XXX finance company with regional footprint in south India. The company wants to provide business intelligence to its sales manager to quickly check the eligibility of the loan applicants when submit the details to the company. This will help the finance company to quickly assess the applicants in the region and their ability repay with regard to the data provided by them and some background verfication data.

So they have decided to launch a web application internally in a website to make a assessment using data analytics models.

## **Detailed requirements:**

## 1. Web page for submission of applicants information

The web page will take the following inputs from the customer

- 1. Name of the applicant
- 2. Personal information such as age, gender, education, Marital status, No of Dependents
- 3. Education level (Non-Grad, Under-Grad, Grad)
- 4. Employment status (Self Employed, Professional, Govt service)
- 5. Application income
- 6. Coapplicant name, income
- 7. Loan amount, loan term
- 8. Credit history
- 9. Domicile area where the applicant is staying more than 1 year)
- 10. Background verification informations

(NOTE: Please use loan.csv data set as the basis of capturing the information for the loan applicant)

After submitting the applications, a reference number LOANID should be generated and returned to sales manager for future reference. The application data submitted should be saved in a database for further assessment.

- 2. <u>Develop a suitable machine learning models which can provide best assessment of the applicants ability to repay the loan.</u>
- 3. When assessment is requested by the manager the machine learning model should take the selected record from the input form and then make the analysis and predictions and

display the assessment. The assessment may be detection few aspects of the applicants as follows:

- 1. Whether applicant is a fraud?
- 2. Whether applicant is eligible to sanction a loan?

## Brief architecture of the system

