Parshvanath Charitable Trust's

A. P. SHAH INSTITUTE OF TECHNOLOGY

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(Religious Jain Minority)

DEPARTMENT OF COMPUTER ENGINEERING

Disease Prediction System
(Group no.16)

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• Problem Statement

- Health information needs are also changing the information seeking behavior and can be observed around the globe. Challenges faced by many people are looking online for health information regarding diseases, diagnoses and different treatments.
- If a recommendation system can be made for doctors and medicine while using review mining will save a lot of time. In this type of system, the user face problem in understanding the heterogeneous medical vocabulary as the users are laymen.
- User is confused because a large amount of medical information on different mediums are available.
- The idea behind recommender system is to adapt to cope with the special requirements of the health domain related with users.

- **Objective**

The aim of developing disease prediction system using machine learning algorithms is to immensely help to solve the health-related issues by assisting the physicians to predict and diagnose diseases at an early stage create and monitors a health profile of every individual patient .

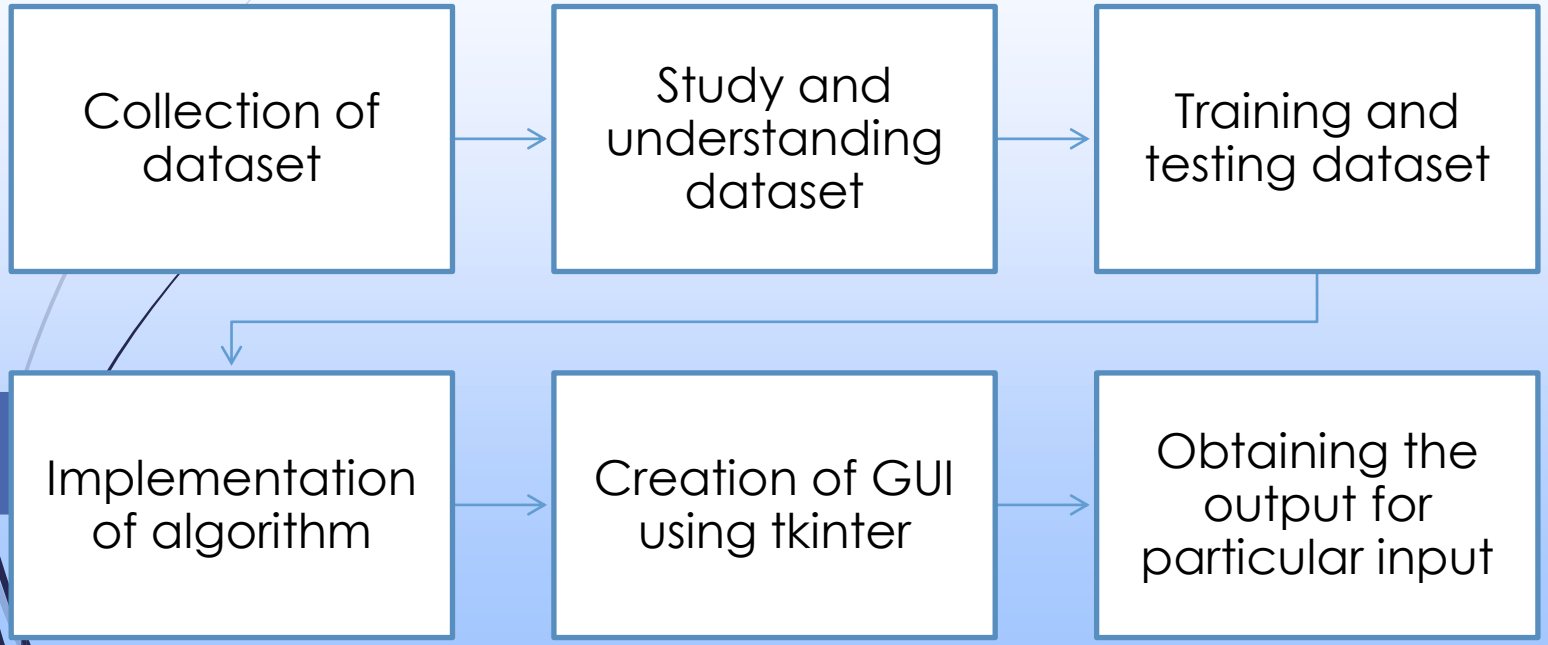
- **Scope and Features**

Machine learning technology offers a strong application forum in the medical industry for health disease prediction concerns based on user/patient experience .Using predictive analytics in healthcare can improve the quality of healthcare, collect more clinical data for personalized treatment, and successfully diagnose the medical condition of individual patient.

