

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

Date	03 October 2022
Team ID	PNT 2022TMID25581
Project Name	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 (Sub-Task)
FR-1	Home Page	<ul style="list-style-type: none">• Symptoms and cure for chronic kidney disease can be displayed.• Test vitals required for prediction of chronic kidney disease.• Sign Up and Login options for the user accordingly. If new user the user needs to SIGN UP and gets directed to the registration page else, redirected to the LOGIN page.
FR-2	User Registration	The user needs to enter few account credentials and other personal details required for registering.
FR-3	User Confirmation	The user must confirm the details given in the registration page.
FR-4	User Login	The user needs to enter the login credentials such as name, username, and password.
FR-5	User Authentication	Validate user credentials through password.
FR-6	Symptoms Form	The user must enter their symptoms and answer the questions properly for prediction.
FR-7	Test Result	<ul style="list-style-type: none">• The page displays the test report.• If positive - displays the test report along the necessary measures to be taken to cure the disease.• If negative – displays the test report along with the preventive measures for the disease.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Web application with a proper user-interface to enable friendly user-access and help them quickly understand the application.
NFR-2	Security	To ensure high security for user's personal, and medical records and hence maintain privacy.
NFR-3	Reliability	Failure of the application can be prevented by making proper analysis of symptoms and predict the disease properly to make the system reliable.
NFR-4	Performance	Provides user friendly application with good performance and prediction accuracy.
NFR-5	Availability	<ul style="list-style-type: none">• The web application must be accessible to everyone around the globe.• It must be simple so that everyone can quickly understand the prediction criterion and the importance of testing the disease.
NFR-6	Scalability	The system must be able to handle both the upbrining and downgrade of the workload.