Project Planning Phase

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

Date	18 October 2022
Team ID	593462
Project Name	Project – Malware Detection and Classification
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	Project setup and develpmont	USN-1	Define the project's objectives and scope, including the specific functionalities. Define the types of malware to be addressed, such as viruses, Trojans, ransomware, and more. Specify the desired detection techniques, whether signature-based, behavior-based, or anomaly-based.	2	High	3
Sprint-2	Data collection and preprocessing	USN-2	Determine the required dataset for training and testing the classification models. Preprocess the data, including feature extraction, data cleaning, and transformation.	1	High	3
Sprint-3	Model development	USN-3	Experiment with various algorithms such as deep learning, decision trees, support vector machines, and ensemble methods. Fine-tune and optimize the models for accuracy and efficiency.	2	Low	3
Sprint-4	Training and testing	USN-4	Train the machine learning models using the prepared dataset. Conduct thorough testing and evaluation of the models' performance, considering metrics like accuracy, false positives, and false negatives. Integrate the developed models with real-time cybersecurity tools for continuous monitoring and detection.	2	Medium	3

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	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022		
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022		
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022		

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)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$