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

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Team ID	PNT2022TMID34980
Project Name	Nutrition Assistant Application

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	New users need to enter their required details and register in it.
FR-2	User Confirmation	Confirmation via Email confirmation and being able to change the password using forgot password option via Email.
FR-3	Log in	Only registered users are able to log into the page which is verified in the database and allowed to do the further actions.
FR-4	Diet goal setting	Users need to provide their biometrics, mention the chronic diseases and set the short term and long term diet goals to get the food suggestions based on their needs.
FR-5	Uploading images of diets and dietary supplements	Users need to upload the image of the diets, based on that food suggestions are notified. If the diet is not found, then users need to provide extra information about the diet like the ingredients added to it.
FR-6	Display of personalized dietary feedback and nutritional report	The uploaded diet image is processed in the database and corresponding food suggestions are notified to the users as per the request.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Users can effectively and easily use the system. User interfaces are simple and easily accessed by the users.
NFR-2	Maintainability	Maintainability defines the time required for a solution or its component to be fixed, changed to increase performance or other qualities, or adapted to a changing environment.

		The mean time to restore the system following a system failure must not be greater than 10 minutes.
NFR-3	Reliability	Reliability specifies how likely the system or its element would run without a failure for a given period of time under predefined conditions. The system must perform without failure in 95 percent of use cases during a month.
NFR-4	Performance	Performance defines how fast a software system or a particular piece of it responds to certain users' actions under a certain workload. The landing page supporting 5000 users per hour must provide 6 second or less response time in a chrome desktop browser.
NFR-5	Availability	Availability describes how likely the system is accessible to a user at a given point in time. While it can be expressed as an expected percentage of successful requests, it may also define it as a percentage of time the system is accessible for operation during some time period. The web dashboard is available at any time whenever the user is accessed.
NFR-6	Scalability	Scalability assesses the highest workloads under which the system will still meet the performance requirements. There are two ways to enable the system scale as the workloads get higher: horizontal and vertical scaling. The system must be scalable enough to support 1,000,000 visits at the same time while maintaining optimal performance.