

## PROJECT PLANNING PHASE

### SPRINT DELIVERY PLAN

TEAM ID	PNT2022TMID47379
PROJECT TITTLE	SMART CROP PROTECTION SYSTEM FOR AGRICULTURE
MAXIMUM MARKS	8 MARKS

#### Product Backlog, Sprint Schedule, and Estimation (4 Marks)

SPRINT	FUNCTIONAL REQUIREMENT	USER STORY NUMBER	USER STORY/TASK	STORY POINTS	PRIORITY	TEAM NUMBERS
Sprint-1		US-1	Create the IBM Cloud services which are being used in this project.	7	high	Niresh Kumar S Cibie charan S Vignesh V Vigneshwaran S
Sprint-1		US-2	Create the IBM Cloud services which are being used in this project.	7	high	Niresh Kumar S Cibie charan S Vignesh V Vigneshwaran S
Sprint-2		US-3	IBM Watson IoT platform acts as the mediator to connect the web application to IoT devices, so create the IBM Watson IoT platform.	5	medium	Niresh Kumar S Cibie charan S Vignesh V Vigneshwaran S
Sprint-2		US-4	In order to connect the IoT device to the IBM cloud, create a device in the IBM Watson IoT platform and get the device credentials	6	high	Niresh Kumar S Cibie charan S Vignesh V Vigneshwaran S
Sprint-3		US-1	Configure the connection security and create API keys that are used in the Node-RED service for accessing the IBM IoT Platform.	10	high	Niresh Kumar S Cibie charan S Vignesh V Vigneshwaran S

Sprint-3		US-3	Create a Node-RED service	8	high	Niresh Kumar S Cibie charan S Vignesh V Vigneshwaran S
Sprint-3		US-2	Develop a python script to publish random	6	medium	Niresh Kumar S Cibie charan S Vignesh V Vigneshwaran S
			sensor data such as temperature, moisture, soil and humidity to the IBM IoT platform			Niresh Kumar S Cibie charan S Vignesh V Vigneshwaran S
<b>Sprint-3</b>		US-1	After developing python code, commands are received just print the statements which represent the control of the devices.	8	high	Niresh Kumar S Cibie charan S Vignesh V Vigneshwaran S
<b>Sprint-4</b>		US-3	Publish Data to The IBM Cloud	5	high	Niresh Kumar S Cibie charan S Vignesh V Vigneshwaran S
<b>Sprint-4</b>		US-2	Create Web UI in Node-Red	8	high	Niresh Kumar S Cibie charan S Vignesh V Vigneshwaran S
<b>Sprint-4</b>		US-1	Configure the NodeRED flow to receive data from the IBM IoT platform and also use Cloudant DB nodes to store the received sensor data in the cloudant DB	6	high	Niresh Kumar S Cibie charan S Vignesh V Vigneshwaran 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	6days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6days	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)

$$AV = \text{Sprint duration} / \text{velocity} = 20 / 10 \text{ Burndown}$$

### Chart:

A burndown chart is a graphical representation of work left to do versus time. However, burndown charts can be applied to any project containing measurable progress overtime.

