

Project Design Phase 1

Proposed Solution

Team ID	PNT2022TMID24631
Project Name	A Gesture-based Tool for Sterile Browsing of Radiology Images

Proposed Solution:

S.No	Parameter	Description
1.	Problem Statement	To design an ML model to identify and classify the hand gestures.
2.	Idea / Solution description	To develop a CNN based classifier model, which would be trained on our training data.
3.	Novelty / Uniqueness	We train a CNN based model to recognize the hand gesture. The training data include images that captures the hand gestures of 1,2,3,4,5 and 0. The image is resized without much loss of information and used for training a CNN based model. We use Python Flask to provide an interactive platform for our model.
4.	Social Impact / Customer Satisfaction	This project would help the doctors in operation theatres where physical contact between persons should be avoided in order to be sterilized and also prevent from any infections
5.	Business Model (Revenue Model)	It can be sold as an open-source service to all the hospitals as a non-profitable work.
6.	Scalability of the Solution	The model could also be extended to other real world classifying problems like cancer detection from X-ray, COVID detection using X-ray images, mask detection, face detection etc..