Mobile Device Usage And User Behaviour Data-set

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**Github Repository**: https://github.com/MuhammaUmerMehmood/Applied-Data-Science--1

Introduction:

This is the project in which I will discuss multiple factors about mobile devices related to their usage and behaviour which will provide us full information about the utilisation of mobile devices. I will cover key points such as screen time, battery life, the number of installed apps, and the operating systems used, providing a full view of how mobile devices are utilised. In this project, I will also discuss the usage of mobile devices based on gender how much male or female users use mobile devices. I will also show the battery drainage of operating systems such as Android and IOS.

Visualization of Codes:

The heat-map shows correlations between numeric columns in the data frame. It allows us to show relationships between features. There are two types of correlations. First, positive correlations are in red shades, and negative correlations are in blue shades, with intensity based on the correlation strength. So, this type of visualization helps us identify features that are directly related to each other.
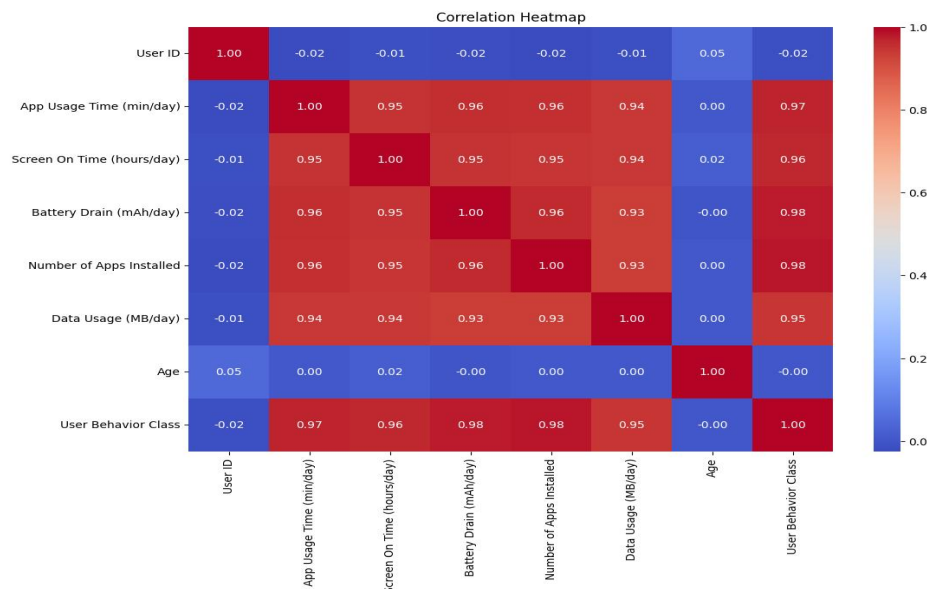
This plot shows the relationship between App Usage Time and Screen Time for users, with color differences by User Behavior Class. It can be used to identify patterns and clusters in how different user classes use apps and screen time.
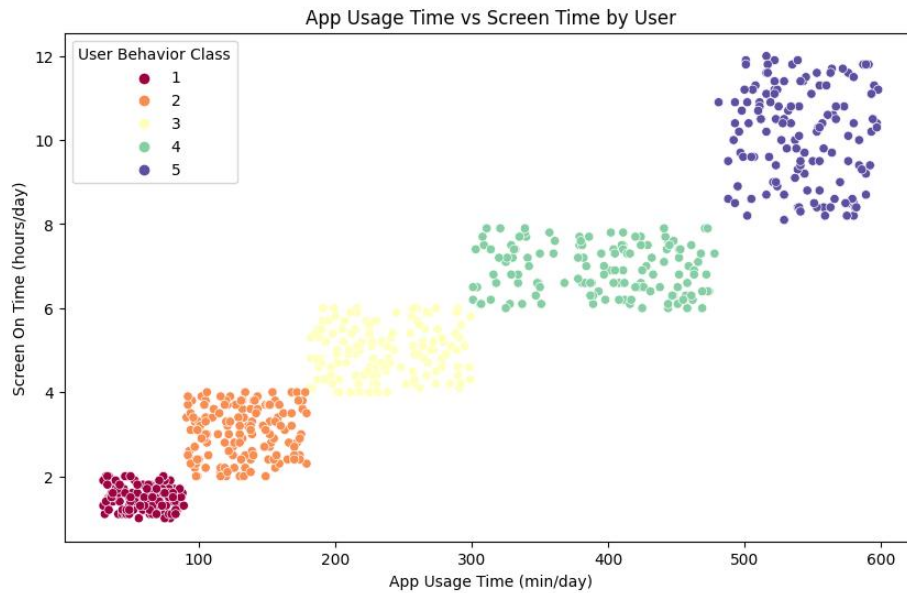
This plot visually shows us the distribution of users by gender, allowing you to quickly see which gender category has more users. This type of visualization is useful for comparing the size of different categories within a single categorical variable.
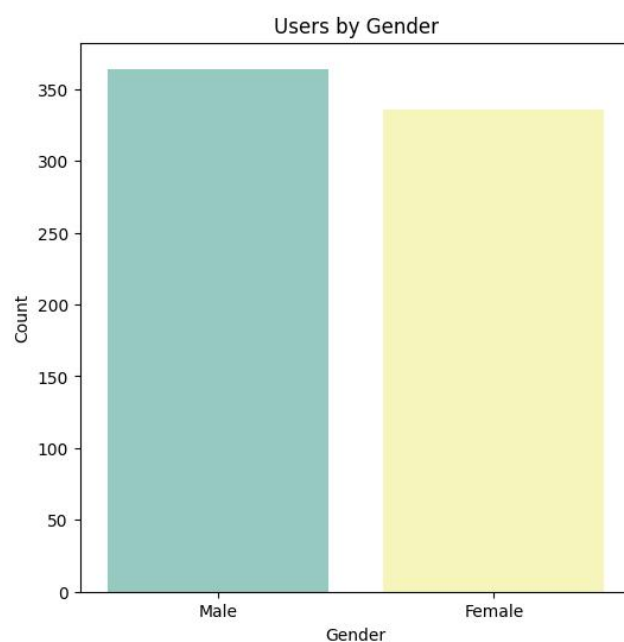
Conclusion:

In this project, we discussed about user behavior with mobile devices by analysis of app usage, screen time, and user demographics. It allowed us to see which features are closely related, showing valuable insights into factors that may related to each other. It also highlighted patterns and clusters in how users from different behavior classes spend time on their devices, while the gender distribution plot provided a clear view of the demographic balance in our data set. Together, these visualizations reveal useful trends and relationships, helping us better understand user behavior with mobile devices and guiding future research or targeted improvements in user experience.