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

Project Design Phase-I - Solution Fit Template

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Define CS, fit into CC

1. CUSTOMER SEGMENT(S) — CS

- Those who wants to surf on internet for both Specially Abled person and common person.
- People wants to communicate with "Hand signs".
- Common People wants to control "IOT devices through hand signs".
- Who wants to control the "Screens with Hand Gestures".

6. CUSTOMER CONSTRAINTS — CC

- Anxiety - customer began to get anxious when they still no idea about what they have found.
- Available devices – Customers are required to have the necessary devices.
- Network Connection – It is necessary to have the network connection.

5. AVAILABLE SOLUTIONS — AS

- To have the Proper and regular Internet connection to stay connect to surf.
- By searching in books, e-books, online websites etc...
- To know the English alphabet hand signs to surf

Explore AS, differentiate

Focus on J&P, tap into BE,

2. JOBS-TO-BE-DONE / PROBLEMS — J&P

- Giving the necessary information for particular thing which needs for customer.
- To make the computer to understand hand signs

9. PROBLEM ROOT CAUSE — RC

- Unaware of the object.
- New to environment.
- Technology to capture the images.
- Technique of classification must be appropriate.
- Computers cannot understand the human hand signs.

7. BEHAVIOUR — BE

- For Specially Abled person it makes them too difficult to communicate with computer.
- To advance the life with hand gesture by controlling the cars, IOTs, screens etc…

Focus on J&P, tap into BE,

3. TRIGGERS — TR

- They want to advance their lifestyle
- Easy to use (user friendly interface)
- Can be used in many sectors

4. EMOTIONS: BEFORE / AFTER — EM

Before:

- Confident – They feel confident about the software without knowing the basic English alphabetic hand signs.

After:

- It makes them to use this software with full efficient

10. YOUR SOLUTION — SL

The following approaches are used to built an efficient "Web Application" that recognize the hand gestures:

- IBM Watson Assistant - To build the web application as user interface.
- Flask - Web Application Framework.
- Convolutional Neural Network (CNN) - To finding patterns in images to recognize objects, faces, and scenes.

8. CHANNELS of BEHAVIOUR — CH

8.1 ONLINE

- Online websites
- Social media platforms

8.2 OFFLINE

- Customer throw words

Identif