AI - POWERED NUTRITION ANALYZER FOR FITNESS ENTHUSIASTS

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Team ID	PNT2022TMID53466
Project Name	AI-Powered Nutrition Analyzer for FitnessEnthusiasts

FUNCTIONAL REQUIREMENTS:

Following are the functional requirements for the proposed solution

FR NO.	FUNCTIONAL REQUIREMENTS (EPIC)	SUB REQUIREMENT (STORY/SUBTASK)
1.	USER REGISTRATION	▪ Answering user questions and directing them in the right direction to maintain their health using automated voice and web interface interaction. ▪ There will be distinct and unique features in the online interface allowing the registered user to receive tailored, well-defined advice and beneficial practice lectures to maintain their fitness. ▪ Depending on their desire to provide their information, all of the registered users will have their identity confirmed via email or mobile number; nonetheless, this verification is a need. ▪ Non-registered users can access the website for free, verify the nutritious content of the fruits and vegetables, and observe the standard fitness routines.

2.	USER MANAGEMENT	▪ Assembling a team of individuals who are committed to maintaining good health and organizing them in a model setting will enable them to work together and support one another as they pursue their objectives. ▪ In order for the fitness groups to properly work, the application provides the option to ask inquiries regarding a problem.
3.	USER SATISFYING	▪ Each user's pleasure is essential, thus the UI/UX should be excellent to hold their interest in the platform, and the application's performance should be maximized to keep them using it for a long time. ▪ We must speak with each user individually on a regular basis (like once a month) in order to address their queries.
4.	USER ENGAGEMENT	To receive notifications on the most recent and best fitness practices, which are advised by the backend model, the user should be actively using the application at least once a day.

NON-FUNCTIONAL REQUIREMENTS:

Following are the functional requirements for the proposed solution.

NFR.NO	NON-FUNCTIONAL REQUIREMENTS	DESCRIPTION
1.	USABILITY	▪ To use the Nutrition Analyzer, no training is necessary. ▪ Within 30 seconds, the results should load. ▪ It ought to be comfy and easy to use. ▪ It need to be uncomplicated and straightforward to use. ▪ The results should be self-explanatory in order for the general public to understand them.

2.	SECURITY	▪ The security of an AI-powered nutrition analyzer for fitness should be increased, including the security of any data we enter or maintain. ▪ With the aid of the username and password, it offers increased security, allowing for more secure access to private data. ▪ It should be socially and economically accessible and safe to use. ▪ The AI-powered nutrition analyzer for fitness providers must be trustworthy, as this is crucial. ▪ How does one determine if it is trustworthy? Comparing the nutrition-based food with other nutrition-related applications makes it simple to determine whether or not it is reliable. ▪ With the right advice and knowledge, we can develop a suitable workout regimen, acquire correct nutrition, and more.

3.	RELIABILITY	▪ However, it takes too much time, thus to prevent this a trustworthy program should be created that determines whether or not we can obtain the right answer. Therefore, it is essential that the AI-powered nutrition analyzer for fitness has accurate data and information so that we may learn the truth about it and receive accurate counsel regarding it. ▪ The information on nutrition and health should be provided in addition to information on diseases, health risks, and prevention strategies. In order to increase reliability in that field, it should also extend a research-based online learning network with a variety of resource areas. Additionally, it may include calorie information, balanced diet plans, guidelines for what kinds of food to eat when, etc. for increased reliability. ▪ Therefore, this method can be

		trusted.
4.	PERFORMANCE	▪ It ought to allow a greater number of users to consume at any time and anywhere. ▪ It ought to offer Usability, Scalability, Reliability, and Security. ▪ When over-paging websites or applications, it must have the bare minimum of data and must not be larger than 20 MB. ▪ It should respond as quickly and without any time traffic as possible while the page is being consumed. ▪ In order to use the connection while travelling or in remote areas, it should be properly maintained.

		○ ▪ Nutritious food to satisfy their dietary requirements and food preferences for a healthy and active lifestyle. ▪ Foods and beverages that support health and ward off disease should always be accessible, affordable, and readily available. ▪ It should be appropriate for everyone, at all times, in all situations.
5.	AVAILABILITY	▪ Easy to access Data. ▪ Avoids Data redundancy andinconsistency. ▪ Fast and Efficient. ▪ User Friendly.

6.	SCALABILITY	▪ The architecture of an AI-powered nutrition analyzer for fitness outlines the user's daily food intake in straightforward terms and aids in the maintenance of a balanced diet. ▪ The proper mechanism for each person's nutrient intake, which can be increased or decreased, is provided by their tracking system used in architecture. ▪ The premium for the analyzer is nearly perfect.