

Project Planning Phase

Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

| | |
|---------------|---|
| Date | 15 February 2025 |
| Team ID | LTVIP2026TMIDS85825 |
| Project Name | Prosperity Prognosticator – Machine Learning for Startup Success Prediction |
| Maximum Marks | 5 Marks |

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task (Updated for Project) | Story Points | Priority | Team Members |
|----------|-------------------------------|-------------------|--|--------------|----------|-------------------|
| Sprint-1 | User Registration | USN-1 | As a startup analyst, I can register in the Prosperity Prognosticator system using email and password to access prediction features. | 2 | High | Frontend, Backend |
| Sprint-1 | User Confirmation | USN-2 | As a registered user, I receive an email confirmation to securely activate my Prosperity Prognosticator account. | 1 | High | Backend |
| Sprint-2 | Social Registration | USN-3 | As a user, I can register using social login to quickly access startup success prediction services. | 2 | Low | Backend |
| Sprint-1 | User Login | USN-4 | As a registered user, I can log in to the Prosperity Prognosticator platform to view startup prediction analytics. | 1 | High | Backend |
| Sprint-1 | Dashboard | USN-5 | As a policy maker or entrepreneur, I can view a dashboard showing startup success probability and risk indicators. | 3 | High | Frontend |
| Sprint-1 | Startup Data Input | USN-6 | As a user, I can enter startup details such as domain, funding amount, team size, and market type for prediction. | 3 | High | Frontend, Backend |
| Sprint-1 | Data Preprocessing | USN-7 | As a system, I preprocess startup data to ensure accuracy before applying machine learning models. | 4 | High | ML Engineer |
| Sprint-1 | ML Prediction Engine | USN-8 | As a user, I can request startup success prediction generated using machine learning algorithms. | 5 | High | ML Engineer |

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task (Updated for Project) | Story Points | Priority | Team Members |
|----------|-------------------------------|-------------------|---|--------------|----------|--------------|
| Sprint-2 | Feature Analysis | USN-9 | As a user, I can view key factors influencing startup success derived from the ML model. | 3 | Medium | ML Engineer |
| Sprint-2 | Reports | USN-10 | As a policy maker, I can download detailed startup success reports to support data-driven policy decisions. | 3 | Medium | Frontend |
| Sprint-2 | Prediction History | USN-11 | As a user, I can view historical startup predictions for comparison and trend analysis. | 2 | Medium | Backend |
| Sprint-1 | Admin – User Management | USN-12 | As an administrator, I can manage users accessing the Prosperity Prognosticator system. | 2 | High | Backend |
| Sprint-1 | Admin – Dataset Management | USN-13 | As an administrator, I can upload and update startup datasets used for model training. | 3 | High | ML Engineer |
| Sprint-1 | Admin – Model Training | USN-14 | As an administrator, I can train and update machine learning models to improve prediction accuracy. | 5 | High | ML Engineer |
| Sprint-2 | Admin – System Reports | USN-15 | As an administrator, I can view system-wide analytics and prediction usage reports. | 2 | Medium | Backend |

Project Tracker, Velocity & Burndown Chart: (4 Marks)

| Sprint | Total Story Points | Duration | Sprint Start Date | Sprint End Date (Planned) | Story Points Completed (as on Planned End Date) | Sprint Release Date (Actual) |
|----------|--------------------|----------|-------------------|---------------------------|---|------------------------------|
| Sprint-1 | 32 | 6 Days | 1 Feb 2025 | 7 Feb 2025 | 32 | 7 Feb 2025 |
| Sprint-2 | 15 | 6 Days | 8 Feb 2025 | 14 Feb 2025 | 15 | 14 Feb 2025 |

Velocity:

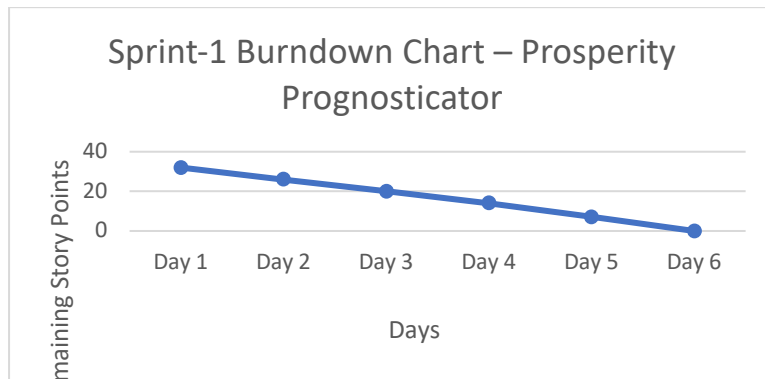
Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \text{Total Story Points} / \text{Sprint Duration}$$

$$AV = 32 / 6 \approx 5.3 \text{ story points per day}$$

Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.



<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>