## MILESTONE AND ACTIVITY LIST

| Date          | 22 October 2022  |
|---------------|--|
| Team ID       | PNT2022TMID24925   |
| Project Name  | Virtualeye-Life Guard For Swimming pools To Detect Active Drowning |
| Maximum Marks | 4 Marks  |

## **MILESTONE**

| Pre-Requisites         | M-01 | To complete this project we should have known the following software concepts and packages such as Keras, Tensorflow, Python, Anaconda, OpenCV, Flask,etc  | Yes |
|------------------------|------|--|-----|
| Project Structure      | M-02 | This is the project structure which needs to be followed for building Conversation Engine  | yes |
| Data collection        | M-03 | We are collecting data for building our project. We will be creating two folders one for training and the other for testing. Images present in the training folder will be used for building the model and the testing images will be used for validating our model. | Yes |
| Image<br>Preprocessing | M-04 | Importing the ImageDataGenerator libraries, Applying Image Data<br>Generator Functionality to train set and testset  | Yes |

| Model Building M | И-05 | Importing the model building libraries, Initializing the model, Adding Convolution layers, Adding the Pooling layers, Adding the Flatten layers, Adding Dense layers, Compiling the model, Fit and Save the model. | Yes |
|------------------|------|--|-----|
|------------------|------|--|-----|

| Test the model                  | M-06 | Import the packages and save the model and Load the test image, pre-<br>process it and predict it.    | Yes |
|---------------------------------|------|---|-----|
| Application layer               | M-07 | Build the flask application and the HTML pages.   | Yes |
| Train CNN<br>model              | M-08 | Register for IBM Cloud and train Image Classification Model   | Yes |
| Ideation Phase                  | M-09 | Prepare Literature Survey on the selected Project and Information Gathering, empathy map and ideation | Yes |
| Project Design Phase-I          | M-10 | Prepare Proposed solution , problem-solution fit and Solution Architecture                            | Yes |
| Project<br>Design<br>Phase-II   | M-11 | Prepare Customer journey ,functional requirements,Data flow diagram and Technology Architecture       | Yes |
| Project<br>Planning<br>Phase    | M-12 | Prepare Milestone list, Activity list and Sprint Delivery Plan  | Yes |
| Project<br>Development<br>Phase | M-13 | Project Development delivery of Sprint 1, Sprint 2, Sprint 3, Sprint 4                                | Yes |

## **ACTIVITY LIST**

| Activity Number 1. | Activity PRE-REQUISITES    | Sub Activity  | Assigned To All Members | Status Completed |
|--------------------|----------------------------|---|-------------------------|------------------|
|                    |                            |   |                         |                  |
| 2.                 | PROJECT<br>STRUCTURE       |   | All Members             | Completed        |
| 3.                 | DATA<br>COLLECTION         | 3.1 Download the Dataset  | All Members             | Completed        |
| 4.                 | IMAGE<br>PREPROCES<br>SING | <ul><li>4.1 Import the ImageDataGenerat or Library.</li><li>4.2 Applying ImageDataGenerator Functionality to train set and testset.</li></ul> | All Members             | Completed        |

| 5. | MODEL BUILDING | 5.1 Importing the model building libraries. 5.2 Initializing the model. 5.3 Adding Convolution layers 5.4 Adding the Pooling layers 5.5 Adding the Flatten layers 5.6 Adding Dense layers | All Members | Completed   |
|----|----------------|---|-------------|-------------|
|    |                | 5.7 Compiling the model 5.8 Fit and Save the model.   |             |             |
|    |                |   |             |             |
| 6. | TEST THE MODEL | 6.1 Import the packages and save the model 6.2 Load the test image, pre-process it and predict it.  | All Members | In progress |

| 7.  | APPLICATION<br>LAYER           | Build the flask application and the HTML pages.   | All Members | In-progress |
|-----|--------------------------------|---|-------------|-------------|
| 8.  | TRAIN CNN<br>MODEL ON<br>IBM   | <ul><li>8.1 Train image classification model.</li><li>8.2 Register for IBM cloud.</li></ul> | All Members | In progress |
| 9.  | IDEATION<br>PHASE              | <ul><li>9.1 Literature Review.</li><li>9.2 Empathy map.</li><li>9.3 Ideation.</li></ul>     | All Members | Completed   |
| 10. | PROJECT<br>DESIGN<br>PHASE – I | 10.1 Proposed Solution 10.2 Problem Solution Fit. 10.3 Solution Architecture                | All Members | Completed   |

| 11. | PROJECT<br>DESIGN<br>PHASE -II      | <ul> <li>11.1 Customer journey.</li> <li>11.2 Functi onal requirement.</li> <li>11.3 Data flow Diagrams.</li> <li>11.4 Techno logy</li> <li>Architecture.</li> </ul>                           | All Members | Completed   |
|-----|-------------------------------------|--|-------------|-------------|
| 12. | PROJECT<br>PLANNING<br>PHASE        | <ul><li>12.1 Prepare milestones and activity lists.</li><li>12.2 Sprint delivery plan.</li></ul>   | All Members | Completed   |
| 13. | PROJECT<br>DEVELOP<br>MENT<br>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. | All Members | In Progress |