



MAHENDRA INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering

Smart Farmer-IOT Enabled Smart Farming Application

IBM NALAIYATHIRAN

Project Planning Phase

Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

TITLE	Smart Farmer-IOT Enabled Smart Farming Application
DOMAIN NAME	INTERNET OF THINGS
TEAM ID	PNT2022TMID17252
LEADER NAME	KARTHICKRAJA M
TEAM MEMBER NAME	KAVIN M KAVIYARASAN R LOGANATHAN K
MENTOR NAME	DIVYA BHARATHI G

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	Hardware	USN-1	Sensors and wi-fi module with python code.	2	High	Karthickraja, Loganathan, Kavin, Kaviyarasan.
Sprint-2	Software	USN-2	IBM Watson IoT platform, Workflows for IoT scenarios using Node-red	2	High	Karthickraja, Loganathan, Kavin, Kaviyarasan.
Sprint-3	MIT app	USN-3	To develop an mobile application using MIT	2	High	Karthickraja, Loganathan, Kavin, Kaviyarasan.
Sprint-4	Web UI	USN-4	To make the user to interact with software.	2	High	Karthickraja, Loganathan, Kavin, Kaviyarasan.

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		29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022		5 th NOV 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022		12 th NOV 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022		14 th 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)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$

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.

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

Reference:

<https://www.atlassian.com/agile/project-management>

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

<https://www.atlassian.com/agile/tutorials/epics>

<https://www.atlassian.com/agile/tutorials/sprints>

<https://www.atlassian.com/agile/project-management/estimation>

<https://www.atlassian.com/agile/tutorials/burndown-charts>