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

| Date | 10 November 2022 |
|---------------|--|
| Team ID | PNT2022TMID45216 |
| Project Name | Efficient Water Quality Analysis & Prediction using Machine Learning |
| Maximum Marks | 8 Marks |

Product Backlog, Sprint Schedule, and Estimation:

| Sprint | Functional User Story User Story / Task Requirement Number (Epic) | | , | | Priority | Team Members |
|---------------------------|---|--|--|----|----------|---|
| Sprint-1 | Data Preparation | USN-1 | Collecting water dataset and pre-processing it | 10 | High | KEERTHANA M, LATHIKA R |
| Sprint-1 | Model Building | USN-2 | Create an ML model to predict waterquality | 5 | Medium | |
| Sprint-1 | Model Evaluation | USN-3 | Calculate the performance, error rate, and complexity of the ML model and evaluate thedataset based on the parameter that the dataset consists of. | 5 | Medium | KEERTHA NA M, BANUPRI YA K, |
| Sprint-2 Model Deployment | | USN-4 As a user, I need to deploy the model an need to find the results. | | 20 | Medium | SHANMU GAPRIYA M, LATHIKA R, JEEVA P |
| 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 | KEERTHA NA M, BANUPRI YA K, SHANMU GAPRIYA M, |

| | | | | | | LATHIKA R, JEEVA P |
|----------|-----------|-------|--|----|------|-------------------------------------|
| 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 efficientfor use or not. | 20 | High | KEERTH ANA M, BANUPR IYA K |

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 | 11 Nov 2022 |
| Sprint-2 | 20 | 7 Days | 29 Oct 2022 | 04 Nov 2022 | 20 | 12 Nov 2022 |
| Sprint-3 | 20 | 7 Days | 05 Nov 2022 | 11 Nov 2022 | 20 | 13 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 $80 \div 4 = 20$.

Burndown Chart:

A burndown 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. burndown charts are used to predict your team's likelihood of completing their work in the time available.