- **Technology Stalk**

  - Python 3
  - CSS
  - HTML

- **Flow of module**



Implementation

In this project we have used Decision Tree Classifier algorithms

Algorithm predict the disease as a result when the user enter the symptoms of diseases.

Our Dataset consist of training and testing file which contains 5000+ rows to predict the diseases.

All the used algorithm gives an accuracy of more than 90%.

Library Used

tkinter: It’s a standard GUI library of python.

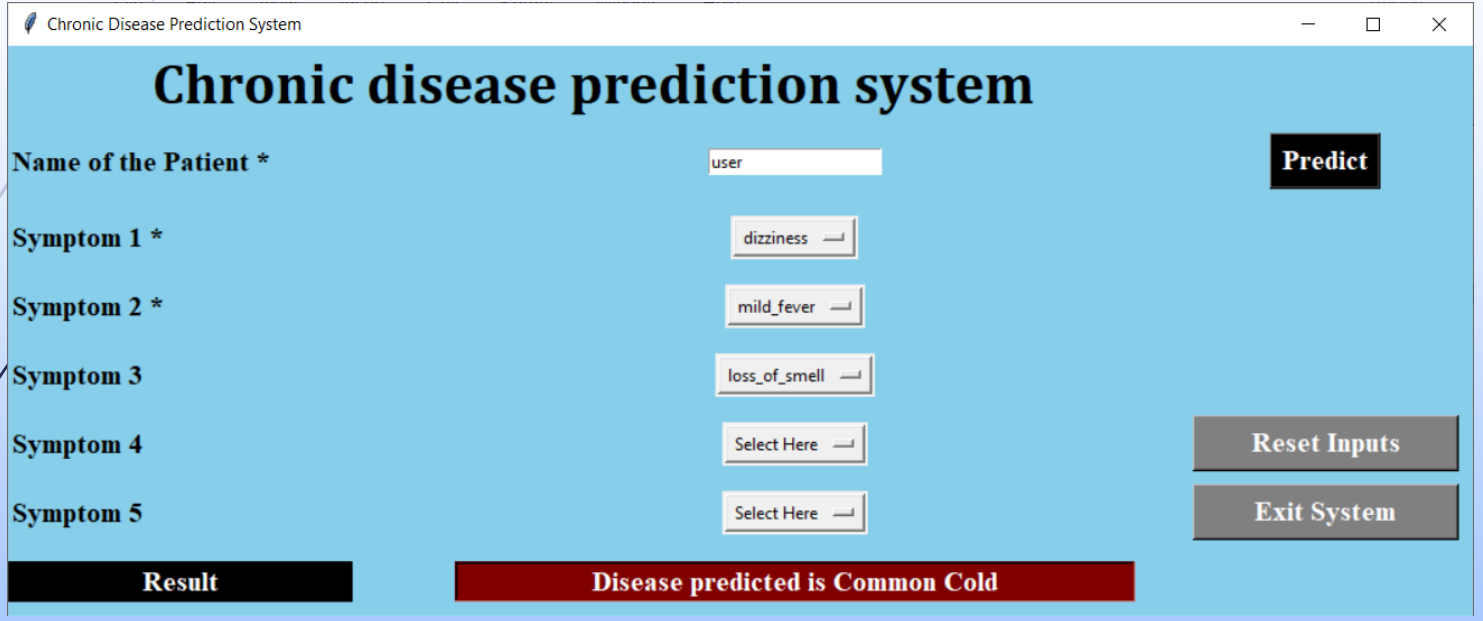
Numpy : It provides powerful tools to deal with various multi-dimensional arrays in python.

Pandas : It provides highly optimized performance with back-end source code purely written in C or python.

sklearn: Sklearn is an open source python library with implements a huge range of machine-learning, pre-processing, cross-validation and visualization algorithms.

GUI made for this project is a simple tkinter GUI consisting of labels, messagebox, button, text, title and option menu

Interface of GUI:



Reference

- https://www.geeksforgeeks.org/disease-prediction-using-machine-learning/
- https://www.kaggle.com/datasets/kaushil268/disease-prediction-using-machine-learning