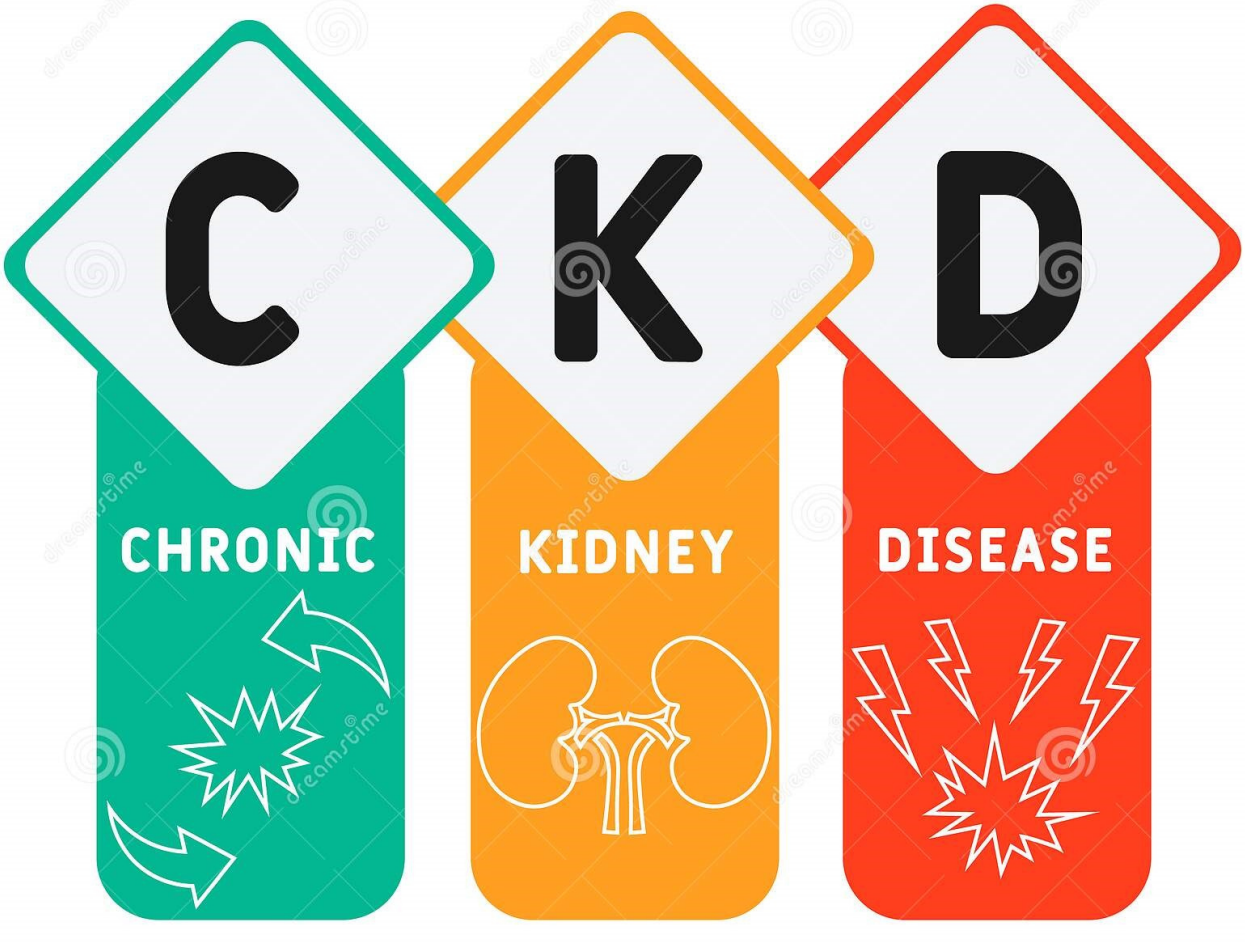
Project Proposal

Predict Status of Chronic Kidney Disease



Project Overview

Mentor:	**Prof. Ajay Anand**
Leader:	**Akshat Abhishek Lal(2005919)**
Members:	• **Vasav Chaudhary(20051909)** • **Aniket Bhardwaj(20051317)** • **Satyam Siddharth(2005127)** • **Komal Kumari(21053029)** • **Rohan Kumar(2005746)**

Project Description

PROBLEM STATEMENTS

Chronic Kidney Disease includes conditions that can damage our kidneys and decrease the ability to filer out waste from our blood. If kidney disease worsens, blood wastes can build upto high levels and may lead to fatality. We may develop complications like,

- High Blood Pressure
- Anaemia (Low Blood Cells Count)
- Weak Bones
- Poor Nutritional Health
- Nerve Damage

AIM

Chronic Disease Prediction In Kidney : To predict chronic disease in kidney in more accurate and faster way to reduce attributes.

PROJECT DETAILS

We want to create a software with a hope to help solve the problem of chronic diseases taking over by affecting people and become significantly more lethal as time goes on. The symptoms of these

diseases get overlooked most of the time as the symptoms aren't that serious and people think of them as ordinary illnesses but in that stage are indeed curable and that too with ease.

We hope to design an AI/ML model that uses the combination of techniques such as,EDA(Exploitory Data Analysis),Label Encoder,Random SearchCV, to give the best advice to the user considering the current symptoms they are experiencing and the history of their illnesses throughout their life up until now. The model will be designed in Python with the main libraries being Pandas, NumPy and matplotlib,seaborn,sklearn.

Objective and Scope

- Users will get advice from ML model and provide prevention methods.
- Make Data user friendly.
- Use of various ML methods to analyse more about datasets so as to achieve more accuracy.

Enhancement

There are several enhancements that can be done to a Chronic Kidney Disease (CKD) prediction project using machine learning techniques. Some possible ideas can be :

1. Improve data preprocessing: Cleaning and pre-processing the data can help eliminate outliers, missing values, and other anomalies that can affect the accuracy of the model increasing data visualization using EDA

2. Increase the size and quality of the dataset: A larger and more diverse dataset can improve the accuracy and robustness of the predictive model. The quality of the data can be improved by removing outliers, filling missing values, and correcting errors.

3.Data-Description-We can describe the values of the given data to make it more use friendly and more straight-forward.