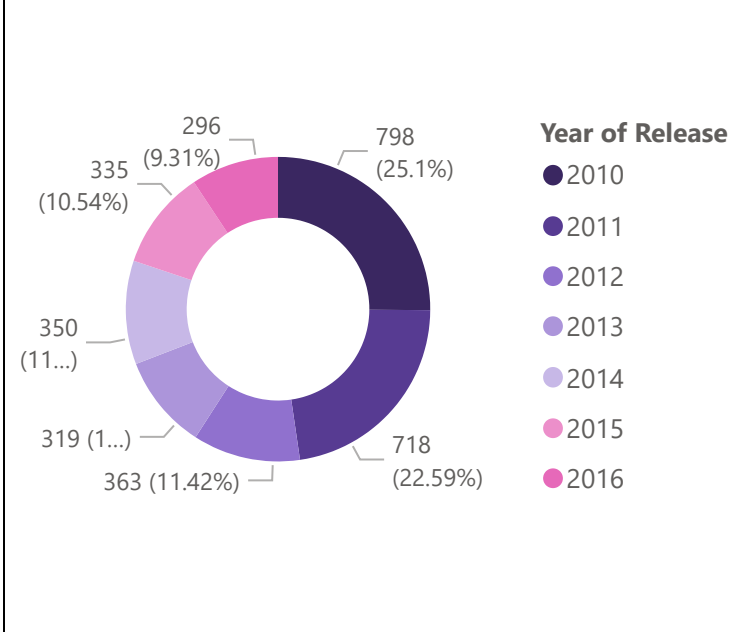
Europe,Japan and North America Sales, Global Sales and Other Sales



