FAYOMI ADVERTISING

The goal of this project is to predict the outcome based on the customer when certain advertisement is posted on a certain website .The target of this problem is to classify whether the person clicks AD or Not.

[Clicked,Non Clicked].

The Data consists of around 1000 instances in which divided 800 for training and 200 for validating data instances.

This dataset was featured from Kaggle.

Features of this dataset are :

* Daily Time Spent on a Site --->Time spent by the user on a site in minutes.
* Age--->Customers age in terms of years.
* Area Income-->Average income of geographical area of consumer.
* Daily Internet Usage -->Average minutes in a day consumer is on the internet.
* Ad Topic Line--->Headline of the advertisement.
* City-->City of the consumer.
* Male-->Whether or not a consumer was male.
* Country-->Country of the consumer.
* Timestamp-->Time at which user clicked on an Ad or the closed window.
* Clicked on Ad--->0 or 1

For this problem tried multiple approaches of Machine learning algorithms and required statistical analysis for the problem. Multiple Algorithms were applied along with parameter tuning and cross validation. The approaches tried were:

* Logistic regression
* Ridge Classifier CV along with parameter tuning
* Decision trees
* Naïve Bayes
* K-nearest neighbors
* Ensemble techniques such as Random forests
* Gradient boosting
* Adaptive boosting
* Support vector machines

Out of all these approaches best model was saved into pickle file and recorded the metrics . As we recorded all the metricsof classification problem In this case Recall is given more important as No.op positive clicks to be more considered according to the problem.

The code and Data is posted in github in below link: <https://github.com/anish997/PROJECTS/tree/master/FAYOMI%20ADVERTISING>