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

Date	27 October 2023
Team ID	Team-593214
Project Name	Machine Learning Approach For Employee Performance Prediction
Maximum Marks	8 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	Story Points	Priority	Team Members
Sprint-1	Data Collection and Preprocessing	USN-1	As a data scientist, I need to collect and preprocess employee data, including individual and domain-specific characteristics, education, socioeconomic status, and psychological factors, to prepare it for analysis.	5	High	Sreenath Madhav Aditi
		USN-2	As a data scientist, I need to clean and normalize the collected data to ensure data quality and consistency for accurate analysis.	3	Medium	Sreenath
Sprint-2	Model Development and Training	USN-3	As a machine learning engineer, I want to develop and train supervised learning models, including Support Vector Machines, Random Forest, Naive Bayes, Neural Networks, and Logistic Regression, using the preprocessed data.	8	High	Madhav
		USN-4	As a machine learning engineer, I need to fine-tune the model hyperparameters for optimal performance.	2	Medium	Aditi
		USN-5	As a machine learning engineer, I want to implement the 10-fold validation technique to assess model correctness and robustness.	5	High	Madhav
Sprint-2	Evaluation and Reporting	USN-6	As a data analyst, I want to evaluate the performance of the models and generate insights into employee performance and commitment based on the model results.	5	High	Sreenath
		USN-7	As a data analyst, I want to create reports and	3	Medium	Aditi

			visualizations to communicate the findings effectively to stakeholders.			

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	18	10 Days	12 Oct 2023	22 Oct 2023	16	22 Oct 2023
Sprint-2	12	8 Days	17 Oct 2023	25 Oct 2023	8	27 Oct 2023
Sprint-3	6	6 Days	25 Oct 2023	1 Nov 2023	-	-

Velocity:

- Sprint 1: 18 points

- Sprint 2: 12 points

- Sprint 3: 6 points

Average Velocity $=(18+12+6)/3$

$=36/3$

$=\mathbf{12}$

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.