**Project Planning Phase**

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

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| --- | --- |
| 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-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** | **Functional Requirement (Epic)** | **User Story Number** | **Task / User Story** | **Story Points** | **Priority** | **Team Members** |
| 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 | 8 | 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 | 18 | 28 Oct 2023 |
| Sprint-4 | 13 | 5 Days | 28 Oct 2023 | 2 Nov 2023 | 13 | 2 Nov 2023 |
| Sprint-5 | 10 | 3 Days | 2 Nov 2023 | 5 Nov 2023 | 10 | 5 Nov 2023 |
| Sprint-6 | 5 | 2 Days | 5 Nov 2023 | 7 Nov 2023 | 13 | 7 Nov 2023 |

**Velocity:**

The team’s average velocity (AV) per iteration unit (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**

**Reference:**

**https://www.atlassian.com/agile/project-management**

**https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software**

**https://www.atlassian.com/agile/tutorials/epics**

**https://www.atlassian.com/agile/tutorials/sprints**

**https://www.atlassian.com/agile/project-management/estimation**

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