

Smart Lender - Applicant Credibility Prediction for Loan Approval

Milestone and Activity List

Industry Mentor(s):	Nidhi	Faculty Mentor:	Lakshmi Priya S
Team Members:	Anirudh T E Pranav Raj SB Tushar Shah Yashwanth M	Roll Numbers:	SSNCE195001016 SSNCE195001078 SSNCE195001117 SSNCE195001130

Milestone List:

M. No.	Milestone Name	Description	Mandatory
M001	Pre-Requisites	Downloading and installing Anaconda software and installing the following packages NumPy, Pandas, SciKit Learn, Matplotlib, Flask, Pickle-Mixin.	Yes
M002	Prior Knowledge	Learning about supervised learning, unsupervised learning, flask, metrics techniques.	Yes
M003	Project Objectives	Gaining knowledge about the machine learning algorithms, python with machine learning, cleaning the data, real time analysis of the project, building user interface, navigation of ideas.	Yes
M004	Project Flow	Installing required libraries, data collection, data preprocessing, model building, application building.	Yes
M005	Project Structure	Building a flask application that needs HTML pages and this model is built in notebook floods.	Yes
M006	Data Collection	Downloading the dataset for the project from the open sources like keggel.com, data.gov.	Yes

M007	Visualizing and Analyzing the data	Reading dataset, performing univariate, bivariate, multivariate, descriptive analysis of the project.	Yes
M008	Data Preprocessing	Checking for null values, handling categorical values, balancing the data, scaling the data, splitting into training and testing data.	Yes
M009	Model Building	Model building with the use of four best algorithms: Decision tree, random forest, KNN, xgboost model are used. Comparison and Evaluation of models.	Yes
M010	Application Building	Building HTML pages, python code with all tests done running the application.	Yes
M011	Train the model on IBM	Building and deployment of models on IBM cloud, and integration with flask.	Yes
M012	Ideation Phase	Literature survey on the project and preparing the empathy map and ideation.	Yes
M013	Project Design Phase-1	Preparation of proposed solution, problem solution fit and solution architecture.	Yes
M014	Project Design Phase-2	Preparation of customer journey map, functional requirements, data flow diagrams, technology architecture for the project.	Yes
M015	Project Planning Phase	Preparation of milestone list, activity list and sprint delivery plan for the project.	Yes
M016	Project Development Phase	Project development and delivery of sprint-1, sprint-2, sprint-3, sprint-4.	Yes

Activity List:

A. No.	Activity Name	Description	Assigned To	Status
1.1	Access resources	Access the resources (courses) in the project dashboard.	All Members	Completed
1.2	Rocket chat registration	Join the mentoring channel via platform, rocket-chat mobile app.	All Members	Completed
1.3	Access workspace	Access the guided project workspace.	All Members	Completed
1.4	IBM Cloud registration	Register on IBM Academic Initiative & Apply Feature code for IBM Cloud Credits.	All Members	Completed
1.5	Project Repository Creation	Create a GitHub account and collaborate with Project Repository in project workspace.	All Members	Completed
1.6	Environment Setup	Set-up the Laptop or Computers based on the prerequisites for each technology track.	All Members	Completed
2.1	Literature Survey	Literature survey on the selected project & Information Gathering.	Pranav Raj SB Yashwanth M	Completed
2.2	Technology Training	Attend the technology training as per the training calendar.	All Members	Completed
2.3	Empathy Map	Prepare Empathy Map Canvas to capture the user Pains & Gains, Prepare list of problem statements	Anirudh T E Tushar Shah	Completed
2.4	Technology Training	Attend the technology training as per the training calendar.	All Members	Completed
2.5	Brainstorming	List the ideas by organizing the brainstorming session and prioritize the top 3 ideas based on the feasibility & importance.	All Members	Completed
2.6	Technology Training	Attend the technology training as per the training calendar.	All Members	Completed

3.1	Proposed Solution Document	Prepare the proposed solution document, which includes the novelty, feasibility of idea, business model, social impact, scalability of solution, etc.	Anirudh T E Tushar Shah	Completed
3.2	Technology Training	Attend the technology training as per the training calendar.	All Members	Completed
3.3	Solution fit and architecture	Prepare problem-solution fit document & solution architecture.	Pranav Raj SB Yashwanth M	Completed
3.4	Technology Training	Attend the technology training as per the training calendar.	All Members	Completed
4.1	Customer Journey Map	Prepare the customer journey maps to understand the user interactions & experiences with the application.	Pranav Raj SB	Completed
4.2	Technology Training	Attend the technology training as per the training calendar.	All Members	Completed
4.3	Functional requirements, data flow-diagrams	Prepare the Functional Requirement document and data-flow diagrams.	Tushar Shah Anirudh T E	Completed
4.4	Technology Architecture	Prepare Technology Architecture of the solution.	Yashwanth M	Completed
4.5	Technology Training	Attend the technology training as per the training Calendar.	All Members	Completed
5.1	Milestone and Activity List	Prepare Milestone list, Activity list.	Pranav Raj SB Tushar Shah Yashwanth M	Completed
5.2	Sprint Delivery Plan	Prepare Sprint Delivery Plan.	Anirudh T E	Completed
6.1	Data Collection	Collect datasets from different open sources like kaggle.com, data.gov.	All Members	In Progress
7.1	Visualizing and analyzing of data	Analyzing data collected and visualizing.	All Members	In Progress
7.2	Importing libraries	Importing of libraries from the downloaded dataset.	All Members	In Progress

7.3	Reading the dataset	Data reading and analysis.	All Members	In Progress
8.1	Model Building	Importing the model building libraries.	All Members	In Progress
8.2	Model Building	Initializing the model.	All Members	In Progress
8.3	Model Building	Decision tree model is created and passed as the parameters.	All Members	In Progress
8.4	Model Building	Random forest model is created and passed as the parameters.	All Members	In Progress
8.5	Model Building	The Xgboost model is created and passed as the parameters.	All Members	In Progress
8.6	Model Building	Comparison of models.	All Members	In Progress
8.7	Model Building	Save the model.	All Members	In Progress
8.8	Model Building	Make Predictions.	All Members	In Progress
9.1	Application building	Building the HTML pages.	All Members	In Progress
9.2	Application building	Building the python code.	All Members	In Progress
9.3	Application building	Running the application.	All Members	In Progress
10.1	Train CNN Model on IBM	Register for IBM Cloud	All Members	Completed
10.2	Train CNN Model on IBM	Train the ML model on IBM.	All Members	In Progress
10.3	Train CNN Model on IBM	Integrate flask with scoring end point	All Members	In Progress