

## Ideation Phase

### Brainstorm & Idea Prioritization Template

Date	17 September 2022
Team ID	PNT2022TMID13791
Project Name	Smart Lender - Applicant Credibility Prediction for Loan Approval
Maximum Marks	4 Marks

#### Step-1: Team Gathering, Collaboration and Select the Problem Statement

### Brain storming and idea prioritization

In this template share ideas and can be written here to modify accordingly, leader will these chart and based on mentor feedback

 A period of 2 months to prepare  1 month to collaborate  A team of 4 members

High Accuracy  
clean visuals  
clean code  
More Insights

#### A Team Gathering :-

Ananth.R(Team Leader) will gather group and instruct, ask idea and lead the group further

#### B Set Goal :-

Setting up the goal and working based upon the goal

#### C Facilitation Tools :-

- 1.Youtube and IBM sessions to learn concepts.
- 2.Use documentation to code new concepts
- 3.Use discord, stackoverflow to clear doubts

## **Application Credibility Prediction for Loan Approval**

This data Science project will help the Bank Employees need a way to predict the credit defaulters so that recovery of approved loans can take place without any loss and it can play as the contributing parameter of the bank statement. This problem occurs when the banks need to provide loans to the customers who are in need of the money. This problem needs to be solved quickly because the banking system is one of the most important factors which affect our country's economy and financial condition and credit risk evaluation is a major function of banking systems.

### **Problem**

We are going to solve this problem by using machine learning algorithm using sci-kit and other conventional libraries like spark to handle big data, numpy and pandas for reshaping, cleaning data, etc,.

## ARUN RITTHIK.K.K

1. Get the big data
2. Clean values by outlier detection removing null value by mean/median
3. Remove abnormal data from csv/txt file

## JAVAHAR.A

1. Clean values by outlier detection removing null value by mean/median
2. Use matplotlib to create clean visuals
3. Use neural network for this problem

## ANANTH.R

1. Use Xgboost Regression
2. Do statistical i.e. inferential statistics, descriptive statistics, etc.,
3. Try to keep ideas clean and neat

## DHARUN.R

1. Preprocess data to reduce computation strain
2. Try to achieve more accuracy by repeated epochs and do parameter tuning
3. Do proper refactoring of code and clean visualization patterns

**ARUN RITTHIK.K.K**  
Use numpy,  
pandas, plotly

**JAVAHAR.A**  
Use Matplotlib

**ANANTH.R**  
Use seaborn for  
clean visualization,  
use testing  
techniques if  
possible

**DHARUN.R**  
Refractor code if  
possible use clean  
visuals and use  
required libraries to  
reduce complexity

**JAVAHAR.A**  
Use Apache spark  
to store big data

**ARUN RITTHIK.K.K**  
Use aws or azure  
for model training  
and deploying  
model

### **Step-3: Idea Prioritization**

#### **prioritizing ideas**

##### **Prioritize**

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible

##### **ARUN RITTHIK.K.K**

Use plotly for interactive graphs or visualizations, use xgboost and scikit learn for preprocessing and training model. Use kaggle to learn code from experienced persons as it is a data science community

##### **JAVAHAR.A**

Use aws, azure to deploy model and training model use seaborn. Use Kaggle and gitHub for reference

##### **DHARUN.R**

Use seaborn, numpy, pandas which are commonly used libraries in data science project.

##### **ANANTH.R**

Clean code, clean visuals, Higher accuracy.