

## IDEATION PHASE – BRAINSTROMING SESSION

**PROJECT NAME :** A Gesture based tool for sterile browsing of  
radiology images

**DATE OF SUBMISSION:** 16.09.2022

**PROBLEM STATEMENT:** To replicate sterile browsing skill in computers  
using image capture technology and classification techniques.

### **TEAM MEMBERS:**

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IDEA 1	IDEA 2	IDEA 3
<ul style="list-style-type: none"><li>• A video-based hand gesture capture and recognition system used to manipulate MRI within a graphical user interface.</li><li>• A hand gesture vocabulary of commands are selected such as 1-Resize, 2-Flip, 3-Rotate, 4-Rectangle.</li><li>• Each gesture is cognitively associated with the notion or command that is meant to represent it.</li><li>• Using this doctors can analyze the image by having non-verbal communication</li></ul>	<ul style="list-style-type: none"><li>• By tracking the navigation and other gestures and translate to commands based on the temporal trajectories through video capture.</li><li>• To develop computer vision algorithms to extract intension and attention cues from the surgeons behavior and combine them with sensory data from a commodity depth camera.</li></ul>	<ul style="list-style-type: none"><li>• By using machine learning algorithms for image detection and recognition for sterile browsing of images in radiology.</li><li>• But the system becomes more complex and requires large number of data set for implementation.</li></ul>