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

| Date          | 22 October 2022  |
|---------------|--|
| Team ID       | PNT2022TMID47186   |
| Project Name  | Project-Emerging Method For Early Detection Of Forest Fire |
| Maximum Marks | 8 Marks  |

## **Product Backlog, Sprint Schedule, and Estimation (4 Marks)**

| Sprint   | Functional<br>Requirement<br>(Epic) | User Story<br>Number | User Story / Task  | <b>Story Points</b> | Priority | Team<br>Members                          |
|----------|-------------------------------------|----------------------|--|---------------------|----------|--|
| Sprint-1 | Download data set                   | USN-1                | The data is downloaded from the Kaggle website and then the data set is classified into training and testing images.   | 10                  | High     | M. Santhiya                              |
| Sprint-1 | Image pre-processing                | USN-1                | In Image processing technique the first step is usually importing the libraries that will be needed in the program.  Import Keras library from that library and import the ImageDataGenerator Library to your Python script.  The next step is definig the arguments for the | 10                  | High     | R. Abinesh<br>S. Yogeswari<br>S. Saranya |
|          |                                     |                      | ImageDataGenerator . Here the arguments which we are given inside the image data generator class   |                     |          |  |

|          |   |       | are, rescale, shear_range, rotation range of image, and zoom range that we can consider for images.  The next step is applying the ImageDataGenerator arguments to the train and test dataset. |    |      |  |
|----------|---|-------|--|----|------|--|
| Sprint-2 | Training image  | USN-2 | In this training phase the ImageDataGenerator arguments is applied to the training images and the model is tested with several images and the model is saved.                                  | 20 | High | R. Abinesh<br>S. Yogeswari<br>G. Mohanapriya |
| Sprint-3 | Testing image and prediction                                    | USN-3 | In this testing phase the Image processing techniques is applied to the testing images and executed for prediction.  | 20 | High | M. Santhiya<br>S. Yogeswari<br>S. Saranya    |
| Sprint-4 | Video analysis<br>,Sending Alert message<br>and web application | USN-4 | In this phase video is given as input and fire is detected when the fire is detected alert message is sent using twilio service and a frontend application is created.                         | 20 | High | R. Abinesh<br>S. Yogeswari<br>G. Mohanapriya |

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

| Sprint   | Total Story<br>Points | Duration | Sprint Start Date | Sprint End Date<br>(Planned) | Story Points<br>Completed (as on<br>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 = Sprint Duration / velocity = 20/6 = 3.33.