Data Flow Diagrams and User Stories

Prosperity Prognosticator: ML For Startup Success Prediction

1. Data Flow Diagram – Level 0 (Context Diagram)

The system receives startup data as input from the user and outputs a success/failure prediction.

[User Input] → [Prosperity Prognosticator System] → [Prediction Result]

2. Data Flow Diagram – Level 1

Process	Input	Output
1.0 Collect Startup Data	User fills web form	Raw startup metrics
2.0 Preprocess Data	Raw metrics	Cleaned, encoded feature array
3.0 Load ML Model	random_forest_model.pkl	Trained Random Forest model
4.0 Predict Success	Feature array + Model	Binary prediction (success/failure)
5.0 Display Result	Prediction output	Result page shown to user

3. User Stories

Investor User Stories

Story ID	As a...	I want to...	So that...
US-01	Investor	Input startup characteristics and get a success prediction	I can prioritize high-potential investments
US-02	Investor	See model confidence score	I can gauge risk before investing
US-03	Investor	Compare multiple startups	I can optimize my portfolio allocation

Entrepreneur User Stories

Story ID	As a...	I want to...	So that...
US-04	Entrepreneur	Enter my startup metrics and get a prediction	I can understand my startup's viability
US-05	Entrepreneur	Know which features most impact success	I can focus on improving critical factors
US-06	Entrepreneur	Use the tool easily without technical knowledge	I can self-evaluate without a data team

Policy Maker User Stories

Story ID	As a...	I want to...	So that...
US-07	Policy Maker	Analyze trends across startup predictions	I can design better support policies
US-08	Policy Maker	Identify sectors with high success rates	I can direct funding strategically
US-09	Policy Maker	Access aggregated prediction data	I can present evidence-based recommendations