

Project Design Phase – II

Solution Requirements (Functional and Non-Functional)

Date	30 January 2026
Team ID	LTVIP2026TMIDS76348
Project Name	Prosperity Prognosticator Machine Learning for Startup Success Prediction
Maximum Marks	4 Marks

Functional Requirements

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Data Collection & Input	Upload startup dataset through form or CSV file Input startup details manually Integrate external data sources (market trends, funding data)
FR-2	Data Preprocessing	Handle missing values Feature extraction and encoding Normalize and clean data for model training
FR-3	Machine Learning Model Training	Train classification model for startup success prediction Evaluate model performance using metrics Store trained model for future predictions
FR-4	Prediction & Analysis	Accept new startup input data Generate success probability prediction Display confidence score
FR-5	Insight Generation	Identify key factors influencing prediction Provide analytical visualization and trends Generate data-driven recommendations
FR-6	Stakeholder Dashboard	Investor dashboard for opportunity evaluation Entrepreneur dashboard for strategy insights Policy maker dashboard for trend analysis
FR-7	Reporting Module	Generate prediction reports Export reports in PDF/CSV format Store prediction history

FR-8	Admin Management	Manage datasets Retrain/update models Monitor system performance
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Non-Functional Requirements

NFR No.	Non-Functional Requirement	Description
NFR-1	Performance	Prediction response time should be within a few seconds.
NFR-2	Scalability	System should support growing startup datasets and multiple users.
NFR-3	Accuracy	Model should achieve high prediction accuracy using evaluation metrics.
NFR-4	Security	Secure handling of startup and financial data with authentication.
NFR-5	Usability	Dashboard must be simple and user-friendly for non-technical users.
NFR-6	Reliability	System should provide consistent predictions without failures.
NFR-7	Maintainability	Model and dataset updates should be easy to manage.
NFR-8	Compatibility	System should run on standard web or desktop environments.