

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID04324
Project Name	Project - Early Detection of Chronic Kidney Disease using Machine Learning
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Requirements	Create an account Login using credentials Storing past records Should be able to generate test reports for presence of CKD
FR-4	User Authentication	Validating user credentials-using password or some other data regarding the user
FR-5	User Authorization	Once it is a verified account, then the users can access the resources
FR-6	User Profile	View their account details Change their password
FR-7	Business Requirements	Application that helps users to know about CKD within limited amount of time

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The software application must be user-friendly and everyone should be able to access it without any difficulty. All the features must be clearly understandable.
NFR-2	Security	Since it is something which is concerned regarding the health status of the people the medical records and data of each individual should be protected. The sensitive information should be stored and secured with proper database management systems

NFR-3	Reliability	The software is well designed to provide accurate information and test results of the patients. The ML models that are built is highly reliable to generate the diagnostic results to its maximum possible extent of accuracy
NFR-4	Performance	The main goal is to provide results within a shorter period by reducing the overall time for prediction of the test results. The software will be immediate without causing any delay
NFR-5	Availability	Details can be accessed any time since the app should be available to the users all the time. Application can be accessed from both the mobile and desktop
NFR-6	Scalability	The application is deployed in such a way that it can handle large number of users at the same time and database will be scaled in a efficient manner to reduce storage and cost