

Project Planning Phase

TeamID	PNT2022TMID22196
ProjectName	IoTbasedSmartcropProtectionSystemforagriculture
MaximumMarks	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	IBM Cloud services	US-1	Create the IBM Cloud services which are being used in this project.	6	High	Geethalakshmi Arithka Deeksha Gowri
Sprint-1	IBM Cloud services	US-2	Configure the IBM Cloud services which are being used in completing this project.	4	Medium	Geethalakshmi Arithka Deeksha Gowri
Sprint-2	IBM Watson IoT platform	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	Geethalakshmi Arithka Deeksha Gowri
Sprint-2	IBM Watson IoT platform	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.	5	High	Geethalakshmi Arithka Deeksha Gowri
Sprint-3	IBM Watson IoT platform & Node-RED service	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	Geethalakshmi Arithka Deeksha Gowri

Sprint	Functional Requirement(Epic)	UserStory Number	UserStory/Task	StoryPoints	Priority	TeamMembers
Sprint-3	Node-REDservice	US-2	CreateaNode-REDservice.	10	High	Geethalakshmi Arithka Deeksha Gowri
Sprint-3	IBMIoTplatform	US-1	Developapythonscripttopublishrandomsensordata such as temperature, moisture, soil andhumiditytotheIBM IoTplatform	7	High	Geethalakshmi Arithka Deeksha Gowri
Sprint-3	IBMIoTplatform	US-2	Afterdeveloping python code,commandsarereceived just print the statements which representthecontrolofthedeveloped devices.	5	Medium	Geethalakshmi Arithka Deeksha Gowri
Sprint-4	IBMCloudServices	US-3	Publish DatatoTheIBMCloud	8	High	Geethalakshmi Arithka Deeksha Gowri
Sprint-4	Webpage	US-1	CreateWebUI in Node- Red	10	High	Geethalakshmi Arithka Deeksha Gowri
Sprint-4	IBMIoTplatform	US-2	ConfiguretheNode-REDflowtoreceivedatafromtheIBMIoTplatform and alsouseCloudantDB nodestostorethereceivedsensordatainthecloudantDB	10	High	Geethalakshmi Arithka Deeksha Gowri

ProjectTracker, Velocity&BurndownChart:(4Marks)

Sprint	Total StoryPoints	Duration	SprintStart Date	SprintEndDate(Planned)	StoryPoints Completed (as onPlannedEndDate)	SprintReleaseDate(Actual)
Sprint-1	20	6Days	24Oct2022	29Oct2022	20	29Oct2022
Sprint-2	20	6Days	31Oct2022	05Nov2022	20	05Nov2022
Sprint-3	20	6Days	07Nov2022	12Nov2022	20	12Nov2022
Sprint-4	20	6Days	14Nov2022	19Nov2022	20	19Nov2022

Velocity:

Imaginewehavea10-

daysprintduration,andthevelocityoftheteamis20(pointspersprint).Let'scalculatetheteam'saveragevelocity(AV)periterationunit(storypoints perday)

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

BurndownChart:

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 over time.

