

Project Planning Phase

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

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|---------------|---|
| Date | 02 November 2022 |
| Team ID | PNT2022TMID42581 |
| Project Name | Emerging Methods for Early Detection of Forest Fires. |
| 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 | Data Collection | USN-1 | Download the dataset in Kaggle for detection of forest fire | 20 | High | |
| Sprint 2 | Image Preprocessing | USN-2 | Cleaning, transforming, collecting and selection are the processes involved in preprocessing then the images will be improved for detecting the forest fire | 20 | High | |
| Sprint-3 | Model building | USN-3 | Here, CNN is used to recognize the images. Neural networks are most important technology now a days. Neural networks learn like humans by using labelled data. It is the most effective way to detect forest fire earlier. We have to add the CNN and Dense layers in our model and train the model for prediction. | 20 | High | |

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|----------|----------------------|-------|--|----|------|--|
| Sprint-3 | Evaluating the model | USN-4 | A model behaves after each iteration of optimization. An accuracy metric is used to measure the algorithm's performance in an interpretable way. The accuracy of a model is usually determined after the model parameters. | 20 | High | |
| Sprint-4 | Output | USN-5 | Build Deep learning model and computer vision Using the IBM cloud. | 20 | High | |

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 | 2 Days | 27 Oct 2022 | 28 Oct 2022 | 20 | 29 Oct 2022 |
| Sprint-2 | 20 | 5 Days | 30 Oct 2022 | 03 Nov 2022 | 20 | 04 Nov 2022 |
| Sprint-3 | 20 | 8 Days | 04 Nov 2022 | 12 Nov 2022 | 20 | 13 Nov 2022 |
| Sprint-4 | 20 | 8 Days | 14 Nov 2022 | 22 Nov 2022 | 20 | 23 Nov 2022 |

Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20(points per sprint). Lets calculate the team's average velocity(AV) per iteration unit(story points per day)

$$\mathbf{AV = Sprint\ duration\ /\ velocity = 20/10 = 2}$$