

## **OBJECTIVE**

The main objective of this project is to predict stage Chronic Kidney Disease (CKD) at an early stage. CKD is a condition in which the kidneys are damaged and cannot filter blood as they always do. Chronic Kidney Disease also recognized as Chronic Renal Disease, is an uncharacteristic functioning of kidney or a failure of renal function expanding over a period of months or years.

Habitually, chronic kidney disease is detected during the screening of people who are known to be in threat by kidney problems, such as those with high blood pressure or diabetes and those with a blood relative Chronic Kidney Disease(CKD) patients. So the early prediction is necessary in combating the disease and to provide good treatment.

Machine learning methods are effective in CKD prediction. This work proposes a work flow to predict CKD status based on clinical data, incorporating data prepossessing, a missing value handling method with collaborative filtering and attributes selection. The research also considers the practical aspects of data collection and highlights the importance of incorporating domain knowledge when using machine learning for CKD status prediction. This project helps to raise awareness among people and to promote early diagnosis. Early prediction and proper treatments can possibly stop, or slow the progression of this chronic disease.