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

Date	08 November 2022
Team ID	PNT2022TMID37519
Project Name	Fertilizers Recommendation System For Disease Prediction
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 Registration	Registration through Form
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Uploading the images	Drag and drop feature Browse through device folders
FR-4	Image Pre-processing	Uploaded images are pre-processed using the pre-processing model deployed IBM cloud.
FR-5	Disease Prediction	Disease prediction model is trained with a large dataset and deployed in the IBM cloud to predict the disease by analysing the uploaded images.
FR-6	Fertilizer Recommendation	Based on the disease predicted by the model the fertilizer required to cure the disease is suggested to the user
FR-7	Report Generation	The fertilizer to be used and the amount and other details are specified in the report which can be downloaded by the user.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The website is designed to be responsive and user-friendly so that it can be used on any device and by anyone.
NFR-2	**Security**	The user details are confidential and the user account is verified with the email id provided to ensure security.
NFR-3	**Reliability**	As the deployment is done in a cloud environment the model and the website are highly reliable with efficient and accurate outputs.
NFR-4	**Performance**	As the models are deployed in the IBM cloud the performance will be efficient.

NFR-5	**Availability**	The website will be hosted so that it is available for a large number of people.
NFR-6	**Scalability**	As the models are deployed in the IBM cloud they can easily be scaled for large inputs and to handle many requests.