Project Planning Phase

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

Date	03-11-2023
Team ID	PNT2022TMID591862
Project Name	Project - IDENTIFING AIRLINE PASSENGERS' SATISFACTION Using ML
Maximum Marks	8 Marks

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

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	User Authentication	USN-1	Implement user login functionality	5	High	Sai Charan, Harshitha
Sprint-1	User Interface	USN-2	Design user interface for airline selection	8	High	Karthik, Bhargavi
Sprint-1	Data Collection and Data Processing	USN-3	Develop data collection logic and Implement data cleaning and transformation	13	High	Sai Charan, Bhargavi
Sprint-2	Machine Learning Integration	USN-4	Integrate machine learning models	13	High	Karthik, Sai Charan
Sprint-2	Testing and Quality Assurance	USN-5	Conduct testing on data processing	5	Medium	Karthik, Bhargavi
Sprint-2	Database Management	USN-6	Set up database for storing processed data	8	High	Sai Charan, Harshitha

Sprint-3	Security and Access Control	USN-7	Implement user data encryption	5	High	Karthik, Harshitha
Sprint-3	Real-time Data Analysis	USN-8	Integrate real-time data analysis features	8	Medium	Sai Charan, Bhargavi
Sprint-4	Scalability and Performance	USN-9	Optimize system for scalability	8	High	Bhargavi, Harshitha
Sprint-4	Third-party Integrations	USN-10	Integrate third-party APIs	8	High	Karthik, Sai Charan

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

Sprint	Total Story Points	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint End date (Actual)
1	26	30-10-23	05-11-23	21	06-11-23
2	21	06-11-23	09-11-23	23	09-11-23
3	21	10-11-23	15-11-23	23	15-11-23
4	20	16-11-23	18-11-23	21	18-11-23

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)

To calculate the team's average velocity per iteration unit (story points per day), you can use the following formula:

Average Velocity (AV) = Total Story Points completed in All Sprints/Total Amount of Data Across Sprints

Based on the provided sprint information:
Total Story Points Completed in All Sprints:
21(Sprint 1) +23(Sprint 2) +23(Sprint 3) +21(Sprint 4) =88 story points

Total Number of Days Across All Sprints:

Sprint 1: 7 days (30-10-23 to 06-11-23)
Sprint 2: 3 days (07-11-23 to 09-11-23)
Sprint 3: 6 days (10-11-23 to 15-11-23)
Sprint 4: 3 days (16-11-23 to 18-11-23)
7 days+ 3 days + 6 days +3 days = 19 days

Using the formula:
Average Velocity (AV) = 88 story points / 19 days ≈ 4.63 story points per day
So, the team's average velocity is approximately 4.63 story points per day across all sprints.

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.

Dates	Planned	Actual
30-10-2023	5	3
31-10-2023	4	5
01-11-2023	3	2
02-11-2023	6	5
03-11-2023	3	4
04-11-2023	5	3
05-11-2023	6	4
06-11-2023	7	8
07-11-2023	5	6
08-11-2023	5	5
09-11-2023	4	6
10-11-2023	3	4
11-11-2023	6	5
12-11-2023	3	4

13-11-2023	4	5
14-11-2023	1	2
15-11-2023	5	4
16-11-2023	6	6
17-11-2023	4	4
18-11-2023	5	7

Graphical Representation: