Project Title: A Gesture-based Tool for Sterile Browsing of Radiology Images **Project Design Phase-I - Solution Fit Template** **Team ID:** PNT2022TMID34850

Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

Hospital domain, especially used for doctors inside the operation room.

6. CUSTOMER CONSTRAINTS CC

No breakdown of power and full internet access.

5. AVAILABLE SOLUTIONS AS

Doctors use their hands to access the computer to zoom, scroll, rotate etc of radiology images by touching keyboard, mouse and screen.

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE/PROBLEMS J&P

To keep the doctor sterile inside the operation room.

9. PROBLEM ROOT CAUSE RC

Doctors use their hands to access the computer by touching keyboard, mouse and screen to scroll, zoom, rotate the radiology images and this may lead to the spreading of infections inside the operation room.

7. BEHAVIOUR BE

Directly related : Easy to use, can predict the hand gesture correctly and accurately.

Indirectly associated : Require high internetspeed.

Focus on J&P, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS TR

If the operation is done and successfully completed by using this project in an hospital, that makes other hospital to use.

4. EMOTIONS: BEFORE / AFTER EM

Before: Spreading of infection.

After: Faster response, avoid spreading of infection.

10. YOUR SOLUTION SL

1) Create a webpage to upload the images which needs in operation room.
2) It consumes less data and secures the information of the radiology images.
3) OpenCV is used to recognize the hand gestures that is used by the doctors.
4) Accurate result will be provided.

8. CHANNELS of BEHAVIOUR CH

Online: To upload the radiology images in the created webpage.

Offline: Stores the result of the radiology images.

Extract online & offline CH of BE