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

Team ID	PNT2022TMID48827
Project Name	Project - Fertilizers Recommendation SystemFor Disease Prediction
Maximum Marks	4 Marks

Technical Architecture:

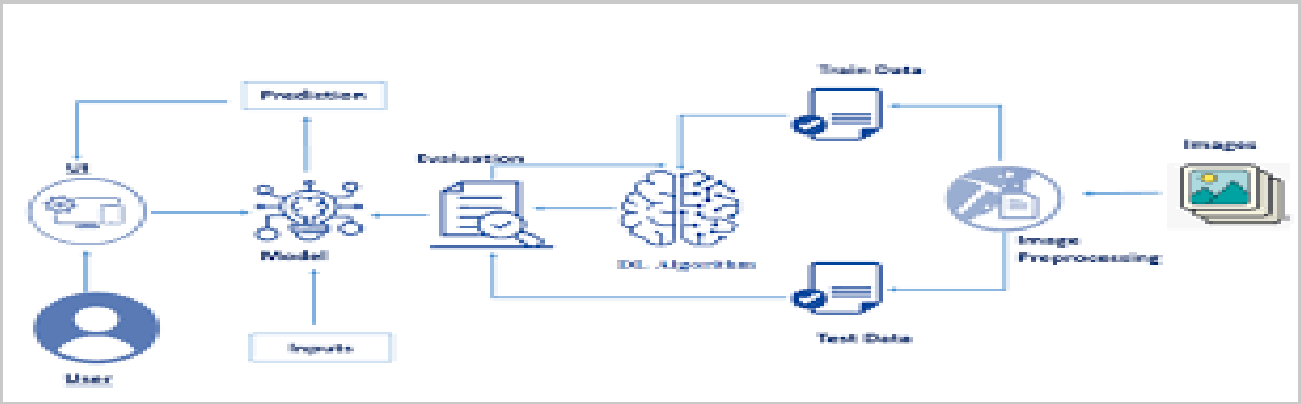

Table-1 : Components & Technologies

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How the user interacts with the application .To depict the human-computer interaction and communication.	HTML, CSS, JavaScript
2.	Application Logic-1	A page to upload images as input	Java / Python

3.	Application Logic-2	To use the MachineLearning model and predicting the result	python
4.	Database	Structured data-images	MySQL
5.	Cloud Database	Database that typically runs on a cloud computing platform and accessto the database is provided as-a- service	IBM Cloudant
6.	File Storage	To store data in a hierarchicalstructure	IBM Block Storage Service or Local Filesystem
7.	Machine Learning Model	Here, we use a Support VectorMachine Algorithm that is used widely in Classification and Regression problems	Random Forest ,XGBoost

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask micro web framework	Written in Python.It is classified as a micro frame work because it does not requireparticular tools or libraries. It has nodatabase abstraction layer, form validation, or an other components where preexisting third-party libraries providecommon functions.
2.	Security Implementations	With all aspects of the job, including detecting malicious attacks, analyzing the network endpoint protection and vulnerability assessment, Sign inencryption	IBM Cloud App IDServices
3.	Availability	Available for all data size	
4.	Performance	Can extend the storage accordingto our needs	Python,angularjs