

PROJECT PLANNING PHASE

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

Date	08 November 2022
Team ID	PNT2022TMID36188
Project Name	IOT BasedSmart Crop Protection For Agriculture
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	P A Bhoomika P Gunasundari M Jothika B Keerthi
	Software	USN-2	Install the Python IDE	5	Medium	P A Bhoomika P Gunasundari M Jothika B Keerthi
	Clarifai	USN-3	Create an Account in Clarifai (To detect the animals and birds we are usingan open-source platform Clarifai.)	5	High	P A Bhoomika P Gunasundari M Jothika B Keerthi

Sprint-2	IBM Watson Platform	USN-4	Create IBM Watson IoT Platform and Device(It acts as the mediator to connect the web application to IoT device)	5	High	P A Bhoomika P Gunasundari M Jothika B Keerthi
	Node Red Services	USN-5	Create Node Red Services (To Create a Web Application)	5	High	P A Bhoomika P Gunasundari M Jothika B Keerthi
	Cloudant DB	USN-6	Create a Database in Cloudant DB (To Store the Image URL, Launch theCloudant DB)	5	High	P A Bhoomika P Gunasundari M Jothika B Keerthi
	Cloud Object Storage	USN-7	Create a Cloud Object Storage Service	5	High	P A Bhoomika P Gunasundari M Jothika B Keerthi
Sprint-3	Python Code	USN-8	Develop a Python Script	20	High	P A Bhoomika P Gunasundari M Jothika B Keerthi
Sprint-4	Web UI(User Interface)	USN-9	Develop a Web Application using Node-REDSERVICE. (Display the image in the Node-RED web UIand also display the temperature, humidity, and soil moisture levels.)	20	High	P A Bhoomika P Gunasundari M Jothika B Keerthi

PROJECT TRACKER, VELOCITY & BURNDOWN CHART: (4 MARKS)

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as onPlanned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	23 Oct 2022	28 Oct 2022	20	28 Oct 2022
Sprint-2	20	6 Days	28 Oct 2022	03 Nov 2022	20	03 Nov 2022
Sprint-3	20	8 Days	04 Nov 2022	11 Nov 2022	20	11 Nov 2022
Sprint-4	20	8 Days	12 Nov 2022	19 Nov 2022	20	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)

$$\begin{aligned}\text{AV} &= \text{Sprint Duration} / \text{Velocity} \\ &= 28/20 \\ &= 1.4\end{aligned}$$

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.

