# Project Planning Phase

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

| Date | 9 NOVEMBER 2022 |
|---|---|
| **Team ID** | **PNT2022TMID27543** |
| **Project Name** | **Emerging Methods for Early Detection of Forest Fires** |

**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. | 20 | High | SHRI VARSHA R |
| Sprint-1 | | USN-2 | As a user, I will receive confirmation email once I have registered for the application usage. | 20 | High | MITHRRA SREE RA |
| Sprint-1 | Login | USN-3 | As a user and a forest fire department staff, I will be provided with unique login ID and password. | 20 | High | VANITHA LAKSHMI M |

| | | | | | | |
|---|---|---|---|---|---|---|
| Sprint-2 | IBM Cloud Server | USN-4 | The forest fire is detected using computer vision algorithm based cameras. These cameras continuously monitor the forest and the data is sent to the server. | 20 | High | VANITHA LAKSHMI M |
| Sprint-2 | | USN-5 | I can fetch the details/data from the cloud server. | 20 | High | VEERALAKSHMI P |
| Sprint-3 | Data Collection | USN-6 | I must gather information about forest fires. | 20 | High | VEERALAKSHMI P |
| Sprint-3 | | USN-7 | I must draft and point out the algorithms to predict the forest fire. | 20 | Medium | MITHRRA SREE RA |
| Sprint-4 | Algorithm Implementation | USN-8 | I must determine the precision of each algorithm. | 20 | High | SHRI VARSHA R |
| Sprint-4 | | USN-9 | Extracting and assessing the Dataset | 20 | High | VANITHA LAKSHMI M |
| Sprint-4 | Evaluating the Algorithm | USN-10 | I must determine the precision, recall and accuracy of the algorithm. | 20 | High | MITHRRA SREE RA |

**Project Tracker, Velocity & Burn down Chart: (4 Marks)**

**Project Tracker:**

| 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)

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

Average velocity of sprint-1: AV = 17/8 = 2.125
Average velocity of sprint-2: AV = 11/4 = 2.75
Average velocity of sprint-3: AV = 22/5 = 5.5
Average velocity of sprint-4: AV = 15/4 = 3.75