Project Name: <u>**TECHCARE**</u> <u>- A Health Monitoring & Risk Analysis System</u>

Sponsored by: Inhouse

Team Members names:

Adesh Tajane(**403080**) , Ronish Zadode(**403086**) , Ashutosh Kedar(**402065**) Prabhat Pandey(**403049**) .

Project Domain : Data mining and Machine learning .

Project Description : In our project we intend to analyze the data available for various patients of certain diseases which are primarily affected by change in daily routine , climate and diet   . from this analysis we recognize certain pattern related to symptoms , cause and treatment of the disease . Based on this analysis we create a model to predict the risks , prevention and precautions to be taken by the pateints with similar pattern . Also the prediction will be supported by the climate forecast and current changes in medical health of the patient . Based on the analyzed and detected patterns , the current medical health and climate changes to be confronted by the patient we aim to give in advance predicton to the pateint . We also intend to provide the precautionary methods . Along with prediction we intend to prompt the pateint about taking care of his health based on his personal health satus and the climate changes . We extend the Idea of health risk prediction and prevention measures to farming(plants) and daily routine management of the person .
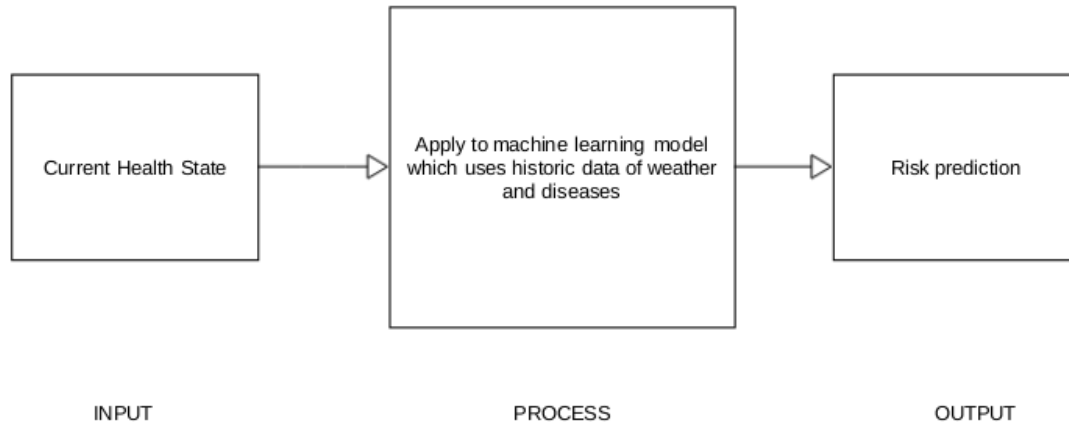
Literature Survey:

Data Driven Analytics for Personalized Healthcare (Base paper)

Curve relativity analyze for relationship between blood pressure and atmospheric temperature using Matlab.

Project Scope:

        In our project techcare we are attempting to provide risk prediction of occurence of disease and it's progress based on the machine learning model we aim to create . We want to make a system which would update the health status of a person daily and tell him to improve or change his routines . Also we want to predict and tell the user to take precautions and identify symptoms properly . All this is related to the climate change and it's affect on daily health . Wer are using the climate forecast and histerical data of the user to dorediction.

High Level Design:i/p , process block , o/p

Current Health State		Apply to machine learning model which uses historic data of weather and diseases		Risk prediction
INPUT		PROCESS		OUTPUT

Mathematical model for Low Level Design : (individual modules) – Attached separately.