

Date	30 October 2023
Team ID	Team-592061
Project Name Project	River Water Quality Forecasting
Maximum Marks 8 Marks	8 Marks

Product Backlog:

Sprint Functional Requirement	User Story Number	User Story/ Task	Story Points	Priority	Team Members
Water Quality Prediction	US001	Implement UI	5	High	Vishnu
Water Quality Prediction	US002	Backend API	8	High	Nithin
Model Enhancement	US003	Refactor Code	3	Medium	Harsha
Model Enhancement	US004	Performance Tuning	5	Medium	Nanda Kishore

Sprint Schedule:

Sprint Functional Requirement	Sprint Number	Sprint start Date	Sprint End Date (Planned)	Sprint End Date (Actual)	Team Members
Water Quality Prediction	Sprint-1	30/10/23	5/11/23	7/11/23	Vishnu, Harsha
Model Enhancement	Sprint-2	7/11/23	19/11/23	20/11/23	Nithin, Nanda kishore

Estimation Chart:

Sprint Functional Requirement	User Story Number	Story Points
Water Quality Prediction	US001	5
Water Quality Prediction	US002	8
Model Enhancement	US003	3
Model Enhancement	US004	5

Project Tracker Table:

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Sprint Points Completed(as on planned end date)	Sprint Release Date
1	20	7 Days	30/10/23	5/11/23	15	6/11/23
2	25	12 Days	7/11/23	18/11/23	20	19/11/23
3	18	2 Days	19/11/23	20/11/23	18	21/11/23

Velocity:

Imagine we have a 10-day 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 (story points per day)

$$AV = \text{Sprint Duration} / \text{Velocity} = 20 / 10 = 2.$$

Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

Step-1: Create Estimate Effort:

User Task	Estimated Effort
Data Collection	5
Model Development	8
Integration With Sensors	3
Quality Assurance And Testing	4
Documentation	2

Step-2: Track Daily Process:

Day	Data Collection	Model Development	Integration	Q&A Testing	Documentation
1	1	2	1	0	0
2	1	2	1	1	0
3	2	2	1	1	0
4	2	4	2	1	0
5	3	4	2	2	1

Step-3: Compute Actual Effort:

Day	Cummulative Effort
1	4
2	9
3	14
4	21
5	31

Step-4: Obtain Final Dataset:

Day	Remaining Effort
1	15
2	11
3	6
4	0
5	0

Step-5: Plot Burndown Using Dataset:



