Project Planning Phase

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

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| --- | --- |
| 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

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| --- | --- | --- | --- | --- | --- | --- |
| **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)

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| **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 |  |  |
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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)

