

PROJECT PLANNING PHASE

PROJECT PLANNING TEMPLATE (PRODUCT BACKLOG, SPRINT PLANNING, STORIES, STORY POINTS)

TEAM ID	PNT2022TMID18045
PROJECT DOMAIN	INTERNET OF THINGS
PROJECT TITLE	IoT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE
DATE	18 OCTOBER 2022
MAXIMUM MARKS	8 MARKS

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	IBM Cloud Services	USN-1	Create a Cloud Account in IBM	10	High	Whole Team
	Python IDE	USN-2	Install the Python IDE	5	Medium	Gopi Krishnan K
	Clarifai	USN-3	Create an Account in Clarifai	5	High	Kani Raj K and Raja Kumaran G
Sprint-2	IBM Watson Platform	USN-4	Create IBM Watson IoT Platform and Device	5	High	Mariappan K
	Node Red Services	USN-5	Create Node Red Services (To Create a Web Application)	4	High	Saravanan B
	Cloudant DB	USN-6	Create a Database in Cloudant DB (To Store the Image URL, Launch the Cloudant DB)	4	High	Saravanan B
	Cloud Object Storage	USN-7	Create a Cloud Object Storage Service	4	High	Saravanan B

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Python Code	USN-8	Develop a Python Script	15	High	Mariappan K Saravanan B
Sprint-4	Web UI(User Interface)	USN-9	Develop a Web Application using Node-RED Service. (Display the image in the Node-RED web UI and also display the temperature, humidity, and soil moisture levels.)	15	High	Saravanan B

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	6 Days	24 Oct 2022	29 Oct 2022	20	
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	

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)

$$AV = \text{Sprint Duration} / \text{Velocity} = 24/6=3.33$$

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.