

## Project Planning Phase

### Project Planning (Product Backlog, Sprint Planning, Stories, story points)

Date	21 October 2022
Team ID	PNT2022TMID38806
Project Name	IoT Based Smart Crop Protection System for Agriculture
Maximum Marks	8 Marks

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

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points (40)	Priority (Low to High)	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the required dataset by entering my email, password, and confirming my password.	3	High	Sowmiya R
Sprint-1		USN-2	As a user, I will receive confirmation email and the SMS once I have registered for the application	2	High	Sowmiya R
Sprint-2	Cloud services	USN-3	As a user, I can register for the application through Facebook or any social media	1	Low	Suganthi P
Sprint-4		USN-4	As a user, I can register for the application through Gmail/web service	2	Medium	Priyadharshini P
Sprint-3	Login	USN-5	As a user, I can log into the application network by entering email & password	4	High	Narmatha V
Sprint-2	Pre processing	USN-6	As a farmer, the user must be able to find the system easy to access so pre-processes and other task must be perfect.	3	High	Sowmiya R
Sprint-1	Collecting Dataset	USN-7	To collect various sources of animal threats and keep developing a dataset.	3	Medium	Sowmiya R
Sprint-4	Integrating	USN-8	To integrate the available dataset and keep improving the accuracy of finding animals	2	High	Suganthi P
Sprint-3		USN-9	To find and use appropriate compiler to run and test the data so that we can implement our program	1	Low	Narmatha V
Sprint-2		USN-10	Request CK College of Engineering and Technology to deploy the project in our campus and test	1	Low	Priyadharshini P
Sprint-1	Training	USN-11	As programmer, we need to train our data perfectly so that the program runs smoothly	3	High	Sowmiya R
Sprint-3		USN-12	Train the data using out available services and IBM dataset from server and improve that	2	Medium	Priyadharshini P
Sprint-4	Coding	USN-13	To modify the code according to our program and improve the efficiency of that code	4	High	Suganthi P
Sprint-2		USN-13	To improve performance	1	Low	Narmatha V
Sprint-2	Record	USN-5	To record the data and plot the graph to show the characteristics officially	4	High	Sowmiya R
Sprint-1	Planning	USN-4	Plan the programming language and feasibility	3	Medium	Sowmiya R
Sprint-4		USN-14	Demonstrate the working and improve accuracy overall	2	Low	Suganthi P Sowmiya R

### 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	5 Days	20 Oct 2022	24 Oct 2022	20	21 Oct 2022
Sprint-2	20	5 Days	25 Oct 2022	29 Oct 2022	20	27 Oct 2022
Sprint-3	20	5 Days	31 Oct 2022	4 Nov 2022	20	2 Nov 2022
Sprint-4	20	7 Days	5 Nov 2022	11 Nov 2022	20	8 Nov 2022

#### Velocity:

We have a 23-day sprint duration, and the velocity of the team is 20 (points per sprint).

To Find: Calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{23}{20} = 1.15$$

#### 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.

Project: IoT Based Smart Crop Protection System for Agriculture

