**SPRINT DELIVERY PLAN**

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| Date | 20 October 2022 |
| Team ID | PNT2022TMID16214 |
| Project Name | Efficient Water Quality Analysis and Prediction using Machine Learning |
| Maximum Marks | 8 Marks |

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| **Sprint** | **Functional Requirement**  **(Epic)** | **User Story**  **Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Members** |
| Sprint- 1 | Data Collection | USN-1 | Collecting dataset for pre-processing | 10 | High | Uppala Jayasree  T Sai Chandana  Turaga Yasaswini  Sangavi S |
| Sprint- 1 |  | USN-2 | Data pre-processing- Used to transform the data into useful format. | 10 | Medium | Uppala Jayasree  T Sai Chandana  Turaga Yasaswini  Sangavi S |
| Sprint- 2 | Model Building | USN-3 | Calculate the Water Quality Index (WQI) using Regression  algorithm of machine learning. | 10 | High | Uppala Jayasree  T Sai Chandana  Turaga Yasaswini  Sangavi S |
| Sprint- 2 |  | USN-4 | Splitting the data into training and testing from the entire dataset. | 10 | Medium | Uppala Jayasree  T Sai Chandana  Turaga Yasaswini  Sangavi S |
| Sprint- 3 | Training and Testing | USN-5 | Training the model using regression algorithm and testing the performance of the  model | 20 | Medium | Deepthivarsha E G Basireddygari Dhavala Anusha R  Abinaya Kamatchi |
| Sprint- 4 | Implementation of Web page | USN-6 | Implementing the web page for collecting the data from user | 10 | High | Uppala Jayasree  T Sai Chandana  Turaga Yasaswini  Sangavi S |
| Sprint- 4 |  | USN-6 | Deploying the model using IBM Cloud and IBM Watson Studio | 10 | Medium | Uppala Jayasree  T Sai Chandana  Turaga Yasaswini  Sangavi S |

**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 | 20 | 05 Nov 2022 |
| Sprint- 3 | 20 | 6 Days | 07 Nov  2022 | 12 Nov 2022 | 20 | 12 Nov 2022 |
| Sprint- 4 | 20 | 6 Days | 14 Nov  2022 | 19 Nov 2022 | 20 | 19 Nov 2022 |

**Velocity:**

Sprint 1 Average Velocity:

Average Velocity = 20/2 = 10

Sprint 2 Average Velocity:

Average Velocity = 20/2 = 10

Sprint 3 Average Velocity:

Average Velocity = 20/1 = 20

Sprint 4 Average Velocity:

Average Velocity = 20/2 = 10

**Burndown Chart:**

