

## Project Design Phase-I

### Solution Architecture

#### 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.

