Project Planning Phase

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

Team ID	PNT2022TMID15690
Project Name	Project – Real time river water quality monitoring and control system

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	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	3	High	Pranav, Yashith Reddy, Avinash, Phanikumar, Yagnith Varma
Sprint-1	Registration via Facebook	USN-2	As a user, I can register for the application through Facebook	3	High	Pranav, Yashith Reddy, Avinash, Phanikumar, Yagnith Varma
Sprint-1	registration via Gmail	USN-3	As a user, I can register for the application through Gmail	2	Medium	Pranav, Yashith Reddy, Avinash, Phanikumar,

						Yagnith Varma
Sprint-2	Confirmation	USN-4	As a user I will receive confirmation email once I have registered for the application	3	High	Pranav, Yashith Reddy, Avinash, Phanikumar, Yagnith Varma
Sprint-2	Login	USN-5	As a user, I can log into the application by entering email & password	3	High	Pranav, Yashith Reddy, Avinash, Phanikumar, Yagnith Varma
Sprint-2	IBM cloud service	USN-6	Get access to IBM cloud services	3	High	Pranav, Yashith Reddy, Avinash, Phanikumar, Yagnith Varma

Sprint	**Functional Requirement (Epic)**	**User Story Number**	**User Story / Task**	**Story Points**	**Priority**	**Team Members**
Sprint-3	Create IBM Watson and device settings	USN-7	To create the IBM Watson IOT platform and Intergrate the microcontroller with it to send sensed data to cloud	3	High	Pranav, Yashith Reddy, Avinash, Phanikumar, Yagnith Varma

Sprint-3	Create node red service	USN-8	To create a node red service to integrate the IBM Watson along with Web UI	1	Low	Pranav, Yashith Reddy, Avinash, Phanikumar, Yagnith Varma
Sprint-3	Create Web UI	USN-9	To create Web UI to access the data from cloud And display all parameters	3	High	Pranav, Yashith Reddy, Avinash, Phanikumar, Yagnith Varma
Sprint-3	To develop a python code	USN-10	Create python code to sense the physical quantity and store data	2	Medium	Pranav, Yashith Reddy, Avinash, Phanikumar, Yagnith Varma
Sprint-4	Publish data to cloud	USN-11	Publish data that is sensed by the microcontroller to the cloud	3	High	Pranav, Yashith Reddy, Avinash, Phanikumar, Yagnith Varma
Sprint-4	Fast SMS service	USN-12	Use fast SMS to send alert message once the parameters like ph , turbidity and temperature goes beyond the threshold	2	Medium	Pranav, Yashith Reddy, Avinash, Phanikumar, Yagnith Varma

Sprint-4	Testing	USN-13	Testing of project and final deliverables	3	High	Pranav, Yashith Reddy, Avinash, Phanikumar, Yagnith Varma

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	10	6 Days	24 Oct 2022	29 Oct 2022	10	29 Oct 2022
Sprint-2	10	6 Days	31 Oct 2022	05 Nov 2022	10	05 Nov 2022
Sprint-3	10	6 Days	07 Nov 2022	12 Nov 2022	10	12 Nov 2022
Sprint-4	10	6 Days	14 Nov 2022	19 Nov 2022	10	19 Nov 2022

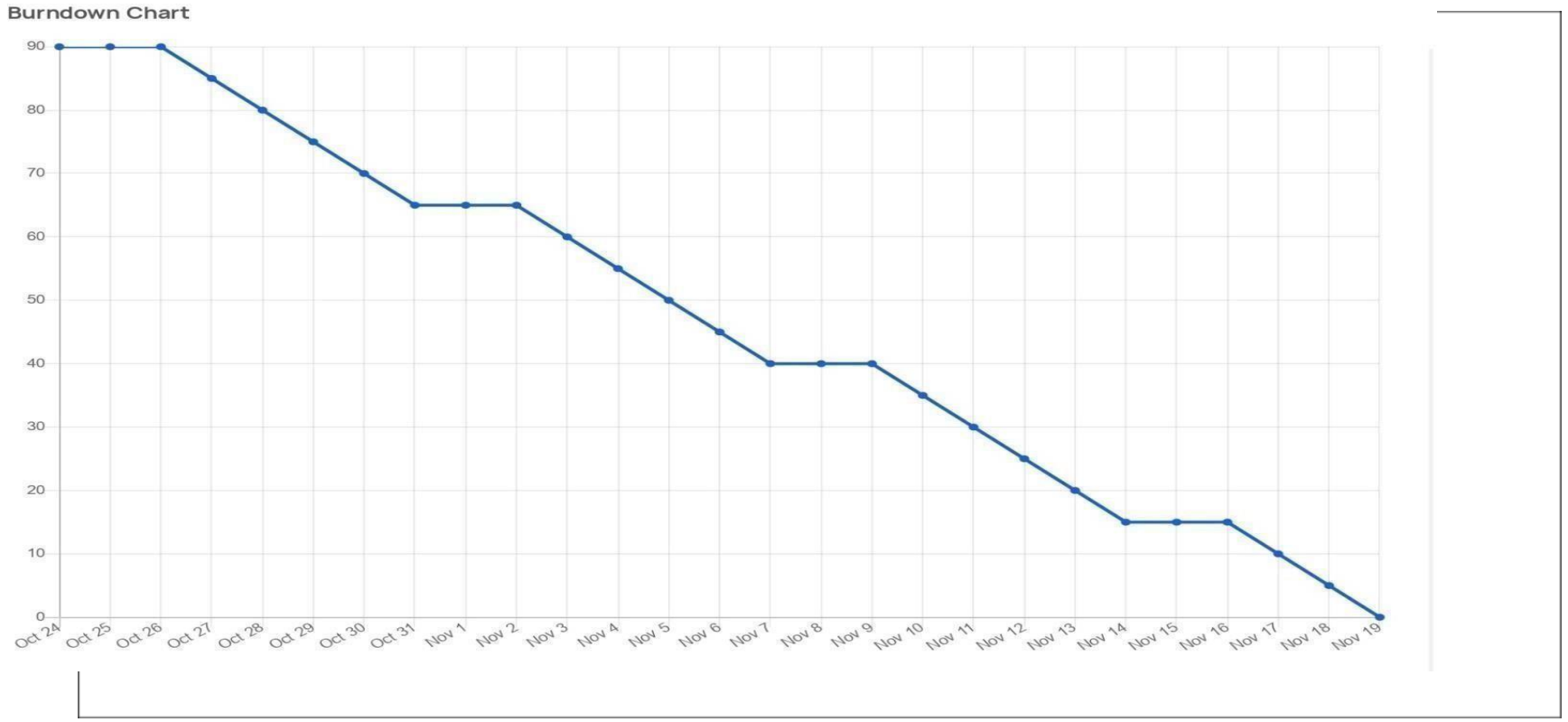
$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

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)

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 suchas Scrum. However, burn down charts can be applied to any project containing measurable progress over time


Burndown Chart
90
80
70
60
50
40
30
20
10
0
Oct 24
Oct 25
Oct 26
Oct 27
Oct 28
Oct 29
Oct 30
Oct 31
Nov 1
Nov 2
Nov 3
Nov 4
Nov 5
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Nov 19