

# **Project Design: Phase -II**

## **Data Flow Diagram & User Stories**

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TEAM ID	LTVIP2026TMIDS86917
PROJECT NAME	<b>Prosperity Prognosticator: Machine Learning for Startup Success Prediction</b>
MAXIMUM MARKS	

## **Data Flow Diagram**

The data flow of the Prosperity Prognosticator system begins with the collection of startup dataset in CSV format containing historical business information such as funding details, market category, team size, revenue patterns, and operational metrics.

The dataset first undergoes data preprocessing, where missing values are handled, categorical features are encoded, and numerical features are normalized using Pandas and NumPy. The cleaned data is then divided into training and testing datasets.

The training data is fed into machine learning algorithms implemented using Scikit-learn to build a predictive model. The model is evaluated using the test dataset to measure accuracy and performance.

Once validated, the trained model is integrated into a Flask-based web application. Users provide startup input parameters through the user interface, and the system processes these inputs through the trained model to generate a success prediction.

The final output is displayed to the user as a prediction result indicating the likelihood of startup success.



