

Early prediction for Chronic Kidney Disease Detection: A Progressive Approach To Health Management

Define problem/Problem Understanding:

- 1.Specify The Business Problem**
- 2.Business Requirement**
- 3.Literature Survey**
- 4.Social Or Business Impact**

1.Specify The Business Problem:

- **Chronic Kidney Disease (CKD) is a major medical problem and can be cured if treated in the early stages.**
- **Consequently, attributes of various medical tests are investigated to distinguish which attributes may contain helpful information about the disease.**
- **Chronic Kidney Disease which can help in treatments of peoples who are suffer from this disease.**

- The information says that it helps us to measure the severity of the problem
- The predicted survival of the patient after the illness, the pattern of the disease and work for curing the disease.

2.Business Requirements:

- The business requirements for a machine learning model to predict chronic kidney disease include the ability to accurately predict the CKD based on given information
- Minimise the number of false positives and false negatives
- Provide an explanation for the model's decision
- To comply with regulations and improve transparency

3.Literature Survey:

- Chronic kidney disease (CKD) is a significant public health issue, affecting 14% of the global population.
- Early detection and management of CKD is crucial to prevent progression to ESRD and improve patient outcomes.
- There have been numerous studies in recent years aimed at developing accurate and efficient methods.
- These studies have employed a variety of techniques, including machine learning, deep learning and artificial neural networks.

4.Social or Business Impact:

- **On a social level,early detection and prediction of CKD can lead to improved patient outcomes and quality of life.**
- **By identifying individuals at risk for CKD.**
- **Healthcare providers can intervene early and slow the progression of the disease through lifestyle changes,medication management and other treatments.**
- **This can help prevent the need for dialysis or kidney transplantation.**
- **CKD on the healthcare system by reducing the number of hospitalizations and emergency room visits.**