Project Planning Phase

**Project Planning Template (Product Backlog, Sprint Planning, Stories, Storypoints)**

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| --- | --- |
| Date | 18October 2022 |
| Team ID | PNT2022TMID01306 |
| 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 | The Dataset for training the model is to obtained | 20 | Medium | Badri Krishnan A |
| Sprint-1 | Image Pre- processing | USN-2 | Processing the image to find the fire is detected or not. The output should be of high accuracy. | 10 | Medium | Badri Krishnan A Deepak S  Dhanush Kumar V Hariharan S |
| Sprint-2 | Model Creation | USN-3 | Now the model is created and trained on the  processed images. | 20 | High | Badri Krishnan A Deepak S |
| Sprint-2 | Model Deployment to IBM Cloud | USN-4 | Now the model file is stored in IBM cloud for future usage as well by trained in IBM cloud | 20 | High | Badri Krishnan A  Deepak S Dhanush Kumar V  Hariharan S |
| Sprint-3 | Video Analysis | USN-5 | The drone videos will be split into frames to detect the fire. | 20 | Medium | Badri Krishnan A Deepak S Dhanush Kumar V  Hariharan S |
| Sprint-3 | Alerting | USN-6 | Then the user is to be alerted using **Twilio** API in case of fire | 10 | Medium | Badri Krishnan A Deepak S  Dhanush Kumar V Hariharan S |

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| --- | --- | --- | --- | --- | --- | --- |
| **Sprint** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Members** |
| Sprint-4 | Flask Integration | USN-7 | The model created along with alerting and rest will be integrated into a web app using Flask | 20 | High | Badri Krishnan A Deepak S Dhanush Kumar V  Hariharan S |
| Sprint-4 | Location Tracking | USN-8 | The exact location of the drone will be predicted and sent along with the alert message. | 10 | Medium | Badri Krishnan A Deepak S Dhanush Kumar V  Hariharan S |

# Project Tracker, Velocity & Burndown Chart: (4 Marks)

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| --- | --- | --- | --- | --- | --- | --- |
| **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 | 30 | 29 Oct 2022 |
| Sprint-2 | 20 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | 40 | 05 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 30 | 12 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 30 | 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 = (30+40+30+30)/10 = 13

# 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 such as [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.

