Project Planning Phase

Mile stone & Activity List

| Date | 06 November 2022 |
|--------------|---|
| Team Id | PNT2022TMID50335 |
| Project Name | Emerging methods for early detection of forest fire |
| Team members | Azhagu Selvi.M |
| | Sundari.R |
| | Surya Prabha.S |
| | Umamaheshwari.M |

Milestone List

| Milestone Name | Milestone | Description | Mandatory | |
|---------------------|-----------|---|-----------|--|
| | number | | | |
| Project Objectives | M-01 | We will be able to learn to prepare dataset, image processing , working with CNN layers, read images OpenCV and CNN for computer visionAI | 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-Requistes | M-03 | To complete this project, we should have known following project such as Keras, TensorFlow, Python, Anaconda, OpenCV, Flask, Scikitlearn etc | 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 kaggle.com,UCI machine learning etc | Yes | |
| Image Preprocessing | M-06 | Importing the Image Data Generator libraries,Define Parameters/ Arguments for Image | Yes | |

| | | DataGenerator class, Applying ImageData Generator Functionality to Trainset and Testset. | | |
|------------------------------|--------|--|-----|--|
| Model Building | M-07 | Importing the model building libraries, Initialization the model, Adding CNN layers, Adding Adding Dense layers, Configuring the learning process, Train the model, Save the model, Predictions. | Yes | |
| Video Analysis | M-08 | Opency for video processing, creating an account in twilio service and sending alert message | Yes | |
| Train CNN model | MI-099 | Register for IBM RegisternfotrHBM C Image Classificational MaideImage Classification Mod | | |
| 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, and Solution Architecture | Yes | |
| Project Design Phase- II | M-12 | Prepare Customer Journey map, Prepare Functional requirements and, Dataflowdiagram and Technology Architecture | Yes | |
| Project Planning Phase | M-13 | Prepare Milestone list and 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 | Assigned To | Status |
|------------------------|---------------------|--|-------------|-------------|
| 1. | Project Objectives | | All members | In Progress |
| 2. | Project flow | | All members | In Progress |
| 3. | Pre-Requisites | | All members | Completed |
| 4. | Data Collection | 4.1 Downland the data set | All members | Completed |
| 5. | Image Preprocessing | 5.1 Import the ImageDataGenerator Library. 5.2 Define the Parameters/Arguments for ImageDataGenerator class. 5.3 Applying ImageDataGenerator Functionality to trainset and testset. | All members | In Progress |
| 6. | Model Building | 6.1 Importing the model building 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. | All members | In Progress |

| 7. | Video Analysis | 7.1 OpenCV for video processing. 7.2 Creating an account in Twilio service. 7.3 Sending alert message. | All members | In Progress |
|-----|---------------------------|--|-------------|-------------|
| 8. | Train CNN model | 8.1 Train image classification model. 8.2 Register for IBM cloud. | All members | In Progress |
| 9. | Ideation Phase | 9.1 Literature Review. 9.2 Empathy map. 9.3 Ideation. | All members | Completed |
| 10. | Project design phase – | 10.1 Proposed Solution. 10.2 Problem solution fit. 10.3 Solution Architecture | All members | Completed |
| 11. | Project design phase – II | 11.1 Customer journey. 11.2 Functional requirement. 11.3 Data flow Diagrams. 11.4 Technology Architecture. | All members | Completed |
| 12. | Project planning phase | 12.1 Prepare milestone and activity list. 12.2 Sprint delivery plan | All members | Completed |

| 13. | Project development | 13.1 Project | In Progess |
|-----|---------------------|----------------------|------------|
| | phase | 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 | |
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