Capstone Project Submission

Team Member's Name, Email, and Contribution:
Team's member- Uma Shankar **Email id- vedanandkumar44@gmail.com** **Contribution to this project by Uma Shankar** **I wrote the basics program on python to analyse the Yes bank stock price prediction using a machine learning algorithm. I also prepared some questions and analysed the prediction.** **1. Data Wrangling** **2. Importing datetime, .head().** **3. Graph analysis between Open and Close prices** **4. Bivariate analysis** **5. Residual Error** **6. Lasso regression** **7. Cross validation** **8. Linear regression model performance visualisation** **9. Data Wrangling** **10. Basics i.e. .head(), .tail(), .shape(), .info()** **11. Variable analysis** **12. Data analysis** **13. Collinearity graph between all variables** **14. Linear regression** **15. Ridge regression** **16. Cross validation** **After finding the solutions to those questions I prepared the presentation slides. Then I created the GitHub account for the submission of this project.**
Please paste the GitHub Repo link.
Github Link:- https://github.com/Umashankar9818/Classification-project-Yes-bank-stock-price-pridiction-

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

I prepared my second Capstone project. The title of the project is 'Yes Bank Stock Closing Price Prediction'. This project is based on the close stock price of the Yes bank. We have provided some datasets from which we have to find the information about the Yes Bank stock price details. The problem that we faced was that we had a small dataset so it was very difficult to do EDA and modelling.

Components of the project-

In this project, I provided the different types of columns. In those columns, I had information for the Yes bank stock closing prices. All names of the features were: Date, Open, High, Low, and close price.

Problems statements:

There were a total of 6 problem statements that we analysed. All the six problems were different from each other. So my approaches for solving those statements were sample projects and online sources.My coding knowledge of python and machine learning algorithms helped here a lot.

Conclusions-

1) **At first I do the data wrangling and then data cleaning and after that we do the EDA part.**
2) **In EDA part I conclude from our dataset that**
    a) **Stock close price decreased after 2018 it is mainly because of Rana Kapoor case and hit the stock price badly.**
    b) **The graph for Yes bank opening price and Yes bank closing price has the same result.**
    c) **The point is that the stock price of the YES BANK falls down after the year 2018 and it is not beneficial for investors to invest their money.**
    d) **From the scatter plot we can conclude that bivariate analysis shows high correlation of close price with other features.**
    e) **All histogram plots show that all are right skewed.**
    f) **From heatmap we can conclude that all the features show high correlation between each other.**

- **I implemented linear regression and the accuracy of our linear regression model is 99.78%.**
- **After that I visualise the performance of our linear regression model and the graph shows that I achieve the almost best fit model for our dataset.**