Batch No:

SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN:: BHIMAVARAM
(AUTONOMOUS)
DEPARTMENT OF CSE
Academic Year:: 2020-21 :: II Semester

B.Tech - PROJECT WORK:: ABSTRACT

Name of the Class / Section	IV – CSE / B		
Batch Number	B7		
Project Domain / Technology	Machine Learning		
Project Title	Chronic Kidney Disease Prediction		
Guide Name	Mr.K.Bhadrachalam		
Students Registered	**Registered Number**	**Student Name**	**Student Signature**
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Signature of Internal Project Guide	**Signature of B.Tech Projects – Coordinator**	**Signature of Head of the Department**

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Abstract of the Project (In 200 words)

The data was taken over a 2-month period in India with 25 features (eg, red blood cell count, white blood cell count, etc). The target is the 'classification', which is either 'ckd' or 'notckd' - ckd=chronic kidney disease. There are 400 rows and 25 columns. We perform preprocessing of data. Later we apply some of the classification algorithms like KNN, Linear Regression , Logistic Regression, SVC, Decision tree classifier and others.

Existing System (If any) – Features & Drawbacks

The existing system of diagnosis is based on the examination of urine with the help of serum creatinine level. Many medical methods are used for this purpose such as screening, ultrasound method. In screening, the patients with hypertension, history of cardiovascular disease, disease in the past, and the patients who have relatives who had kidney disease are screened. This technique includes the calculation of the estimated Glomerular Filteration Rate (GFR) from the serum creatinine level.

Drawbacks:
It is more time consuming.
It require lot of features to decide whether a person suffering from CKD or not.

Proposed System – Features
List of objectives/features that are planned to implement.

- It is an approach to predict the Chronic Kidney Disease.
- Preprocessing of the dataset.
    - Missing Values
    - Data Reduction
- Working on various models.
- It gives more efficient results.

(i)Functional Requirements
(ii) Non Functional Requirements
(iii) Software & Hardware Requirements

Functional Requirements

Classification algorithms and Feature Selection techniques along with Python programming.

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Non Functional Requirements

Scalability : As we are performing prediction using various algorithms, we can use large amount of data for making predictions.

Performance : Based on various models, performance increases gradually.

Software Requirements

Operating System : Windows 7/Windows 8/Windows 10

Coding Language : Python

Dataset : MS Excel

Software IDE /

Online Working Toll : Anaconda Navigator(Spyder) / Google Collaboratory

Documentation : Microsoft Office

Hardware Requirements

GPU or any high process power server

	Expected Date of completion

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Literature Survey	Kunwar, et al. entitled “Chronic Kidney Disease Analysis is Using Data Mining Classification Techniques” published in 2016. Amirgaliyev, et al. entitled “Analysis of Chronic Kidney Disease Dataset by Applying Machine Learning Methods” published in 2015. Devika, et al. entitled “Comparative Study of Classifier for Chronic Kidney Disease Prediction Using Naive Bayes, KNN and Random Forest” published in 2019. Avci E et al. entitled “Performance Comparison of Some Classifiers on Chronic Kidney Disease Data” published in 2018.
Modules	**Expected date of completion**
Understanding and Preprocessing of data	
Visualization of data And Feature Selection	
Applying suitable models for the dataset	
Front End and User Interface	
Testing the project	
Project Report	