Price Prediction for Mobile Phones

Abstract:

A key challenge for new mobile manufacturers is to determine the sale price of the products (mobile). The ability to predict the exact product value is beneficial for product buyers. The product prices depend on the number of features like the RAM, Main & Front Camera Pixel, Storage Available, Price Range, and so on.

Problem Statement:

Use various supervised predictive algorithms to predict the price of the product.

Dataset Information:

- **Brand:** Different Brands which are taken into consideration while evaluating.

1- VIVO
2- OPPO
3- POCO
4- MOTOROLA
5- REDMI
6- SAMSUNG
7- REAL ME
8- ONE PLUS

- **Name**
- **Color**
- **Storage:** This Feature Includes storage(ROM) of different devices.

1- 16gb
2- 32gb
3- 64gb
4- 128gb
5- 256gb
6- 512gb

- **Battery:** This Feature Includes battery(in mAh) information of different devices.
- **Main Camera:** This feature includes main camera pixel(in MP) information of different devices.
- **Front Camera:** This feature includes front camera pixel (in MP) information of different devices.
- **Display Size:** This feature includes display size of the screen (in cms.) of different devices.

- **RAM:** This Feature Includes RAM information of different devices
  1- 2GB
  2- 3GB
  3- 4GB
  4- 6GB
  5- 8GB
  6- 12GB
  7- 16GB
  8- 64GB

- **Star Ratings:** This feature includes star ratings of different products available on sites like Amazon and Flipkart.
- **User Ratings:** This feature includes number of users rated for different products available on sites like Amazon and Flipkart.
- **Price:** This feaure includes the price of various products

Scope:

- Web Scrapping
- Exploratory data analysis
- Feature selection using various criteria
- Hyper parameter tuning
- Training various regression model for prediction
- Power BI dashboard for visualization
- ML web app using streamlit