

Project Planning Phase

Project Planning:

Domain	IOT Based
Team ID	PNT2022TMID50107
Project Name	Industry-specific intelligent fire management system
Maximum Mark	8 mark

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	Sensing	USN-1	Use the sensors to sense the surroundings.	3	High	V.THIRUPATHI, M.VELMANI, S.ROSHAN, K.THIYAGU
	Operating	USN-2	Activating the fire sprinkler system and exhaust fan in case of a fire	3	Medium	V.THIRUPATHI, M.VELMANI, S.ROSHAN, K.THIYAGU
Sprint-2	Sending collected data to the IBM Watson platform	USN-3	Sending IBM Watson the data from the sensors.	3	High	V.THIRUPATHI, M.VELMANI, S.ROSHAN, K.THIYAGU
	Node red	USN-4	Data transmission from IBM Watson to Node Red.	3	High	V.THIRUPATHI, M.VELMANI, S.ROSHAN, K.THIYAGU
Sprint-3	Storing of sensor data	USN-5	Keeping data in a Cloudant database	2	Medium	V.THIRUPATHI, M.VELMANI, S.ROSHAN, K.THIYAGU
	Registration	USN-6	My email and password are being entered to confirm the authentication process.	1	Medium	V.THIRUPATHI, M.VELMANI, S.ROSHAN, K.THIYAGU
	Web UI	USN-7	Keeps track of	3	High	V.THIRUPATHI,

			environmental conditions and presents sensor data.			M.VELMANI, S.ROSHAN, K.THIYAGU
Sprint-4	Fast SMS Service	USN-8	When parameters like temperature, flame, and gas sensor readings exceed the threshold value, use Fast SMS to send an alarm message	3	High	V.THIRUPATHI, M.VELMANI, S.ROSHAN, K.THIYAGU
	Turn ON/OFF the actuators	USN-9	In that case, the user has the option to turn off both the sprinkler system and the exhaust fan	2	Medium	V.THIRUPATHI, M.VELMANI, S.ROSHAN, K.THIYAGU
	Testing	USN-10	Project and final deliverables testing.	1	Low	V.THIRUPATHI, M.VELMANI, S.ROSHAN, K.THIYAGU

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	6	6 Days	13 NOV 2022	19 NOV 2022	6	19 NOV 2022
Sprint-2	6	6 Days	13 NOV 2022	19 NOV 2022	6	19 NOV 2022
Sprint-3	6	6 Days	13 NOV 2022	19 NOV 2022	6	19 NOV 2022
Sprint-4	6	6 Days	13 NOV 2022	19 NOV 2022	6	19 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)

$$AV = \text{sprint duration} / \text{velocity}$$

$$AV = 20 / 2 = 2$$