**Telecom Customer Churn**

**Abstract:**

Bob has started his own mobile company. He wants to give a tough fight to big companies like Apple, Samsung etc. He does not know how to estimate the price of mobiles his company creates. In this competitive mobile phone market, you cannot simply assume things. To solve this problem he collects sales data of mobile phones of various companies. Bob wants to find out some relation between features of a mobile phone(eg:- RAM, Internal Memory etc) and its selling price. But he is not so good at Machine Learning. So he needs your help to solve this problem.

**Problem Statement:**

In this problem, you do not have to predict the actual price but a price range indicating how high the price is using Random Forest.

**Dataset Information:**

|  |  |
| --- | --- |
| Column | Description |
| battery\_power | Total energy a battery can store in one time measured in mAh |
| clock\_speed | The speed at which microprocessor executes instructions |
| fc | Front Camera megapixels |
| int\_memory | Internal Memory in Gigabytes |
| m\_dep | Mobile Depth in cm |
| mobile\_wt | Weight of the mobile phone |
| n\_cores | Number of cores of a processor |
| pc | Primary Camera megapixels |
| px\_height | Pixel Resolution Height |
| px\_width | Pixel Resolution Width |

|  |  |
| --- | --- |
| ram | Random Access Memory in MegaBytes |
| sc\_h | Screen Height of mobile in cm |
| sc\_w | Screen Width of mobile in cm |
| talk\_time | The longest time that a single battery charge will last when you are |
| price\_range | This is the target variable with the value of 0(low cost), 1(medium cost), 2(high cost) and 3(very high cost). |

**Scope:**

* Prepare and analyse data
* Perform Univariate and Bivariate analysis
* Train Random Forest model with data and check it’s performance

**Learning Outcome:**

The students will get a better understanding of how the variables are linked to each other and how the EDA approach will help them gain more insights and knowledge about the data that we have and classify the data into similar groups using Random Forest.