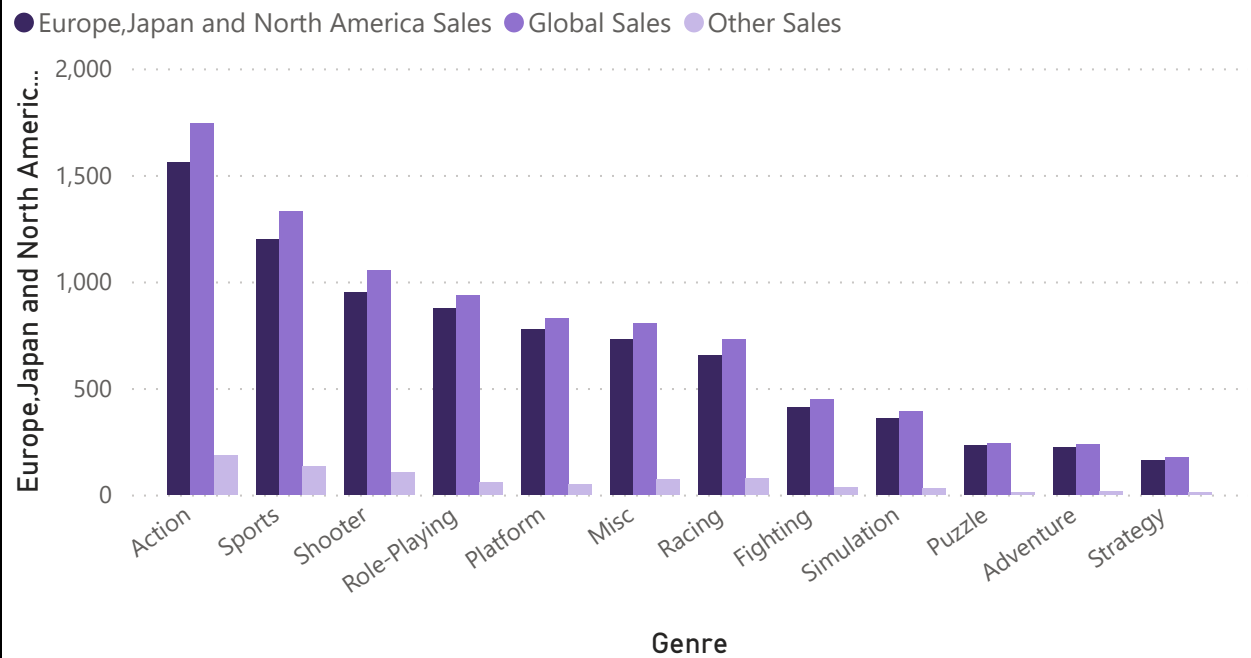
Count of Rating by Genre



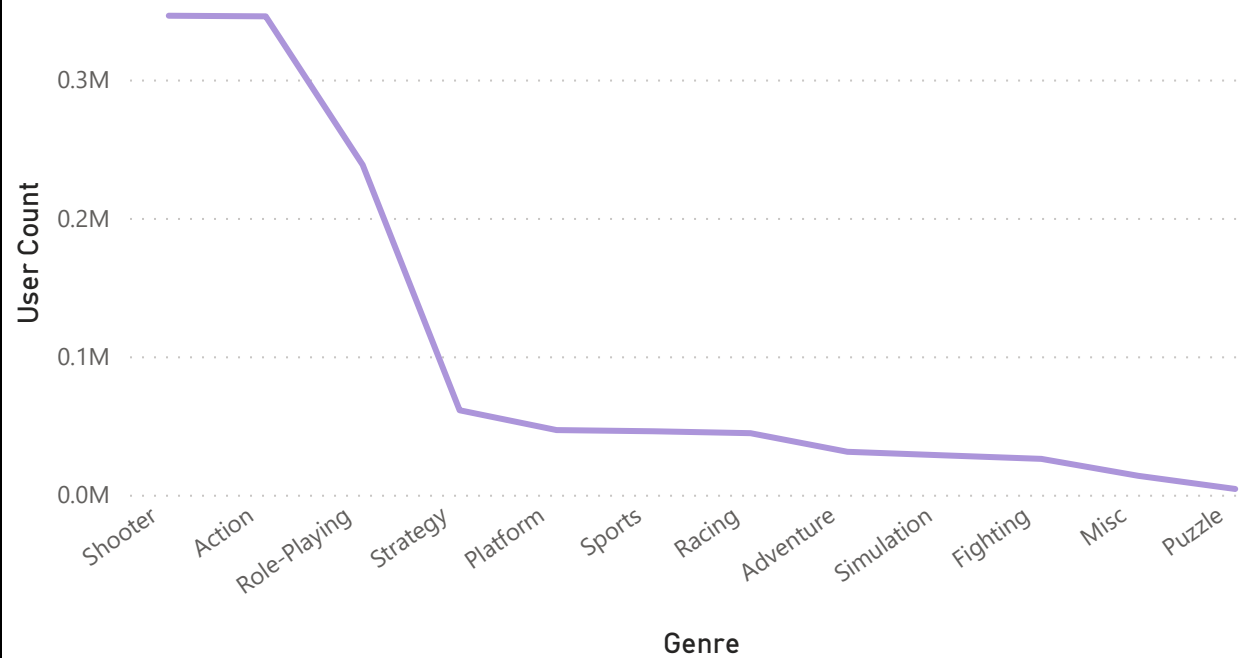
Count of User Score by Year of Release



Europe,Japan and North America Sales, Global Sales and Other Sales by Genre



User Count by Genre





UTM
UNIVERSITI TEKNOLOGI MALAYSIA

TECHNOLOGY INFORMATION SYSTEM
(SECP1513-03)

ASSIGNMENT 4:

ONLINE DASHBOARD REPORT

Group member:

Liew Yvonne A21EC0045

Sam Chia Yun A21EC0127

Part 1 : Group details

Title: Video Games Sales in Europe, Japan, North America, Global and Others

Our group leader while doing this report is Liew Yvonne, she is 20 years old and studying as a year 1 UTM student taking a bachelor of computer science and major in data engineering. She takes responsibility as a leader and divides jobs so that everyone has a chance to participate in doing this report. Besides, she also searches for data and does data analysis to make sure which data is useful for our report.

Apart from that, the group member is Sam Chia Yun, he is 20 years old too and studying as a year 1 UTM student taking a bachelor of computer science and major in data engineering. He always obeyed the instructions given by the group leader and listed out the problems while doing the report so that the solution could be discussed in group. He also did some web searching so that the data could be collected in a short period of time.

