

Project Design Phase-I
Solution Architecture

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| Date | 09 October 2022 |
| Team ID | PNT2022TMID01529 |
| Project Name | Project – 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, behavior, 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.

- 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.
- In this project Gesture based project, First the model is trained, pre trained on the images of different hand gestures,
- 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.
- If the gesture predicate is 1 then images is blurred;2, image is resized;3, image is rotated etc.



