

Project Planning Phase

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

Date	October 2023
Team ID	Team-592444
Project Name	Anticipating Business Bankruptcy
Maximum Marks	8 Marks

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

Sprint	Functional Requirement (Epic)	User Story Number	Task / User Story	Story Points	Priority	Team Members
Sprint-1	Data Collection and Preparation	USN-1	As a stock trader, I want to gather historical financial data of the companies operating in Poland from 2000 to 2012 for bankrupt firms.	5	High	Data Team & Stock Trader
Sprint-1	Data Collection and Preparation	USN-2	As a researcher, I want to collect historical financial data of companies still in operation in 2007.	3	Medium	Data Team & Researchers
Sprint-2	Feature Selection and Engineering	USN-3	As a data scientist, I want to identify and select relevant econometric indicators for bankruptcy prediction.	8	High	Data Team
Sprint-2	Feature Selection and Engineering	USN-4	As a data scientist, I want to engineer new features based on the selected indicators to improve predictive accuracy.	5	Medium	Data Team
Sprint-3	Model Building	USN-5	As a data scientist, I want to develop predictive models using financial ratios from the initial year.	13	High	Data Team
Sprint-3	Model Building	USN-6	As a data scientist, I want to create class labels indicating bankruptcy status for the dataset.	5	Medium	Data Team

Sprint	Functional Requirement (Epic)	User Story Number	Task / User Story	Story Points	Priority	Team Members
Sprint-4	Model Evaluation and Testing	USN-7	As a data scientist, I want to assess the performance of the predictive models and fine-tune them for better accuracy.	8	High	Data Team
Sprint-4	Model Deployment	USN-8	As a business owner, I want to deploy predictive models for ongoing monitoring, prediction and view my company's financial health.	5	Medium	Stakeholders and Software Engineers
Sprint-5	Documentation and Reporting	USN-9	As a data scientist, I want to document the methodology, findings, and model usage guidelines for transparency and knowledge sharing.	4	High	Data Team
Sprint-5	Stakeholder Engagement	USN-10	As a stakeholder, I want to be informed about the project progress and receive training on how to interpret the predictions and reports.	6	Medium	Data Team and Stakeholders
Sprint-6	User Feedback and Improvement	USN-11	As a user (e.g., financial analysts), I want a feedback mechanism to provide insights and suggestions for model and system improvement.	5	High	Data Team and Compliance Team

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	8	3 Days	16 Oct 2023	19 Oct 2023	5	19 Oct 2023
Sprint-2	13	4 Days	19 Oct 2023	23 Oct 2023	13	23 Oct 2023
Sprint-3	18	5 Days	23 Oct 2023	28 Oct 2023	16	28 Oct 2023
Sprint-4	13	5 Days	28 Oct 2023	2 Nov 2023	20	2 Nov 2023
Sprint-5	10	3 Days	2 Nov 2023	5 Nov 2023	11	5 Nov 2023
Sprint-6	5	2 Days	5 Nov 2023	7 Nov 2023	2	7 Nov 2023

Velocity:

The team's average velocity (AV) per iteration unit (story points per day):

Total Story Points Completed in Past Days

= Sprint 1 + Sprint 2 + Sprint 3 + Sprint 4 + Sprint 5 + Sprint 6

= 8 + 13 + 18 + 13 + 10 + 5

= 67

Total Duration of the Past Sprints (in Days)

= Sprint 1 + Sprint 2 + Sprint 3 + Sprint 4 + Sprint 5 + Sprint 6

= 3 + 4 + 5 + 5 + 3 + 2

= 22

$$AV = \frac{\text{Total Story Points Completed in Past Days}}{\text{Total Duration of the Past Sprints (in Days)}} = \frac{67}{22} \approx \mathbf{3.045}$$

Burndown Chart:

