

**Project Design Phase-II**  
**Requirement Analysis (Functional & Non-functional)**

Date	17 October 2022
Team ID	PNT2022TMID01939
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 (Story / Sub-Task)
FR-1	Home Page	<ul style="list-style-type: none"><li>Chronic Kidney disease description</li><li>Information about Test Vitals required for prediction</li><li>If new User , <b>REGISTER</b></li><li>If Already exist, <b>SIGN IN</b></li></ul>
FR-2	User Registration	<ul style="list-style-type: none"><li>Enters Mail ID and other personal details required for Registering.</li></ul>
FR-3	User Login	<ul style="list-style-type: none"><li>Uses Mail ID and Password for login</li></ul>
FR-4	Test Vitals Form	<ul style="list-style-type: none"><li>Test Vitals should be entered for prediction</li></ul>
FR-5	Result	<ul style="list-style-type: none"><li>If Positive – Test Result along with the Information about what is to be done next will be displayed.</li><li>If Negative – Test result along with preventive measures to prevent themselves from getting Chronic Kidney disease will be displayed.</li></ul>

**Non-functional Requirements:**

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

<b>FR No.</b>	<b>Non-Functional Requirement</b>	<b>Description</b>
NFR-1	<b>Usability</b>	Even Illiterates and people with no understanding of computer/mobile should be able to use the product.
NFR-2	<b>Security</b>	Access permission for particular system information may be changed by systems data administration.
NFR-3	<b>Reliability</b>	The database update process must roll back all related updates when any updates fails.
NFR-4	<b>Performance</b>	The Home-page load time must be no more than 2 seconds for users that access the website using an LTE mobile connection.
NFR-5	<b>Availability</b>	New Model Deployment must not impact Home page ,test page and result page availability and must not take longer than 1 hour.
NFR-6	<b>Scalability</b>	The website Traffic limit must be scalable enough to support 2000,000 users at a time.