

## Project Planning Phase

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

	27 October 2023
Team ID	591486
Project Name	network anomaly detection
Maximum Marks	8 Marks
Team members names	Niraianbu kamalnath abirami Tharunya bala

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

#### Product Backlog:

The Product Backlog is a list of items that represent tasks, features, and goals for the project.

Sprint	Functional Requirement (Epic)	User Story Number : User Story / Task	Story Points	Priority
Sprint 1	Data Collection and Ingestion	USN-001: Collect raw network traffic data. USN-002: Ingest network logs from various devices. USN-003: Store data securely for analysis.	1	High
Sprint 1	Data Preprocessing	USN-004: Clean and filter incoming data. USN-005: Normalize timestamps and data formats. USN-006: Handle missing data gracefully.	1	High
Sprint 2	Anomaly Detection Models	USN-007: Research and select suitable anomaly detection algorithms. USN-008: Develop and train machine learning models. USN-009: Fine-tune models for optimal performance.	3	low
Sprint 1	Real-time Monitoring and Alerting	USN-010: Implement a real-time data processing pipeline. USN-011: Define threshold-based alerting rules. USN-012: Notify the IT or security team when anomalies are detected.	2	Medium
Sprint 2	Rule-Based Detection	USN-013: Define rules for detecting known attack patterns. USN-014: Create rules for compliance and policy violations. USN-015: Customize and update rules as needed.	2	High
Sprint 3	Reporting and	USN-016: Create dashboards for real-time	8	Medium

	visualization	network status. USN-017: Generate reports on detected anomalies and incidents. USN-018: Provide historical data for analysis and compliance reporting		
Sprint 2	Testing and validation	USN-019: Develop test cases for different network scenarios. USN-020: Perform system testing and validation. USN-021: Fine-tune the system based on test results.	13	High

## Story points:

1.Granularity: Smaller values (1, 2, 3) are used for tasks that are relatively quick and straightforward. These represent low complexity.

2.Larger Values: Larger values (8, 13, 20, 40) are used for tasks that are more complex and require more effort. These might involve multiple steps, dependencies, or uncertainties.

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

Sprint	Total story points	Duration (Start date - end date)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint 1	40	20/10/23-21/10/23=1day	40	21/10/23
Sprint 2	40	21/10/23-22/10/23=1days		
Sprint 3	40	22/10/23-24/10/23=2days		
Sprint 4	40	24/10/23-26/10/23=2days		
Sprint 5	40	26/10/23-27/10/23=1day		

### Velocity:

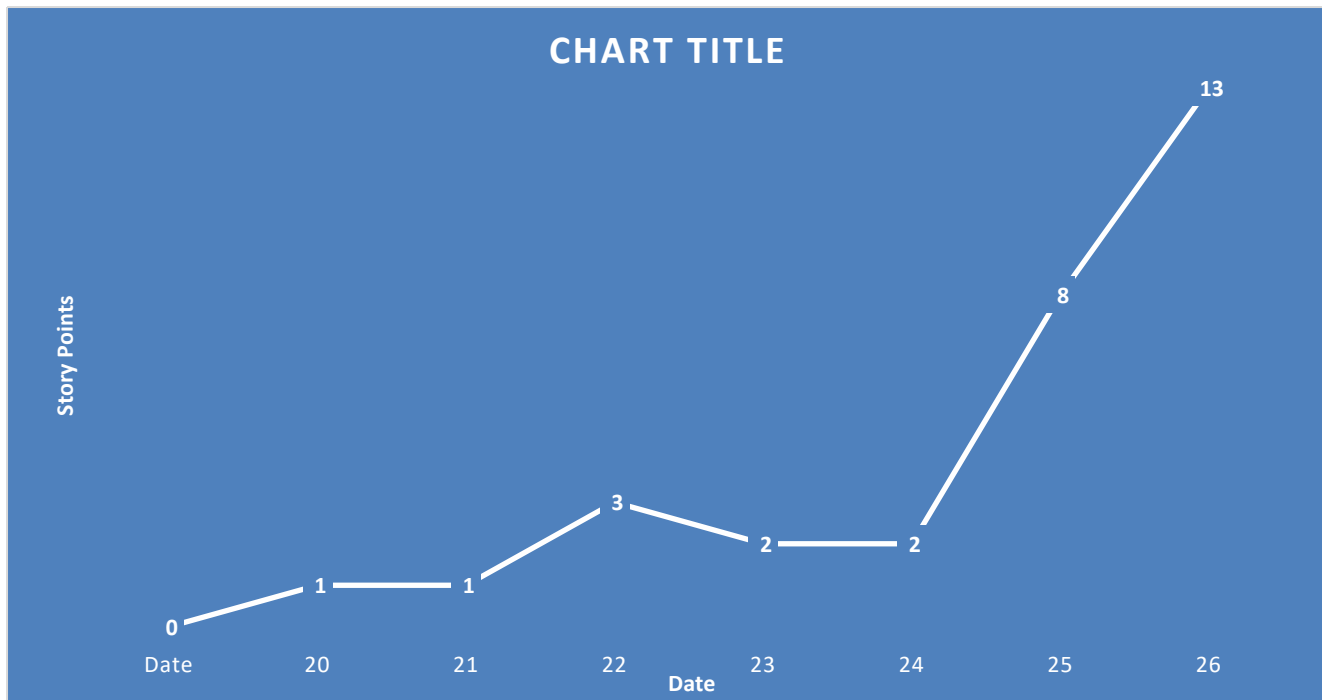
Imagine we have a 20-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per

iteration unit (story points per day)

$$AV = \text{Sprint duration} / \text{velocity} = 40 / 20 = 2$$

### Burn 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.



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>