

Project Design Phase-I
Proposed Solution

Date	24 September 2022
Team ID	PNT2022TMID30121
Project Name	Project - A Gesture Based Tool For Sterile Browsing Of Radiology images
Maximum Marks	2 Marks

Proposed Solution :

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Computers to recognize the human signs language easily. Performing some tasks based on a sign by the humans by Browsing through the images obtained using radiology using hand gestures rather than using mouse, keyboard.
2.	Idea / Solution description	We are going to solve this problem using Convolutional Neural Network (CNN) algorithm using Open Source Computer Vision Library (Open CV) which are mainly used for image processing, video capture and analysis with Python Flask framework.
3.	Novelty / Uniqueness	Easy to use and quicker than the existing methods to browse images. The tool does not need the person using it to have an apparatus or any devices. It can be used regardless of the users location.
4.	Social Impact / Customer Satisfaction	Medical industry to browse images for Scans and Surgeries, Industries presenting certain ideas during meetings and used by teachers while teaching.
5.	Business Model (Revenue Model)	This can be extended to other industries like it can be used by presenters, by teachers for show images in the classroom, etc. This enables doctors and surgeons to maintain the sterility as they would not have to touch any mouse or keyboard to go through the images.
6.	Scalability of the Solution	More number of gestures can be added thereby increasing this tool's functionality and useability. Tracking of both hands can be added to increase the set of commands.