Project Design Phase-II Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID22957
Project Name	Fertilizers Recommendation System For Disease Prediction
Maximum Marks	4 Marks

Technical Architecture:

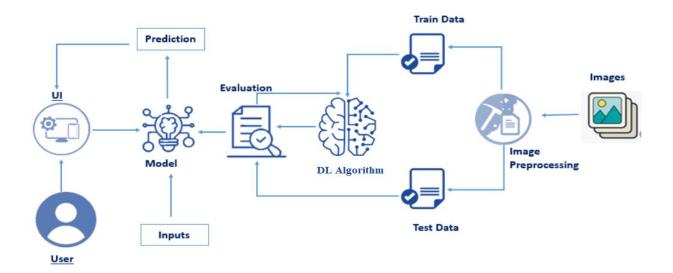


Table-1: Application Characteristics:

S.No	Component	Description	Technology
1.	User Interface	The user interacts with application through chatbot	HTML, CSS, Angular Js .
2.	Application Logic-1	Use machine learning algorithms for preprocessing	Python
3.	Application Logic-2	Use deep learning algorithms for fertilizer prediction	Python
4.	Application Logic-3	Using AI to suggest an exact fertilizer	Python
5.	Database	Maintain the database using mysql.	MySQL.

S.No	Component	Description	Technology
6.	Cloud Database	For storage purpose the ibm cloud should	IBM.
		be used.	
7.	File Storage	To store data in hierarchical structure	Local Filesystem
8.	External API-1	To predict the weather conditions weather	IBM Weather API
		API is used.it is optional.	
9.	Machine Learning	It is widely used in classification and	Random forest,xg
	Model	regression models.	boost.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask micro web framework	Technology of Opensource framework
2.	Security Implementations	To prevent the application from malicious attacks, using the encryption technique.	IBM cloud.
3.	Scalable Architecture	This application Is scalable in nature	-
4.	Availability	Available for all type of data sets and any systems	-
5.	Performance	Extend the storage and the application is in scalable in nature ,based upon their defect it overcome in every errors.	python