Project Planning Phase

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

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| --- | --- |
| Date | 29 October 2022 |
| Team ID | PNT2022TMID38102 |
| Project Name | Efficient Water Quality Analysis & Prediction using Machine Learning |
| Maximum Marks | 8 Marks |

# Product Backlog, Sprint Schedule, and Estimation:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sprint** | **Functional Requirement**  **(Epic)** | **User Story Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Members** |
| Sprint-1 | Data Preparation | USN-1 | Collecting water dataset and pre-processing it | 10 | High | M A Prakruthi |
| Sprint-1 | Model Building | USN-2 | Create an ML model to predict water quality | 5 | Medium | Shajitha Barveen  D Shalini  E S Kaviya  S Snega |
| Sprint-1 | Model Evaluation | USN-3 | Calculate the performance, error rate, and complexity of the ML model and evaluate the dataset based on the parameter that the dataset consists of. | 5 | Medium |
| Sprint-2 | Model Deployment | USN-4 | As a user, I need to deploy the model and need to find the results. | 20 | Medium |
| Sprint-3 | Web page (Form) | USN-5 | As a user, I can use the application by entering the water dataset to analyze or predict the results. | 20 | Medium | Shajitha Barveen  D Shalini  E S Kaviya  S Snega |
| Sprint-4 | Dashboard | USN-6 | As a user, I can predict the water quality by clicking the submit button and the application will show whether the water is efficient for use or not. | 20 | High | M A Prakruthi  D Shalini |

**Project Tracker:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sprint** | **Total Story**  **Points** | **Duration** | **Sprint Start Date** | **Sprint End Date** | **Story Points**  **Completed** | **Sprint Release Date** |
| Sprint-1 | 20 | 6 Days | 23 Oct 2022 | 28 Oct 2022 | 20 | 29 Oct 2022 |
| Sprint-2 | 20 | 7 Days | 29 Oct 2022 | 04 Nov 2022 | 20 | 05 Nov 2022 |
| Sprint-3 | 20 | 7 Days | 05 Nov 2022 | 11 Nov 2022 | 20 | 12 Nov 2022 |
| Sprint-4 | 20 | 8 Days | 12 Nov 2022 | 19 Nov 2022 | 20 | 19 Nov 2022 |

# Velocity:

Sprint 1: 1 user stories x 20 story points = 20

Sprint 2: 1 user stories x 20 story points = 20

Sprint 3: 1 user stories x 20 story points = 20

Sprint 4: 1 user stories x 20 story points = 20

Total = 80

The average sprint velocity is 80 ÷ 4 = **20.**

# Burn down Chart:

A burn down chart is a graphical representation of”**WORK LEFT to do versus TIME**”. It is the amount of work that has been completed in an epic or sprint and the total work remaining. Burn down charts is used to predict your team’s likelihood of completing their work in the time available.