

## EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRE

### MILESTONE AND ACTIVITY LIST

|               |  |
|---------------|--|
| Team ID       | <b>PNT2022TMID01419</b>                              |
| Project Name  | Emerging methods for early detection of forest fires |
| Maximum Marks | 4 marks  |

| S.NO | MILESTONE          | DESCRIPTION  | DURATION | WORKING STATUS |
|------|--------------------|--|----------|----------------|
| 1    | Project objectives | Be able to learn to prepare dataset, image processing, working with CNN layers, read images using Opencv and CNN for computer vision AI  | 1 week   | COMPLETED      |
| 2    | Project flow       | It is a visual aid to understand the methodology you're using to manage the project. The diagram shows the interdependent and parallel processes over the course of the project's life | 1 week   | COMPLETED      |
| 3    | pre-requisites     | To complete this project we should have known the following projects such as Keras, Tensor flow, Python , Anaconda, Open CV, Flask, Scikit-learn etc...                                | 1 week   | COMPLETED      |
| 4    | Prior knowledge    | One should have knowledge on the Supervised Learning ,CNN and Regression   | 1 week   | COMPLETED      |

|    |                        |  |         |           |
|----|------------------------|--|---------|-----------|
|    |                        | Classification and Clustering, ANN   |         |           |
| 5  | Data Collection        | We can collect dataset from different open sources like kaggle.com, UCI machine learning etc   | 2 weeks | COMPLETED |
| 6  | Image Preprocessing    | Importing the Image Data Generator libraries, Define Parameters/Arguments for Image Data Generator class, Applying Image Data Generator Functionality to train set and test set        | 1 week  | COMPLETED |
| 7  | Model Building         | Importing the model building libraries, Initialising the model, Adding CNN layers, Adding Dense layers, Configuring the learning Process, Train the model, Save the model, Predictions | 2 weeks | COMPLETED |
| 8  | Video Analysis         | Open cv for video processing, creating an account in twilio service and sending alert message  | 1 weeks | COMPLETED |
| 9  | Train CNN Model        | Register for IBM Cloud and train Image Classification Model  | 2 weeks | COMPLETED |
| 10 | Ideation Phase         | Prepare Literature Survey on the selected Project and Information Gathering ,empathy map and ideation  | 1 week  | COMPLETED |
| 11 | Project Design Phase-I | Prepare Proposed solution , problem-solution fit and SolutionArchitecture  | 1 week  | COMPLETED |

|    |                           |   |         |           |
|----|---------------------------|---|---------|-----------|
| 12 | Project Design Phase-II   | Prepare Customer journey , functional requirements, Data flow diagram and Technology Architecture | 1 week  | COMPLETED |
| 13 | Project Planning Phase    | Prepare Milestone list , Activity list and Sprint Delivery plan                                   | 1 week  | COMPLETED |
| 14 | Project Development Phase | Prepare Milestone list , Activity list and Sprint Delivery  | 4 weeks | COMPLETED |

### **ACTIVITY LIST**

| Activity Number | Activity Name               | Detailed Activity Description  | Assigned To | Status    |
|-----------------|-----------------------------|--|-------------|-----------|
| 1               | Access Resources            | Access the resources(courses) in the project dashboard.                          | All Members | COMPLETED |
| 2               | Rocket Chat Registration    | Join the mentoring channel via platform & rocket-chat mobile app.                | All Members | COMPLETED |
| 3               | Access Workspace            | Access the guided project workspace  | All Members | COMPLETED |
| 4               | IBM Cloud Registration      | Register on IBM Academic Initiative & Apply Feature code for IBM Cloud Credits.  | All Members | COMPLETED |
| 5               | Project Repository Creation | Create GitHub account & collaborate with Project Repository in project workspace | All Members | COMPLETED |
| 6               | Environment Setup           | Set-up the Laptop / Computers based on the prerequisites for                     | All Members | COMPLETED |

|   |                     |   |             |           |
|---|---------------------|---|-------------|-----------|
|   |                     | each technology track.  |             |           |
| 7 | Literature Survey   | Literature survey on the selected project & Information Gathering | All Members | COMPLETED |
| 8 | Technology Training | Attend the technology training as per the training Calendar.      | All Members | COMPLETED |