Project Planning Phase

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

Date	26 October 2023
Team ID	Team-593170
Project Name	Walmart Sales Analysis for Retail Industry using Machine Learning
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 Preparation	USN-1	Collect historical sales data for 45 Walmart stores	5	High	Maneesha
Sprint-1		USN-2	Preprocess the collected data, including handling missing values and outliers	8	Medium	Kanish
Sprint-2	Holiday Impact Analysis	USN-3	Identify weeks that include Christmas, Thanksgiving, Super Bowl, and Labor Day	3	Low	Phani
Sprint-3		USN-4	Analyze the impact of holidays on store sales	7	Medium	Phani
Sprint-3	Sales Forecasting	USN-5	Apply machine learning algorithms like Random Forest, Decision Tree, XGBoost to predict future Walmart sales	10	High	Phani ,Maneesha, Kanish
Sprint-4	Deployment and Integration	USN-6	Integrate the analysis and forecasting models into a Flask web application	5	Medium	Maneesha
Sprint-4		USN-7	Deploy the Flask application on IBM Cloud for easy access and scalability	3	Low	Kanish

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	12	5-Days	18 Oct 2023	23 Oct 2023	10	23 Oct 2023
Sprint-2	10	6-Days	23 Oct 2023	28 Oct 2023	9	28 Oct 2023
Sprint-3	7	5-Days	28 Oct 2023	03 Nov 2023	6	03 Nov 2023
Sprint-4	5	6-Days	03 Nov 2023	09 Nov 2023	4	09 Nov 2023

Velocity:

Average Velocity = Total Story Points Completed / Total Duration of Sprints

Total Story Points Completed = 10 + 9 + 6 + 4 = 29

Total Duration of Sprints = 5 + 6 + 5 + 6 = 22

Average Velocity = 29 / 22 = 1.32

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.