Project Planning Phase

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

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| Date | 2 November 2022 |
| Team ID | PNT2022TMID14644 |
| Project Name | Efficient Water Quality Analysis & Prediction using Machine Learning |
| Maximum Marks | 8 Marks |

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

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| --- | --- | --- | --- | --- | --- | --- |
| Sprint | Functional  Requirement (Epic) | User Story  Number | User Story / Task | Story Points | Priority | Team Members |
| Sprint 1 | Dataset collection | USN-1 | Collect the required data for the water quality prediction | 3 | High | Anju A, Raghav M |
| Sprint 1 | Data pre-processing | USN-2 | Perform data cleaning to optimize the dataset | 7 | Medium | Anju A, Raghav M |
| Sprint 2 | Training & Building  Model , Model evaluation | USN-3 | Build the model using regression algorithms to classify the data | 10 | High | Rashmi R,Divyanjali S |
| Sprint 3 | Application Building | USN-5 | Build the html and python code. Run flak app. | 7 | High | Rashmi R,Divyanjali S |
|  |  | USN-6 | Run Flask app. | 3 | Medium | Rashmi R,Divyanjali S |
| Sprint 4 | Implementation of the Application | USN-7 | Deploy the model on IBM cloud | 10 | Medium | Anju A, Raghav M |

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 | 10 | 7 Days | 23 Oct 2022 | 29 Oct 2022 | 8 | 29 Oct 2022 |
| Sprint-2 | 10 | 7 Days | 30 Oct 2022 | 05 Nov 2022 | 8 | 06 Nov 2022 |
| Sprint-3 | 10 | 7 Days | 07 Nov 2022 | 13Nov 2022 | 7 | 13 Nov 2022 |
| Sprint-4 | 10 | 7Days | 13 Nov 2022 | 19 Nov 2022 | 10 | 19 Nov 2022 |

Velocity:

Imagine we have a 7 -day sprint duration, and the velocity of the team is 10 (points per sprint). Let’s calculate the team’s average velocity (AV) per iteration unit (story points per day).

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Burndown Chart: