Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID52016
Project Name	IOT Based Smart Crop Protection System for Agriculture
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	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	Kanjana S.K Aarthi G.S Durgai Veerapandian S Aathith J.G
Sprint-1	Login	USN-2	As a user can login using the email and password.	2	High	Kanjana S.K Aarthi G.S Durgai Veerapandian S Aathith J.G
Sprint-1		USN-3	Create the IBM Cloud services which are being used in this project.	6	High	Kanjana S.K Aarthi G.S Durgai Veerapandian S Aathith J.G
Sprint-1		USN-4	Configure the IBM Cloud services which are being used in completing this project.	4	Medium	Kanjana S.K Aarthi G.S Durgai Veerapandian S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
						Aathith J.G
Sprint-2		USN-5	IBM Watson IoT platform acts as the mediator to connect the web application to IoT devices, so create the IBM Watson IoT platform.	5	High	Kanjana S.K Aarthi G.S Durgai Veerapandian S Aathith J.G
Sprint-2		USN-6	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.	4	Medium	Kanjana S.K Aarthi G.S Durgai Veerapandian S Aathith J.G
Sprint-2		USN-7	Configure the connection security and create API keys that are used in the Node-RED service for accessing the IBM IoT Platform.	10	High	Kanjana S.K Aarthi G.S Durgai Veerapandian S Aathith J.G
Sprint-3		USN-8	To create a web application create a Node-RED service.	10	High	Kanjana S.K Aarthi G.S Durgai Veerapandian S Aathith J.G
Sprint-3		USN-9	Launch the cloudant DB and create a database to store the image URL	4	Medium	Kanjana S.K Aarthi G.S Durgai Veerapandian S Aathith J.G
Sprint-4		USN-10	Create a cloud object storage service, create a bucket to store the images, and configure the bucket settings.	5	Medium	Kanjana S.K Aarthi G.S Durgai Veerapandian S Aathith J.G
Sprint-4		USN-11	Develop a python script.	6	Medium	Kanjana S.K Aarthi G.S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
						Durgai Veerapandian S Aathith J.G
Sprint-4		USN-12	Develop a python script to publish random sensor data such as temperature, moisture, soil and humidity to the IBM IoT platform	7	High	Kanjana S.K Aarthi G.S Durgai Veerapandian S Aathith J.G

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)

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

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.