Project Title: A Gesture-based Tool for Sterile Browsing of Radiology Images

Problem-Solution fit canvas 2.0

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Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

Hospitals, clinics and various medical organizations use this model.

6. CUSTOMER CONSTRAINTS — CC

1. hand gestures are not recognized
2.No good webcam
3.Device doesn't support the tool

5. AVAILABLE SOLUTIONS — AS

the basic features is to use the external mouse, or a stylus, etc. for manipulating the images

Explore AS, differentiate

Focus on J&P, tap into

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

1.Recognize the hand gestures
2.Classify the gestures into the respective categories
3.Perform the actions on the image based on the gestures

9. PROBLEM ROOT CAUSE — RC

It is not safe and hygienic to use computers and devices in hospitals without proper sterilization as the germs would persist on the device surface for a long period of time and causes the bacteria to propagate faster. To avoid this gesture recognition is needed for sterile browsing of images.

7. BEHAVIOUR — BE

The user will look for alternatives that would prevent the disposal of germs and causing diseases.. They will opt for contact-less options.

Focus on J&P, tap int C

Identify strong TR & EM

3. TRIGGERS — TR

Time consuming process for image manipulation and also the difficulty to use external devices like mouse, keyboard, etc.

4. EMOTIONS: BEFORE / AFTER — EM

* Apprehensive /much more confident
*confused /clarified

10. YOUR SOLUTION — SL

A vision-based hand gesture capture and recognition system that interprets in real-time the user's gestures for navigation and manipulation of images. It basically detects the hand gestures of the users, recognizes and classifies them based on the dataset trained. Later the corresponding actions are performed.

8. CHANNELS of BEHAVIOUR — CH

* To go online and research more about different hand gestures and their datasets.

8.2 OFFLINE

* Refer experts in their fields and goes through books and papers to know about different types of gesture regnition and their datasets.

Extract online & offline CH of BE

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