

Project Planning Phase

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

Date	18 October2022
Team ID	PNT2022TMID41422
Project Name	IOT BASED SMART CROP PROTECTION SYATEM FOR AGRICULTURE
Maximum Marks	8Marks

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	SensorData(python script)	USN-1	The Data of sensor which are feed to the Raspberrypi.Here we areusingpython scriptto generatea random sensor data.	3	High	SHARATHY K (Teamleader)
Sprint-1	Automation(python script)	USN-2	Some activities are made to automation to overcome insufficient of labourforce in the field. Hence that also included in python script to implement automationin the.	5	High	SHARATHY K (Teamleader)
Sprint-2	IBM IOTplatform	USN-3	To sendtheraspberrypi data to IOT platform, we create an IBM IOT platform and connect the raspberry pi tothe device created in IBM IOT.	5	High	RAMYA S (Team Member-1)
Sprint-3	Node RED service	USN-4	To access the IBM IOT platform from external applicationor from externalUINode red service is established.	5	High	Roja M (Team Member-2)
Sprint-3	API Key	USN-5	Toprotect the IBM IOT platform creating an API Key.		High	Priyadharshini V (Team Member-3)
Sprint-4	User Application	USN-6	Tomonitor and control the field sensors the User is provided with an User application created by MIT app inventor	8	High	Ramya S (TeamMember-1), Roja M (Team Member-2)

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	8	6 Days	24 Oct 2022	29 Oct 2022	8	29 Oct 2022
Sprint-2	5	6 Days	31 Oct 2022	05 Nov 2022	5	05 Nov 2022
Sprint-3	8	6 Days	07 Nov 2022	12 Nov 2022	8	12 Nov 2022
Sprint-4	8	6 Days	14 Nov 2022	19 Nov 2022	8	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)

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

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.