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

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR	Functional	Sub Requirement (Story / Sub-Task)
No.	Requirement (Epic)	
FR-1	User Registration	Registering through Gmail
FR-2	User confirmation	Confirmation is done through Email
FR-2	Image Capture	Take a picture of a leaf and
		verify that the leaf was captured using
		the specified criteria.
FR-3	Image Processing	Upload the image of
		the leaf for detecting
		the diseases that is
		present in the leaf.
FR-4	Leaf Prediction	Determine the parameter that should
		be taken into account for disease
		identification for identifying the leaf
		and predicting the disease in it.
FR-5	Image Description	Show the prescribed fertilizer that
		has to be used for the diseased leaf
FR-6	Providing Dataset	Training the
		datasets
		Testing the
		datasets
FR-7	Adding Datasets	Datasets for fruits and vegetables are
		added.

Non-functional Requirements:

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

FR No.	Non-Functional	Description
	Requirement	
NFR-1	Usability	Data sets can be prepared
		according to the
		leaf .Leaf datasets can be used for
		detection of all kind of leaf's
		Datasets can be reusable to detect
		diseases present in leaf.
NFR-2	Counity	User information and leaf data are
NFK-2	Security	secured
		The employed algorithms are
		more secure.
NFR-3	Reliability	The leaf quality is more for
		predicting the disease
		in leaf.
		The datasets and image capture
		consistently performs well.
NFR-4	Performance	The leaf problem is specified
		when the leaf is detected.
		Performs well according to the
		quality of the leaf and provides a
		specific cure to it by showing
		recommendation of fertilizer.
NFR-5	Availability	The quality of the leaf will
		be used again for detection.
		Datasets will be made
		available and easily
		accessible. It is available to
		all users to predict plant
		disease.
NFR-6	Scalability	Increasing the accuracy of disease
		prediction in the leaf.