**Capstone Project 1 - Milestone Report**

**Overview**

This project is for predicting the interest rates of the loans based on historical data. We are indirectly predicting the risk by predicting the rate as rate prediction is tied with a bunch of factors that contribute to loan risk.

Problem: To predict the loan interest rate on a mortgage loan based on past data.

Client: The client is Fannie Mae risk analytics team who wants to use this data to predict what interest rates could be assigned to customers based on past historical data.

Data set: The dataset is the 2016 Q4 Acquisitions data available from FannieMae’ s website. This is a public data set and is available for anybody’s consumption. This data set also has a performance data set which shows the performance of loans from the past. I used acquisitions data to predict the behavior of the loans but performance data set can be used for the same purpose as well.

### Initial Observations: This data set has approximately 63K rows distributed among 25 columns. Of these columns only 15 have a direct impact on the interest rate

### Code Analysis: The link to the project artifacts is given below.

### https://github.com/HabeebAMohammed/SpringBoard-DA-Career-Track/tree/master/Capstone%20Project%201