| Date | 9 NOVEMBER 2022 |
|--------------|--|
| Team ID | SHRIIBMS120220027543 |
| Project Name | Emerging Methods for Early Detection of Forest Fires |

MILESTONE LIST

| Milestone Name | Milestone Number | Description | Mandatory |
|---------------------|---------------------|---|-----------|
| Project Objectives | M-01 | We will be able to learn to prepare dataset, image processing, workingwith CNN layers, read images using OpenCV and CNN for computer vision AI | Yes |
| Project Flow | M-02 | A project management process flowchart is a graphical aid, designed to visualize the sequence of steps to be followed throughout the project management process | Yes |
| Pre-Requisites | M-03 | To complete this project, we should have known following software and packages | Yes |
| Prior Knowledge | M-04 | One should have knowledge on the Supervised Learning, CNN and Regression Classification and Clustering, ANN | Yes |
| Data collection | M-05 | We can collect dataset from different open sources like kggle.com | Yes |
| Image Preprocessing | M-06 | Importing the ImageDataGenerator libraries, Define Parameters/Arguments for ImageDataGenerator class, Applying ImageData Generator Functionality to trainset and test set | Yes |
| Model Building | M-07 | Importing the model building libraries, Initializing the model, Adding CNN layers, Adding Dense layers, Configuring the learning Process, Train the model, Save the model, Predictions. | Yes |

| Video Analysis | M-08 | Open cv for video processing, creating an account in twillo service and sending alert message | Yes |
|---------------------------|------|---|-----|
| Train CNN model | M-09 | Register for IBM Cloud and train Image Classification Model | Yes |
| Ideation Phase | M-10 | Prepare Literature Survey on the selected Project and Information Gathering, empathy map and ideation | Yes |
| Project Design Phase I | M-11 | Prepare Proposed Solution, Problem- Solution Fit, Solution Architecture | Yes |
| Project Design Phase II | M-12 | Prepare Customer journey, functional requirements, Dataflowdiagram and Technology Architecture | Yes |
| Project PlanningPhase | M-13 | Prepare Milestone list, Activity list and Sprint Delivery Plan | Yes |
| Project Development Phase | M-14 | Project Development delivery of Sprint 1, Sprint 2, Sprint 3, Sprint 4 | Yes |

ACTIVITY LIST

| Activity Number | Activity | Sub Activity | Status |
|--------------------|---------------------|---|-----------|
| 1. | PROJECT OBJECTIVES | | Completed |
| 2. | PROJECT FLOW | | Completed |
| 3. | PRE-REQUISITES | | Completed |
| 4. | DATA COLLECTION | 4.1 Download theDataset | Completed |
| 5. | IMAGE PREPROCESSING | 5.1 Import ImageDataGeneratorLibrary. 5.2 Define the Parameters/ Arguments for ImageDataGeneratorclass. 5.3 Applying ImageDataGenerator Functionality totrainset and test set. | Completed |
| 6. | MODEL BUILDING | 6.1 Importing the modelbuilding libraries. 6.2 Initializing the model. 6.3 Adding CNN layers. 6.4 Adding dense layers. 6.5 Configuring the learning process 6.6 Training the model. 6.7 Saving the model. 6.8 Predictions. | Completed |
| 7. | VIDEO ANALYSIS | 7.1 OpenCV for video processing.7.2 Creating an accountin Twilio service.7.3 Sending alertmessage. | Completed |

| 8. | TRAIN CNN MODELON IBM | 8.1 Train image classification model.8.2 Register for IBMcloud. | In Progress |
|-----|------------------------------|---|-------------|
| 9. | IDEATION PHASE | 9.1 Literature Review.9.2 Empathy map.9.3 Ideation. | Completed |
| 10. | PROJECT DESIGNPHASE – I | 10.1 Proposed Solution.10.2 Problem solution.10.3 Solution Architecture | Completed |
| 11. | PROJECT DESIGNPHASE -II | 11.1 Customer journey.11.2 Functional requirement.11.3 Data flow Diagrams.11.4 TechnologyArchitecture. | Completed |
| 12. | PROJECT PLANNINGPHASE | 12.1 Prepare milestone and activity list 12.2 Sprint delivery plan. | Completed |
| 13. | PROJECT DEVELOPMENT PHASE | 13.1 Project development-Delivery of Sprint-1. 13.2 Project development-Delivery of Sprint-2. 13.3 Project development-Delivery of Sprint-3 13.4 Project development-Delivery of Sprint-4. | In Progress |