Project Design Phase-II Solution Requirements

(Functional & Non-functional)

Date	06 NOVEMBER 2022
Team ID	PNT2022TMID22220
Project Name	**Project – Early Detection of Chronic Kidney Disease**
Maximum Marks	**4 Marks**

Functional Requirements:

Functional Requirements for the proposed solution

S.NO	Functional Requirements (Epic)	Sub Requirements (Sub-task)
1	Home Page	Description of the Chronic Kidney disease Symptoms of the Chronic Kidney disease and cure New user – Sign up, Existing user – Login
2	User Registration	Register through a form
3	User Login	Login using existing credentials
4	Test Vitals	enter the results of pre-diagnostic tests through a form
5	Prediction	Create a report for indicating Chronic Kidney disease present or not Diagnose of Chronic Kidney disease with a blood test A diagnostic remedy for the symptoms that you are experiencing Previous records can be stored in the database
6	Result	If Positive – Test Result along with the Information about the cure will be displayed. If Negative – Test result along with preventive measures from getting Chronic Kidney disease will be displayed

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution

S.NO	Non-functional Requirements	Description
1	Usability	Ease-to-use Illiterates, people without computer/mobile knowledge should be able to use the product Using attributes of medical tests taken for different purposes to detect chronic kidney disease at early stage
2	Security	Users personal information and reports are maintained Confidentiality that user share with us
3	Reliability	The machine learning model can detect the disease in early stage with sufficient accuracy to provide a reliable analysis
4	Performance	prediction the chronic kidney disease with more than 98% of accuracy can be done by using DNN we have more hidden layers and hence its accuracy also high.
5	Availability	It is built as an User Interface(UI) that acts as a website which is trained to predict the CKD the service is available to users from various locations at any time

	Scalability	The Chronic Kidney Disease prediction model is scalable because more number of features are added and if number of users increases also it can predict the result efficiently.