**PROJECT MANAGEMENT DOCUMENT**

**Project Name:** System Monitoring Using Facial Gestures

**Project Timeline:**

Start Date: 15/11/2022

End Date: 28/03/2023

Duration: 6 months (approximately)

**Team Members:**

* Vedhuruparthi Sai Lakshmi Prasanna (S170347) : Technical Lead & Developer.
* Yenninti Ushasri (S170520) : Developer & Technical Writer
* Jonna Pavithra(S170673) : Developer & Technical Writer

**Roles and Responsibilities:**

Vedhuruparthi Sai Lakshmi Prasanna: Responsible for developing the activating and deactivating the module by using yawn through mouth and also developing the scroll mode can be activated simply by squinting of the eyes.

Yenninti Ushasri: Responsible for developing the user interface for taking the input using eyes and perform winking of the left and right eye can achieve a left and a right mouse click operations.

Jonna Pavithra: Responsible for developing the user interface for taking the input using eyes and perform zoom in and zoom out and also developing the nose pointer as virtual mouse.

**Time Spent on project:**

* Vedhuruparthi Sai Lakshmi Prasanna: 25hrs per week
* Yenninti Ushasri: 20hrs per week
* Jonna Pavithra: 20hrs per week

**Lines of Code Written:**

Sai Lakshmi Prasanna: 100 lines of code

Yenninti Ushasri: 80 lines of code

Jonna Pavithra: 80 lines of code

**Project Modules:**

**OpenCv** (Open Source Computer Vision Library) : It is an open-source computer vision and machine learning software library that provides various tools and algorithms for developing applications related to image and video processing, object detection, recognition, and tracking.

**Numpy**: A Python library used for numerical computing, which can be used for mathematical operations on arrays and matrices.

**Dlib**: A C++ library that includes a range of machine learning algorithms, including facial detection and recognition.

**Imutils**: A Python library that provides a range of image processing utilities, including resizing, rotating, and cropping images.

**Pyautogui**: A Python library used for automating tasks, such as mouse movements and keyboard input.