

# Prosperity Prognosticator – ML for Startup Success Prediction

A Sprint is a fixed period during which the team works to complete a set of defined tasks related to startup success prediction model development.

An Epic is a major phase of the project such as Data Collection, Model Development, or Deployment. It is divided into smaller Stories.

A Story is a small task under an Epic.

A Story Point represents the effort required to complete a story (Fibonacci series: 1,2,3,5).

Very Easy task

Normal task

Moderate task

Difficult task

## Storypoint -5 (1,2,3,5)

### Sprint 1

#### Data Collection (Epic 1)

- Collect Startup Dataset (USN1) – 3
- Collect Funding Data (USN2) – 2
- Collect Market Trend Data (USN3) – 2

#### Data Preparation (Epic 2)

- Handling Missing Values (USN4) – 3
- Encoding Categorical Variables (USN5) – 3
- Feature Engineering (USN6) – 5

Total Story Points in Sprint 1 =

$$3 + 2 + 2 + 3 + 3 + 5 = 18$$

### Sprint 2

#### Model Development (Epic 3)

- **Logistic Regression Model (USN7) – 3**
- **Random Forest Model (USN8) – 5**
- **XGBoost Model (USN9) – 5**

#### **Model Evaluation (Epic 4)**

- **Accuracy & Confusion Matrix (USN10) – 2**
- **Precision, Recall, AUC (USN11) – 3**

#### **Visualization & Dashboard (Epic 5)**

- **Success Probability Dashboard (USN12) – 5**

**Total Story Points in Sprint 2 =**

**$3 + 5 + 5 + 2 + 3 + 5 = 23$**

#### **Total Story Points**

Sprint 1 = 18

Sprint 2 = 23

Total Story Points =  $18 + 23 = \mathbf{41}$

Number of Sprints = 2

Velocity = Total Story Points Completed / Number of Sprints

Velocity =  $41 / 2$

Velocity =  **$20.5 \approx 20$**  Story Points per Sprint