Project Title:Classification of Arrhythmia by Using Deep Learning with 2-D ECG Spectral Image Representation **Project Design Phase-I Solution Fit**

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Define CS, fit into CC

1. CUSTOMER SEGMENT(S) CS

Hospital with less or no cardiologist to analyse the ECG.

6. CUSTOMER CONSTRAINTS CC

It needs a lot of aor an expert surgeon to identify the CVDs. Also it cannot be guaranteed to be accurate.

5. AVAILABLE SOLUTIONS AS

The ECG can be analyzed by the expert surgeon and to identify the CVDs.

Explore AS, differentiate

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

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

Analyze the ECG and predict the Cardiovascular disorder(CVDs)

For accurate diagnosis of patient acute and chronic cardiac problems, an in-depth examination of ECG signals is essential.

9. PROBLEM ROOT CAUSE RC

In earlier stage of CVDs it is nearly impossible to identify it. Even experienced doctors requires lot of time to examine

7. BEHAVIOUR BE

The ECG waves may vary for different persons and based on their age alse.

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

Identify strong TR & EM

3. TRIGGERS TR

The patient may have a costly hospitalization or a delayed start to their therapy as a result. So it should be immediately reported.

10. YOUR SOLUTION SL

Deep learning techniques in the artificial intelligence field with 2-D ECG spectral image representation is used here to classify the arrhythmia with high accuracy.

8.CHANNELS of BEHAVIOR CH

8.1 ONLINE

In Online mode the image processing will be done at IBM cloud and results are brought to client browser.

8.2 OFFLINE

In Offline mode the image processing will be done at client side itself using python flask framework

Identify strong TR & EM

	4. EMOTIONS: BEFORE / AFTER EM To get the clarification of the Cardiovascular disorder and at which level it is affected so that fear and getting out of mind is prevented.		