

**Project Design Phase-II**  
**Functional Requirements**

Date	04.11.2021
Team ID	PNT2022TMID40151
Project Name	Project - AI POWERED NUTRITION ANALYSER
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	Application Building	Create an HTML page for registration, prediction, and logout. The real-time object detection algorithm YOLOV3 detector identifies the objects in an image. Computer vision is able to comprehend images very well.
FR-2	User registration	Using a phone, laptop, or computer, you can register using your Gmail account.
FR-3	User confirmation	Confirmation via Email. Confirmation via OTP.
FR-4	User interface	User login form. Admin login form.
FR-5	Database	Each type of food items has at least 50 images collected and organised in a folder. utilising a Chrome extension that allows you to search for and download images from Chrome.
FR-6	Data server	The data server, which is installed to run as a service and is deployed in an IBM cloud instance, connects data from Chrome and the application to the cloud.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Images can be annotated for understanding using the Visual Object Tagging Tool (VOTT).
NFR-2	<b>Security</b>	Throughout the process, it guarantees user safety. Consider carefully which image you upload or use to detect images of your food items.

NFR-3	<b>Reliability</b>	Good network connectivity and ease of use. Precision reduced time commitment Cost Efficient
NFR-4	<b>Performance</b>	The development of a model with an application can be very beneficial to those who are fitness enthusiasts. When compared to reality, the trained model can predict an accurate outcome and took less time.
NFR-5	<b>Availability</b>	Even when there are numerous image samples, the detection is simple and precise. gives user the right care at the right time. Use the app whenever you want as long as you follow the right instructions.
NFR-6	<b>Scalability</b>	Using this method, accurate information about Fitness conditions is guaranteed.