Part 2 : Introduction

Data analytics is a series of techniques aimed at extracting relevant and valuable information from extensive and diverse sets of data gathered from different sources and varying in sizes. Data analytics can be used in different sectors such as banking and security, education, health care and transportation. Data analytics could help the universities across the world to track the performance of their students and map the interest of students in different subjects via attendance. This could help the university to track the performance of their students because they can filter it by using big data analytics. Besides, data analytics can help to collect public health data for faster responses to individual health problems and identify the global spread of serious viruses such as Covid-19. With data analytics, we can get the information that we want in a short period because we don't need to find it one by one. This is important during this covid pandemic, so that the spreading of the virus could be tracked.

Microsoft Power BI is an interactive data visualization software developed by Microsoft with primary focus on business intelligence and it is a part of the Microsoft Power Platform. It offers data warehouse capabilities including data preparation, data discovery and interactive dashboards. Besides, Microsoft Power BI is a secure Microsoft hosted cloud service that lets users view the dashboards and reports using a web browser or via mobile apps. By using the Power BI we could get self-service analytics at enterprise scale, we are able to reduce the cost, complexity and security risks of multiple solutions with an analytics platform. From the talk, we get to know about data visualization, visual design, chart types, design practices and Microsoft Power BI. All of them are important in order to filter our data. We can also identify and understand the data so that we could do a proper visualization to best deliver our message. By understanding the types of data and relationships between the data, we can know our data better and get to present them in a better way.

The analytics that we conducted is about "Video Games Sales in Europe, Japan, North America, Global and Others". The data analytics contains data of Count of Rating by Genre, Count of User Score by Year of Release, Sales by Genre and User Count by Genre. There are a total of 12 genres of video games that we compared. We used standard and donut pie charts, bar chart and also line chart in our data visualisation.

Part 3: Data analytics interpretation for the chosen data

Variables transformation:

We decided to combine Europe sales, Japan Sales and North America Sales into one data by summing all the sales from three countries. Besides, we decided to change the scores given by the users (user score) into percentage.

Discussion of the results for data visualization:

Global Sales has the highest sales which has 17.84K sales (64.76%) followed by Europe, Japan and North America Sales which has 8.12K sales (29.49%) and last is Others Sales which has 1.58K sales (5.75%).

Action has the highest number of ratings of all genres which has 2188 ratings, followed by Sports which has 1509 ratings placed in the second. Shooter games has the third highest number of ratings, which has 1019 ratings. Puzzle has the lowest number of ratings which has 77 ratings.

Based on user count, 2011 has 154741 users which has the highest user count from 2010 to 2016. 2012 has the second highest user count which has 113673 users followed by the year of 2013 which has 132896 user count. The year 2016 has the lowest user count which has 69422 users.

Actions genre video game has the highest sales in all Europe, Japan and North America Sales (1559.59), Global sales (1745.27) and Other Sales (184.60) followed by Sports genre video game which has 1196.76 sales in Europe, Japan and North America, 1332.00 sales in Global and 134.51 sales in Other. Genre that has the third highest sales is Shooter which has 948.34 sales in Europe, Japan and North America, 1052.94 sales in Global and 104.11 sales in Other. Strategy has the lowest sales in all Europe, Japan and North America Sales (163.38), Global sales (174.50) and Other Sales (10.85).

Based on genre, Shooter has the highest number of user count, which has the number of 346110 users. Action has the second highest number of user count with 345668 users. The third highest user count by genre is Role-Playing which has 238315 users. Puzzle has the lowest user count which has 4160 users.

As Action genre has the highest sales, therefore the user count is also quite high just below Shooter which has the highest number of user count. Action genre has the highest rating too. Even though Shooter genre has the third highest sales, Shooter has the most number of user count and also has the third highest rating. As Puzzle has the lowest rating, therefore Puzzle has the lowest number of user count. Sports has the second highest sales and also second highest rating but the user count of Sports genre is in 5th place of all genres.

Conclusion:

As a conclusion, Action games are the most popular video game genre followed by Shooter while Puzzle is the most unpopular video games genre. This is mostly because boys tend to play more video games than girls and boys like Action and Shooter games the most. This causes Action and Shooter genre to have the most sales and the most user count. Even though Sports has a high sales, its user count is in the 5th place. However, they do not really like to play games like Puzzle and Simulation, therefore these two genres have a low user count and sales.