Project Planning Phase

Project Planning Template (Product Backlog, Sprint Planning, Stories, Storypoints)

Date	17 NOVEMBER 2022
Team ID	PNT2022TMID23758
Project Name	Efficient Water Quality Analysis and Prediction using Machine Learning
Maximum Marks	8 Marks

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

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint1	Data Collection	USN-1,2	Collecting/ downloading dataset for pre- processing.	12	High	Rajaranganayaki R Shanmugavalli S Rakshambika S Vidhya P
Sprint1	Data Pre processing	USN-1,2	formats the data and handles the missing data in the dataset.	8	Medium	Rajaranganayaki R Shanmugavalli S Rakshambika S Vidhya P
Sprint2	Model Building	USN-1,2	Calculate the Water Quality Index (WQI) using specified formulafor every parameter.	10	High	Shanmugavalli S Rajaranganayaki R Vidhya P Rakshambika S
Sprint2	Accessing datasets	USN-1,2	Splitting the data into training and testing dataset from the entire dataset.	10	High	Rakshambika S Rajaranganayaki R Shanmugavalli S Vidhya P
Sprint3	Training and Testing	USN-1,2	Training the model using Random Forest Regression algorithm and testing the performance of the model (accuracy rate)	20	High	Vidhya P Rajaranganayaki R Shanmugavalli S Rakshambika S
Sprint4	Implementation of Web page and user login	USN-1,2	Implementing the web page for collecting the data from user	12	High	Rajaranganayaki R Vidhya P Rakshambika S Shanmugavalli S
Sprint4	Web application	USN-1,2	It will display the current information of the water quality.	8	Medium	Shanmugavalli S Rajaranganayaki R Rakshambika S Vidhya P

Project Tracker & Velocity: (4 Marks)

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint1	20	6 Days	22 Oct 2022	27 Oct 2022	20	27 Oct 2022
Sprint2	20	6 Days	29 Oct 2022	03 Nov 2022	20	03 Nov 2022
Sprint3	20	6 Days	05 Nov 2022	10 Nov 2022	20	10 Nov 2022
Sprint4	20	6 Days	12 Nov 2022	17 Nov 2022	20	17 Nov 2022

Velocity:

Imagine we have a 10 days 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.

Average Velocity:

Sprint 1 Average Velocity:

Average Velocity = 20/4 = 5

Sprint 2 Average Velocity:

Average Velocity = 20/4 = 5

Sprint 3 Average Velocity:

Average Velocity = 20/4 = 5

Sprint 4 Average Velocity:

Average Velocity = 20/4 = 5