Project Planning Phase

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

Date	18 November 2022
Team ID	PNT2022TMID 52132
Project Name	Efficient Water Quality Analysis and Prediction using Machine Learning
Maximum Marks	8 Marks

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

Use the below template to create product backlog and sprint schedule

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	Mahalakshmi Manju
Sprint-1		USN-2	Data pre-processing-Used to transform the data into useful format.	10	Medium	Mahalakshmi Malini
Sprint-2	Model Building	USN-3	Calculate the Water Quality Index (WQI) using Regression algorithm of machine learning.	10	High	Mahalakshmi Muthudurachi
Sprint-2		USN-4	Splitting the data into training and testing from the entire dataset.	10	Medium	Mahalakshmi Manju
Sprint-3	Training and Testing	USN-5	Training the model using regression algorithm and testing the performance of the model	20	Medium	Mahalakshmi Malini
Sprint-4	Implementation of Web page	USN-6	Implementing the web page for collecting the data from user	10	High	Mahalakshmi Manju
Sprint-4		USN-6	Deploying the model using IBM Cloud and IBM Watson Studio	10	Medium	Mahalakshmi Malini

Project Tracker, Velocity & Burndown Chart: (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)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	8	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	8	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	7	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	18 Nov 2022	8	19 Nov 2022

Velocity:

Imagine we have a 6-day sprint duration,and the velocity of the team is 10(points per sprint).Let's calculate the teams's average velocity per iteration unit.

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:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software devolopment methodologies such as Scrum.