### *Project Title:* ***Credit* *Risk Classification Analysis (Data Mining)***

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**Document History**

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| **Name** | **Date** | **Change request / Reason** | **Version** |
| Low-Level Design | 14/11/2022 | Initial Draft | 1.0 |
| Low-Level Design | 2/01/2023 | Update in Description and Software used | 1.1 |

**Overview**

This design document has the project overview and the solution to a problem statement. This also has, software and hardware if any requirements and database design, input formats, output layouts, and external interfaces.

# INTRODUCTION

## Purpose and Scope

The purpose of the document is to provide a basic workflow of the project and the tools/software required.

## Project Executive Summary

Credit Risk Modelling, where a machine model will predict if credit risk is high or low. The model will help in understanding the risk based on 72 features. Various models will be trained based on the dataset provided. The best model will be deployed and monitored for further training based on the feedback.

### Constraints

The dataset is limited.

## Document Organization

NA

## Single Points of Contact (SPOC)

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## Project References

NA

## Glossary

NA

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| **Name:** | ***Credit* *Risk Classification Analysis (Data Mining)*** | | |
| **Version:** | 1.0 | | |
| **Developer:** | Mr. Himanshu Sahrawat | **Date:** | 14/11/2022 |
| **Project Description:** | In this project, the client had several new loan applicants and needed to assess the credit risk of the applicants. They provided historical data that included customers’ purchases, financial and demographic information as well as their stated loan purpose on the application and the assigned credit risk. This data is not necessarily big, it only had 72 features, and however, it was certainly useful in assessing the credit risk of our new applicants. | | |
| **Solution** | A Model, trained on provided dataset to predict the credit risk. Further, model will be monitored after deployment based on feedback received. | | |
| **Tools / Software** | Anaconda Navigator, R studio, GitHub, Python, Jupyter-Notebook, Tableau. | | |
| **Project Design** | The basic architecture is: | | |
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