Project Planning Phase

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

Date	22 October 2022
Team ID	PNT2022TMID30308
Project Name	Project – Real-time River Water Quality Monitoring and Control System
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
Sprint-1	Sensor Data generated using Random in Python	USN-1	River Water quality is monitored and the data been collected real time, which is simulated by the random function in Python and transferred to cloud	2	High	Dhinakar L
Sprint-2	Setting up Cloud IoT Platform to collect the data and transfer to node Red	USN-2	Collect the data from the python code and transfer it to the Application to enable real time monitoring	1	Medium	Srinivas Krishna S K
Sprint-3	Web UI – Login, Registration, Dashboard	USN-3	Create a platform to monitor the data. The user can Register and Login to access their real time data and alerts. The users have to Register themselves using their Mobile number to get Alerts about the data	1	Medium	Nandhagopal Vignesh A
Sprint-4	Dashboard	USN-4	The data from the monitoring system is processed and then displayed graphically for user understandability.	2	High	Haripriya S
Sprint-4	Threshold Alert	USN-5	Once the levels of proportions are crossing the threshold value, the alert is raised both in the Web UI and also through Fast SMS.	2	High	Srinivas Krishna S K

Project Tracker, Velocity & Burndown Chart: (4 Marks)

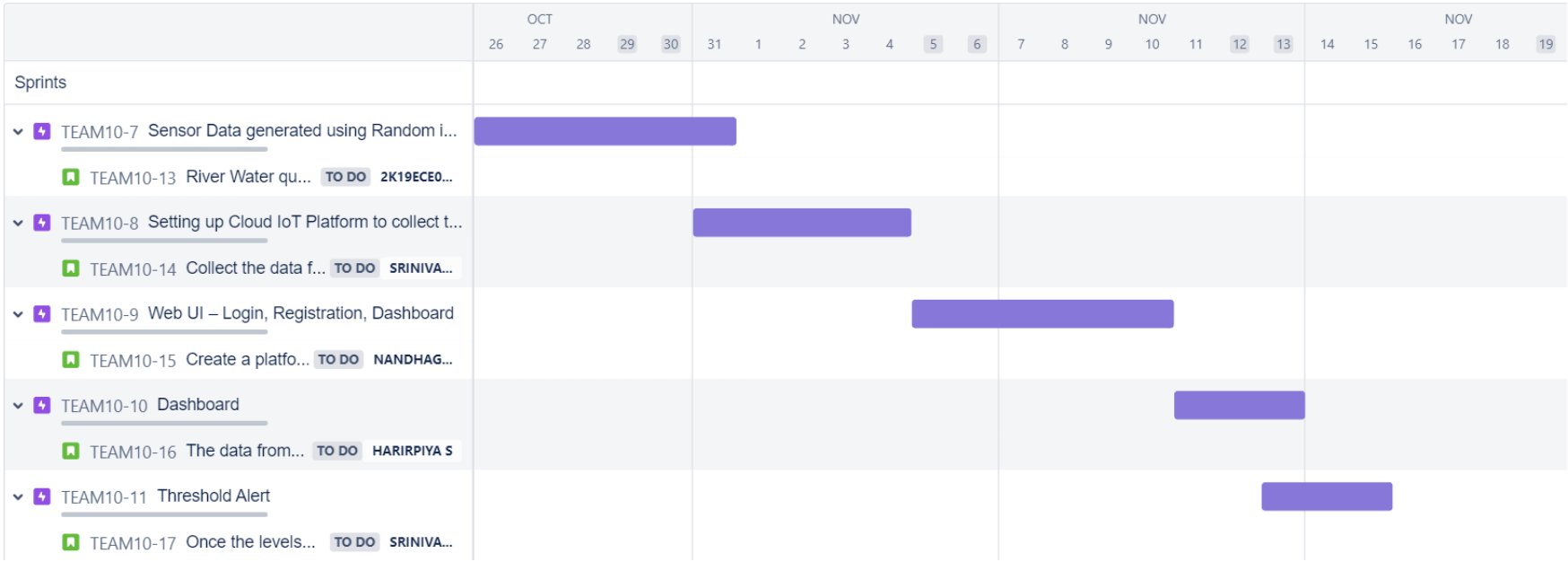
Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	5 Days	26 Oct 2022	30 Oct 2022	20	30 Oct 2022
Sprint-2	20	5 Days	31 Oct 2022	04 Nov 2022	20	04 Nov 2022
Sprint-3	20	6 Days	05 Nov 2022	10 Nov 2022	20	10 Nov 2022
Sprint-4	20	5 Days	11 Nov 2022	15 Nov 2022	20	15 Nov 2022

