

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID53208
Project Name	Project - A Gesture-based Tool for Sterile Browsing of Radiology Images
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The use of doctor-computer interaction devices in the operation room requires new modalities that support medical imaging manipulation while allowing doctors' hands to remain sterile, supporting their focus of attention, and providing fast response times. Therefore, a gesture recognition system that interprets user's gestures for manipulation of medical images is proposed.
2.	Idea / Solution description	The data is to be collected by observing intuitive gestures in different lighting environments by video capture. The data is then sampled, cleaned and segmented and passed into a Convolutional Neural Network which then identifies the gestures. Following this, stacking is performed to give higher accuracy using algorithms such as SVMs and GMMs.
3.	Novelty / Uniqueness	
4.	Social Impact / Customer Satisfaction	
5.	Business Model (Revenue Model)	
6.	Scalability of the Solution	