Project Title: Early Detection of Chronic Kidney Disease using Machine Learning **Project Design Phase-I - Solution Fit Template**

Date : 30-09-2022

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

CS

Who is your customer?

Doctors who felt difficulties in finding the presence of chronic disease quickly using the report of patient

6. CUSTOMER CONSTRAINTS

CC

What constraints prevent your customers from taking action or limit their choices of solutions?

By using the web application which inbuilt using machine learning model makes easy to find the presence of chronic disease instantly

5. AVAILABLE SOLUTIONS

AS

Which solutions are available to the customers when they face the problem

or need to get the job done?

There are solution models available with different algorithms. Here we have used ensemble technique to build the model and created a web application using flask connectivity

Explore AS, differentiat

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

J&P

2. JOBS-TO-BE-DONE / PROBLEMS

Which jobs-to-be-done (or problems) do you address for your customers? To predict and detect the presence of chronic disease using the patient report

9. PROBLEM ROOT CAUSE

RC

What is the real reason that this problem exists? What is the back story behind the need to do this job?

Because there is a delay in analysing ach patience report and detecting the presence of disease by using doctors manually in a quick manner.

7. BEHAVIOUR

BE

What does your customer do to address the problem and get the job done?

They can simply login to our web application and use our chronic disease prediction model in a user friendly interface

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

3. TRIGGERS

TR

What triggers customers to act?

They need to travel to hospital and wait for a long time to visit doctors to check whether they have chronic disease or not.

10. YOUR SOLUTION

SL

We have collected dataset from kaggle. After doing preprocessing, we have developed both regression and classification model. Regression model is built with RandomForest Regressor and classification model is built with RandomForest Classifier. The finally our model is fit with html pages to have good user interface. THis was connected using Pyhon flask web framework.

8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE

What kind of actions do customers take online? Customers need to enter their details inour web frame work to get final results in online

8.2 OFFLINE

What kind of actions do customers take offline?

The need to have theri medical report details.