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)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

Road Map:


OCT
NOV
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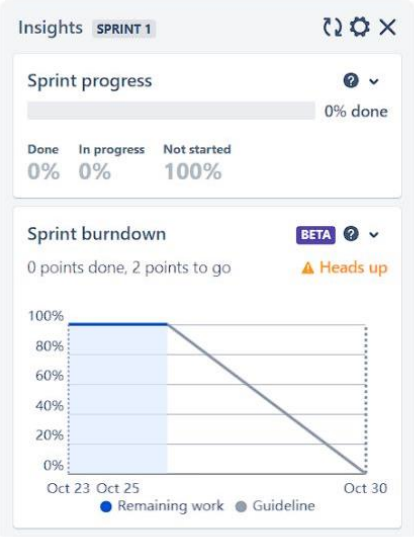
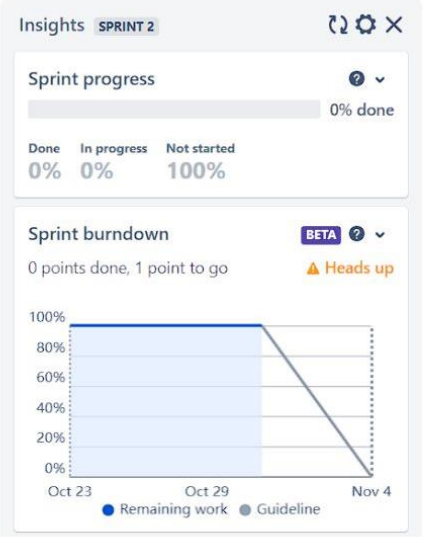
26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Sprints
TEAM10-7 Sensor Data generated using Random i...
TEAM10-13 River Water qu... TO DO 2K19ECE0...
TEAM10-8 Setting up Cloud IoT Platform to collect t...
TEAM10-14 Collect the data f... TO DO SRINIVA...
TEAM10-9 Web UI – Login, Registration, Dashboard
TEAM10-15 Create a platfo... TO DO NANDHAG...
TEAM10-10 Dashboard
TEAM10-16 The data from... TO DO HARIRPIYA S
TEAM10-11 Threshold Alert
TEAM10-17 Once the levels... TO DO SRINIVA...

Burndown Chart:



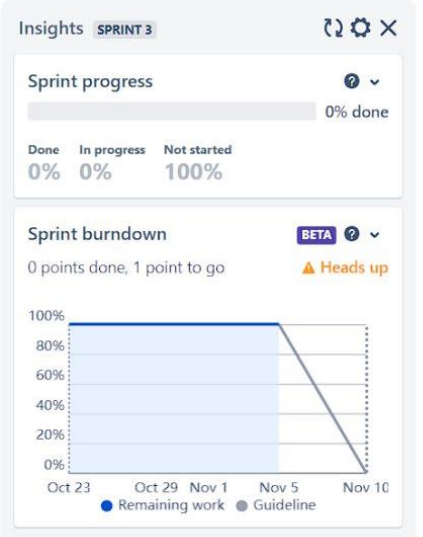
Sprint 1

Dhinakar L



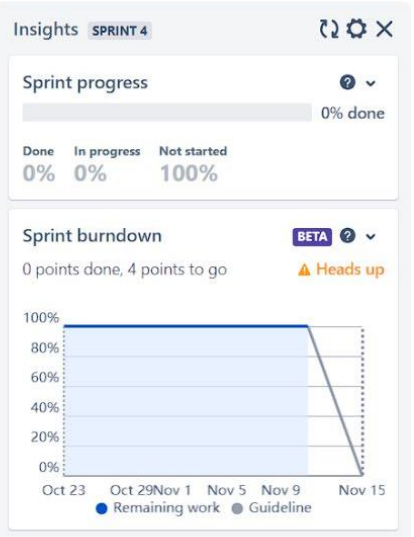
Sprint 2

Srinivas Krishna S K



Sprint 3

Nandhagopal Vignesh A



Sprint 4

Haripriya S