**Capstone Project Submission**

**Instructions:**

i) Please fill in all the required information.

ii) Avoid grammatical errors.

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| **Team Member’s Name, Email, and Contribution:** |
| **Team Member’s Role:-**   * **Vivek Kumar Soni**   **Email:-**[**viviekkumar75251@gmail.com**](mailto:viviekkumar75251@gmail.com)   * + Data Understanding   + Feature Analysis   + Feature Engineering   + Decision Trees   + Random forest   + XG Boost   + Hyperparameter tuning |
| **Please paste the GitHub Repo link.** |
| Vivek’s Github Link:- <https://github.com/vivek7525/Mobile_price_range_capstone-projec> |
| **Please write a summary of your Capstone project and its components. Describe the problem statement, your approaches, and your conclusions. (200-400 words)** |
| In the competitive mobile phone market companies want to understand sales data of mobile phones and factors which drive the prices. The objective is to find out some relation between features of a mobile phone  (eg:- RAM, Internal Memory, etc.) and its selling price. In this problem, we do not have to predict the actual price but a price range indicating how high the price is.  Several aspects determine the cost of a mobile phone. The brand name, as well as specs such as internal memory, camera, ram, sizes, connectivity, and so on, are essential considerations in determining the pricing. From a commercial standpoint, it becomes critical to assess these elements on a regular basis and come up with the ideal set of specs and pricing ranges so that consumers purchase their mobile phones.  As a result, through this exercise and our forecasts, we will attempt to assist firms in estimating the price of mobiles in order to compete with other mobile manufacturers, as well as to assist customers in ensuring that they are paying the best possible price for mobile.  We tried a variety of models, and the table above summarises the results of one set of models.   * K-Nearest Neighbours has the best overall accuracy of 95 percent. * The optimal accuracy for Random Forest, Decision Tree, Gradient Boosting, and XG boost was 84 percent, 90 percent, 90 percent, and 91 percent, respectively. |
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