HEART DISEASE PREDICTION

BLUEPRINT

The entire project consists of approximately 6 steps, that have been brought together to measure and land a rating that is as close to the original user rating as possible, thereby aiming for accuracy and efficiency.

The analysis of disease is a vital job in medicine. The health care industry collects huge amount of healthcare data and then they are mined to discover hidden information for effective decision making. Cardiovascular disease is a kind of serious health imperiling and frequent happening disease. Cardiovascular diseases refer to any disease that affects the cardiovascular system. Medical diagnosis is considered a significant task that needs to be carried out precisely and efficiently. The automation of the same would be highly beneficial.

**Step 1:**

collecting the genuine dataset required which is already present in UCI repository website

simultaneously installing the tool that is required to our project (Octave) which is alternative source to matlab and it is open source

installation of octave can be done from link

<https://youneedtoprogram.wordpress.com/2013/10/12/installing-octave-3-6-4-on-windows-8/>

**Step 2:**

In this step the constraints which are to be considered are selected and the algorithms which are suitable to solve the problem are learned and implemented

The algorithms that are used are SVM(support vector machine) and CNN(neural network) under supervised algorithm category

Source is present in site <https://www.coursera.org/learn/machine-learning/home/welcome>

Step 3:

This step is to connect the dataset and the code generated and the graph is plotted

Step 4:

The 75% of dataset is used to train the system and the 3 dimensional graph is obtained

Step 5:

The appropriate hypothesis function is obtained using those algorithms

Step 6:

The main aim of this step is to test the system (using the rest 25% of dataset is used to test the project) to produce a efficient and accurate product