RELEASE NOTES

HEALTH CARE - DISEASE PREDICTION USING MACHINE LEARNING

1. INTRODUCTION

The field of health is one of the leading research areas in today's landscape with rapid advances in technology and data.It is very difficult to manage huge amounts of patient data. Managing this data is easier through Big Data Analytics. There are procedures to treat many diseases around the world. Machine learning is an emerging approach to disease prediction and diagnosis. This article describes symptom-based disease prediction using machine learning. Machine learning algorithms such as Naïve Bayes algorithm, SVC, GaussianNB, Random Forest, K-means were used on the dataset provided and epidemic predictions were made.Its implementation is done through the Python programming language.

2. COMPATIBLE PRODUCTS

A)Software Requirements

- Operating system: Windows 10/11 or macOS.
- Coding Language : Python
- Software: Anaconda , Jupyter Notebook ,Google Colab.

B)Hardware Requirements

- Processor : Intel i3 or later
- Hard Disk: 500 GB
- RAM: 4 GB
- Any desktop / laptop system with above configuration and high level.

3. UPGRADES

It may have happened so many times that you or your loved one needed immediate medical help, but they weren't there for some reason. The Health Prediction System is an online consulting and end-user support project.

Here we provide a system that allows users to get instant advice about their health problems through an online smart healthcare system. The system is driven by various symptoms and diseases associated with these systems.

- This health prediction system allows users to share their symptoms and issues.

- It then processes the user's symptoms to look for various illnesses that may be related to them.

- In this article we use an intelligent system of Naïve Bayes algorithm, SVM, GaussianNB, Random forest and K-means depending on the symptoms that will predict the diseases.

4. NEW FEATURES

This project is a database-driven healthcare support where symptoms are displayed and are stored in a database. In general, it predicts the disease according to the symptoms specified by the user.Users only need to enter information and accurately predict the condition so that they can provide emergency first aid or take appropriate medical precautions.

In this project we used various algorithms such as:

1) Naïve Random Forest,

2) Random Forest, K-means

3) SVC,

4) GaussianNB,

5) K-meansBayes algorithm,