Project Planning Phase

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

|  |  |
| --- | --- |
| Date | 01 November 2022 |
| Team ID | PNT2022TMID12089 |
| Project Name | SmartFarmer – IoT Enabled Smart Farming  Application |
| 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 | Simulation Creation | USN-1 | Connect sensors, Arduino and esp8266 | 2 | High | Perumal Mohan |
| Sprint-1 | Software | USN-2 | Develop an application with MIT App inventor  (Login page with firebase) | 2 | High | Dinesh Ashokkumar |
| Sprint-2 | Software and Hardware | USN-3 | Connect the hardware with IBM Cloud and API Integration | 2 | Medium | Perumal Mohan |
| Sprint-2 | Software | USN-4 | Application development for project | 2 | High | Dinesh Ashok kumar |
| Sprint-3 | Software | USN-5 | Establishing Node-Red connection | 2 | Medium | Perumal Mohan |
| Sprint-3 | Software | USN-6 | Connecting application with Node-Red and further application development | 2 | High | Dinesh Ashokkumar |
| Sprint-4 | Testing | USN-7 | Testing developed application and working model of hardware | 2 | High | Perumal Mohan Dinesh Ashokkumar |

# Project Tracker, Velocity & Burndown Chart: (4 Marks) Story Points – 8 points

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 | 16 | 5 Days | 25 Oct 2022 | 29 Oct 2022 |  | 31 Oct 2022 |
| Sprint-2 | 16 | 8 Days | 31 Oct 2022 | 07 Nov 2022 |  | 08 Nov 2022 |
| Sprint-3 | 16 | 6 Days | 09 Nov 2022 | 13 Nov 2022 |  | 14 Nov 2022 |
| Sprint-4 | 8 | 6 Days | 15 Nov 2022 | 17 Nov 2022 |  | 17 Nov 2022 – 18 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 averagevelocity (AV) per iteration unit (story points per day)

Total Sprint Points = 56 Total Sprint = 4

Average Velocity = 56/4 = 14

**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](https://www.visual-paradigm.com/scrum/what-is-agile-software-development/) methodologies suchas [Scrum.](https://www.visual-paradigm.com/scrum/scrum-in-3-minutes/) However, burn down charts can be applied to any project containing measurable progress over time.

60

50

40

30

20

10

0

Day 1

Day 2

Day 3

Day 4

Day 5

Actual Effort

Estimated effort