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

TEAM ID	PNT2022TMID26689
PROJECT DOMAIN	INTERNET OF THINGS
PROJECT TITLE	IoT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE
DATE	20 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
	Software	USN-2	Install the Python IDE	5	Medium	Harish J
	Clarifai	USN-3	Create an Account in Clarified (To detect the animals and birds we are using an open-source platform Clarified.)	5	High	Sherlin A G
	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	George Nithis Kishore

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Node Red Services	USN-5	Create Node Red Services (To Create a Web Application)	5	High	Dhinakaran K
	Cloudant DB	USN-6	Create a Database in Cloudant DB (To Store the Image URL, Launch the Cloudant DB)	5	High	Jinil Demetrius
	Cloud Object Storage	USN-7	Create a Cloud Object Storage Service	5	High	Harish J
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	Sherlin A G
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	George Nithis Kishore s

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	05 Nov 2022

Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 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)

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

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.

BURNDOWN CHART