

# **AI - POWERED NUTRITION ANALYZER FOR FITNESS ENTHUSIASTS**

Date	17 October 2022
Team ID	PNT2022TMID21338
Project Name	AI-Powered Nutrition Analyzer for Fitness Enthusiasts
Maximum Marks	4 Marks

## FUNCTIONAL REQUIREMENTS:

Following are the functional requirements for the proposed solution

FR NO.	FUNCTIONAL REQUIREMENTS(EPIC)	SUB REQUIREMENT(STORY/SUBTASK)
FR-1	USER REGISTRATION	<p>Interacting the user through web interface and automated voice to answer the user queries and to guide them in a proper way to maintain their fitness.</p> <p>In the web interface,</p> <ul style="list-style-type: none"><li>● There will be separate and special features for the registered user to get personalized and well defined advice and good practice lectures to maintain their fitness.</li><li>● All the registered users will be verified with either email or mobile number based on their interest in giving their information, but the verification is a must one.</li><li>● For non-registered users, the user can visit the website free of cost and can check the nutrient value in the fruits and vegetables, and also can view the common practices for fitness.</li></ul>
FR-2	USER MANAGEMENT	<p>Creating a group of people, who are willing to be fit in their health and making them organized in a same place, through which they can collaborate and also can achieve their goals with others, by encouraging each other.</p> <p>The application gives the ability to ask questions about a problem in the fitness groups, through which they can work effectively.</p>
FR-3	USER SATISFYING	<p>The satisfaction of each user is a must, so UI/UX should be more than enough to engage the user in the platform and the performance of the application should be optimized in order to keep every user for a long time.</p> <p>On an periodic interval (like once in month), we need to interact one to one with each and every user to solve the queries</p>
FR-4	USER ENGAGEMENT	<p>The user should be engaged in the application at least Once a day to get notified about the latest and good practice on fitness which is recommended by the backend model.</p>

## NON-FUNCTIONAL REQUIREMENTS:

Following are the functional requirements for the proposed solution.

FR.NO	NON-FUNCTIONAL REQUIREMENTS	DESCRIPTION
NFR-1	USABILITY	<ul style="list-style-type: none"><li>• No training is required to access the Nutrition Analyzer.</li><li>• The results should be loaded within 30 seconds.</li><li>• It should be user friendly and comfortable.</li><li>• It should be simple and easy to use.</li><li>• The results should be self explanatory so that it can be understood by common people.</li></ul>
NFR-2	SECURITY	<ul style="list-style-type: none"><li>• AI powered nutrition analyzer for fitness should contain more security in which our data which entered or maintained should be more security.</li><li>• With the help of the username and password it provides more security in which it can access more securable and the data are private.</li><li>• It should be social-economic which should access to sufficient and safe touse.</li><li>• It is Important that the AI powered nutrition analyzer for fitness provides should Must reliable.</li></ul>

NFR-3	RELIABILITY	<ul style="list-style-type: none"> <li>• How a person can find it is reliable? It is easy to find that is he/she can compare the nutrition based food with other nutrition related application so, it can easily rectify whether it is reliable or not.</li> <li>• But it takes too much time, to avoid this a reliable application should be made in which it itself produces whether we can get correct solution or not. So, it is necessary that the AI powered nutrition analyzer for fitness should have proper data and information in which we can get a correct information about it and also get a proper guidance about it.</li> <li>• With the proper guide and proper information in which we can get a nutrition properly and we can have get a proper fitness plan.</li> <li>• It should also provide the information on nutrition and health which it should prevent from health information on diseases, health risks and prevention guidelines. It should also provide an extension a research based online learning network with several resource areas, so it provides more reliability in that area. For more reliable it can also contain the calorie information, balanced diet plans, what type food can be consumed at what time etc..... So, by this way it can be reliable.</li> </ul>
NFR-4	PERFORMANCE	<ul style="list-style-type: none"> <li>• It should provide more number of users to consume at any time and at any place.</li> <li>• It should provide Reliability, Scalability, Security and Usability.</li> <li>• It should contain minimum data while over-paging the websites or application and it is necessary that it</li> </ul>

		<p>should not exceed more than 20mb.</p> <ul style="list-style-type: none"> <li>• While consuming the page it should provide the response as much as possible without any delay or time traffic.</li> <li>• The connection should be properly maintained so that it can use while travelling or in remote places.</li> <li>• The nutritious food to meet their dietary needs and the food preferences for an active and healthy life.</li> <li>• It should be consistently access, availability and affordability of foods and beverages that promote well-being and prevent from diseases.</li> <li>• It should be suitable in all situations that exists to all people, at all times.</li> </ul>
NFR-5	AVAILABILITY	<ul style="list-style-type: none"> <li>• Easy to access Data.</li> <li>• Avoids Data redundancy and inconsistency.</li> <li>• Fast and Efficient.</li> <li>• User Friendly.</li> </ul>
NFR-6	SCALABILITY	<ul style="list-style-type: none"> <li>• The architecture for AI powered Nutrition Analyzer for fitness provides the clear procedure daily consumption of food and helps the user to maintain a healthy diet.</li> <li>• According to their tracking system implemented in architecture provide the proper mechanism to the every individual of their nutrients intake which can be increased or decreased.</li> <li>• The premium amount for analyzer is very much optimum.</li> </ul>