**Flipkart Laptop Data - Business Insights on Product Pricing**

**Dataset Link -** [**laptop\_details.csv**](https://drive.google.com/file/d/1R5aPXN6k1vItagw6mBz9yviBFSDgnf_d/view?usp=share_link)

**Problem Statement**

Elon Musk has started his own laptop company (Tesla Laptop) in India. He wants to give tough fights to big companies like Apple, Alienware, HP etc.

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He does not know how to estimate the price of laptops his company creates. In this competitive laptop market you cannot simply assume things.

Musk wants to find out some relation between features of a Laptop(eg:- RAM, OS, etc) and its selling price. But he is not so good at Data Mining. 😥

To solve this problem he already asked his Data Engineering team (from Twitter 🐥🤭) to collect laptop data from various competitors.



Now he needs your (i.e Data Scientist’s) help to solve the following problem. 🥰

**Sprint - 1 (Data Analysis and Mining)**

**Musk’s Requirements**

1. Build an interface (using streamlit) for Elon Musk where he can enter the laptop features like RAM Size, RAM Type, HDD, OS, etc. and get the price prediction.
2. Based on your Data Analysis and MIning skills, give recommendations to Elon Musk on how the pricing works in the laptop market.

**Note - This is real world data. It was scrapped from Flipkart on 21-12-2022 at 11:50 AM.**

**Kindly refer below mentioned notebook to see how the data was scraped by Musk’s Data Engineering Team:**

[**Click here to get the code for web scraping and cleaning the Flipkart data**](https://github.com/bansalkanav/Machine_Learning_and_Deep_Learning/tree/master/Module%206%20-%20Case%20Studies/8.%20Regex%20and%20Webscrapping/Web%20Scrapping)

**Added some empty meme images for all the creative people out there. 😋**

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**Sprint - 2 (ML Model Tuning)**

Congratulations! Elon Musk is happy with your models and insights that you have shared in the previous requirements.

Now he wants you to test the models you have created for Underfitting and Overfitting. He wants you to build a best fit model.

**Todo -**

1. First try to check if the models you have created are a best fit or not.
2. See if applying cross validation helps improve your models performance.