

## PROJECT PLANNING PHASE

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

<b>TEAM ID</b>	PNT2022TMID44357
<b>PROJECT DOMAIN</b>	INTERNET OF THINGS
<b>PROJECT TITLE</b>	IoT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE
<b>DATE</b>	18 OCTOBER 2022
<b>MAXIMUM MARKS</b>	8 MARKS

#### PRODUCT BACKLOG, SPRINT SCHEDULE, AND ESTIMATION (4 MARKS)

Use the below template to create product backlog and sprint schedule

<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-1	IBM Cloud Services	USN-1	Create a Cloud Account in IBM	10	High	Whole Team
	Software	USN-2	Install the Python IDE	5	Medium	A Deepika
	Clarifai	USN-3	Create an Account in Clarifai (To detect the animals and birds we are using an open-source platform Clarifai.)	5	High	N L Pooja
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	S Sakthi
	Node Red Services	USN-5	Create Node Red Services (To Create a Web Application)	5	High	M S Swasthika
	Cloudant DB	USN-6	Create a Database in Cloudant DB (To Store the Image URL, Launch the Cloudant DB)	5	High	A Deepika
	Cloud Object Storage	USN-7	Create a Cloud Object Storage Service	5	High	N L Pooja

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	20	High	S Sakthi M S Swasthika
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. )	20	High	M S Swasthika

#### 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	29 Oct 2022
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)

$$AV = \text{Sprint Duration} / \text{Velocity} = 24/20 = 1.2$$

## 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.

