Capstone Project Submission

Instructions:

i) Please fill in all the required information.

ii) Avoid grammatical errors.

Team Member's Name, Email and Contribution:

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1.Data Cleaning
2.Exploratory Data Analysis (EDA)
3.Transforming Data
4.Splitting Data
5.Fitting Different Model
6.Cross Validation & Hyperparameter Tuning
7.Lasso Regression
8.Ridge Regression

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Please paste the GitHub Repo link.

Github Link:- https://github.com/Amolkale01/Yes-Bank-Stock-Prediction-ML-regression

Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions. (200-400 words)

Yes Bank is a well-known bank in the Indian financial domain. Yes Bank is listed on exchange market. Stock price of any stock may depend on several factors. Incidents such fraud case involving bank management people, certainly have huge impact on stock price. Such fraud case involving Rana Kapoor happened in Yes Bank in year 2018. After which stock price of Yeas Bank went down severely.

So, there is need of minimizing the risk on investment and increase its profitability. Learning the past trends of stock and to be able to predict the closing price of a stock which leads to take better investment decisions. Closing price of stocks depends on lot many factors. Dataset contains opening price, closing price, high price and low-price for each month.

Stock prices such opening price, closing price, high price and low-price during period of time, may lead us to predict future closing price of that stock. Our experiments can help understand and predict about the closing price of a stock. Data analysis and prediction using machine leaning algorithm leads to feature selection and predict future closing price of a stock.

Prepared data for training after cleaning and transforming into normal distribution. Then splitting data into training and testing dataset. Following model were trained using training dataset:

- Linear Regression
- Lasso Regression and its cross validation
- Ridge Regression and its cross validation
- Elastic Net and its cross validation

Evaluated and compared all the evaluation metrics of each model. We got a maximum accuracy of 82%. All the model shows almost same accuracy except for elastic net.

Drive Link

https://drive.google.com/drive/u/0/folders/15b2YHPVk99ZrniEndorzOWwpFdTpUL9b