

## Project Initialization and Planning Phase

Date	6 JULY 2024
Team ID	740010
Project Title	prosperity Prognosticator : Machine Learning for Startup Success Prediction
Maximum Marks	3 Marks

### Project Proposal (Proposed Solution) report

The project proposal aims to predict whether a startup which is currently operating turn into a success or a failure using machine learning. The project will cover data collection, model training, and integration with existing Startup companies dataset.

<b>Project Overview</b>	
Objective	Develop a machine learning system to predict whether a startup which is currently operating turn into a success or a failure.
Scope	Implement a prediction system that can analyze large volumes of startup companies data to predict company acquired or not . The project will cover data collection, model training, and integration with existing Startup companies dataset.
<b>Problem Statement</b>	

Description	Startups play a major role in economic growth. They bring new ideas, spur innovation, create employment thereby moving the economy. There has been an exponential growth in startups over the past few years. Predicting the success of a startup allows investors to find companies that have the potential for rapid growth, thereby allowing them to be one step ahead of competition.
Impact	venture capitalists and angel investors can use predictive models to identify promising startups. Governments and NGOs can design better support programs for startups based on predictive insights.
<b>Proposed Solution</b>	
Approach	Utilize supervised machine learning techniques, such as logistic regression, random forests, and neural networks, to analyze startup data and identify patterns in the dataset. The solution will involve data preprocessing, feature engineering, model training,

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	e.g., 2 x NVIDIA V100 GPUs
Memory	RAM specifications	e.g., 8 GB
Storage	Disk space for data, models, and logs	e.g., 1 TB SSD
Software		
Frameworks	Python frameworks	e.g., Flask , sklearn , metrics

Libraries	Additional libraries	e.g., scikit-learn, pandas, numpy
Development Environment	IDE, version control	e.g., Jupyter Notebook, Git , Google colab
	and evaluation. Continuous monitoring and model retraining will be essential to maintain accuracy.	
Key Features	<p>Real-time Prediction: The system will Predict Success of Startup Companies</p> <p>Adaptive Learning: The model will continually learn from new data, improving its accuracy.</p> <p>Scalability: Designed to handle large volumes of transactions without compromising performance.</p>	

## Resource Requirements

Data		
Data	Source, size, format	e.g., Kaggle dataset, 500 images , CSV