

# Capstone Project

## SUMMARY

### Member Name, Email and Project Details :

Name: Prasad Khedkar

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Project Name : Mobile Price Range Prediction(Classification)

Project Type : Individual

### GitHub Repo link :

Github Link:- [https://github.com/Prasad-Khedkar/Mobile\\_price\\_range-Classification-](https://github.com/Prasad-Khedkar/Mobile_price_range-Classification-)

### Project Description :

#### Mobile Price Range Prediction(Classification) :-

Mobile Companies give a tough fight to each other when it comes to demonstrating different mobile features to their valued customer but everything will go in vain if price of mobile is not categorized correctly according to the set of features.

The main objective of this project is to categorize the price range into different categories like-

Low cost(0) , Moderate cost(1), High cost(2) and Expensive cost(3) using supervised machine learning algorithm

#### Approach Taken:

- |                     |  |
|---------------------|--|
| 1. Data loading     | 6. Data preparation(for training models) |
| 2. Data Cleaning    | 7. Different Model Implementation        |
| 3. EDA              | 8. Final Model Selection                 |
| 4. Data Preparation | 9. Hyper-parameter tuning of final model |
| 5. Data Scaling     |  |

### Final Conclusions :

- Raw data was already cleaned i.e., no duplicates or null values present in data set
- There was high correlation between price\_range and ram.
- After training on different algorithms, Logistic Regressor gave top notch results & classified the price range with accuracy score 90%+ on both train & test set.
- Upon tuning the hyperparameters of Logistic Regressor, algorithm's performance improved slightly.