

Project Design Phase-I
Solution Architecture

| | |
|---------------|---|
| Date | 26 OCTOBER 2022 |
| Team ID | PNT2022TMID43786 |
| Project Name | A Gesture-based Tool for Sterile Browsing of Radiology Images |
| Maximum Marks | 4 Marks |

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behaviour, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.

Solution architecture for A Gesture based tool for sterile browsing of radiology images

1. User (Doctor/Surgeon) is giving hand gestures as input to perform the certain actions such as zoom in, zoom out the image of the patients during the surgery.
2. In this project Gesture based project, First the model is trained, pre trained on the images of different hand gestures,
3. This model uses the integrated webcam to capture the video frame. The image of the gesture captured in the video frame is compared with the pre-trained model and the gesture is identified.
4. If the gesture predicate is 1 then images is blurred;2, image is resized;3, image is rotated etc.

