

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

Date	10 th October 2022
Team ID	PNT2022TMID35483
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	User Requirements	Use Dataset from Google and clean the dataset.
FR-2	User Requirements	Create, test and save the Model.
FR-3	User Requirements	Display user data entry form to the user.
FR-4	User Requirements	Receive data info from user. Data to be received are blood urea level, blood glucose random. These are numeric values.
FR-5	User Requirements	Receive data from user. Data to be selected by user are select anaemia, select coronary artery disease, select pus cell, select red blood cell level, select diabetes, select pedal edema.
FR-6	User Requirements	Allow user to click on predict button.
FR-7	User Requirements	Display the final result of CKD or Not CKD to the user.
FR-8	User Requirements	Deploy model into IBM cloud.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The application software should be user friendly so many options should be selectable from drop down menu.
NFR-2	Security	Users are asked to register, and only registered users are allowed to login with username and password.
NFR-3	Reliability	The software should be tested for same inputs for 20 times and check the if the output is same.
NFR-4	Performance	The system response should be immediate without any delay.
NFR-5	Availability	Software should be always available for access. It should execute graceful degradation.
NFR-6	Scalability	The software can be used for predicting other chronic disease also just by changing the inputs taken from the user.