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DATA 606
Deliverable-1 Report

Mobile Price Range Prediction.

Project Overview and Purpose

The main goal of this project is to build a model to predict the price range indicating how high the price is of mobile phone based on battery power, 4G, wifi, Bluetooth, Ram, Internal Memory and other mobile specifications. During the whole project, I will use python to training data, visualize the data, use machine learning algorithm and build models to finish my project. This project will help mobile phone manufacturers predict the reasonable market price of their new phone, thereby strengthening their own market competitiveness. Also, it can help consumers verify dose they paid the best price for their phone. Dose they pay more for the phone itself or for the brand.

Motivation

Once I saw a phone called "Vertu Signature Touch" sell for $15,000. I really want to know what the actual value of this phone is.

Dataset

The dataset I will use for this project is *Mobile Price Classification.* It is open resource at Kaggle. The dataset contains two csv files. One is train. csv and another one is test.csv. Both files contain 21 columns and 2000 entries. The 21 columns are id(ID), battery power(Total energy a battery can store in one time measured in mAh), blue(Has Bluetooth or not), clock speed(speed at which microprocessor executes instructions), dual_sim (Has dual sim support or not), fc(Front Camera mega pixels), four_g(Has 4G or not), int_memory(Internal Memory in Gigabytes), m_dep(Mobile Depth in cm), mobile_wt(Weight of mobile phone), n_cores (Number of cores of processor), pc(primary Camera mega pixels), 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(Longest time that a single battery charge will last when you are), three_g(Has 3G or not), touch_screen(Has touch screen or not), and wifi (Has wifi or not)

Reference:

Abhishek Sharma. (2017). Mobile Price Classification. Kaggle. Retrieved from https://www.kaggle.com/iabhishekofficial/mobile-price-classification#test.csv