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

Date	25 October 2022
Team ID	PNT2022TMID05422
Project Name	Fertilizers Recommendation System For Disease Prediction
Maximum Marks	4 Marks

Technical Architecture:

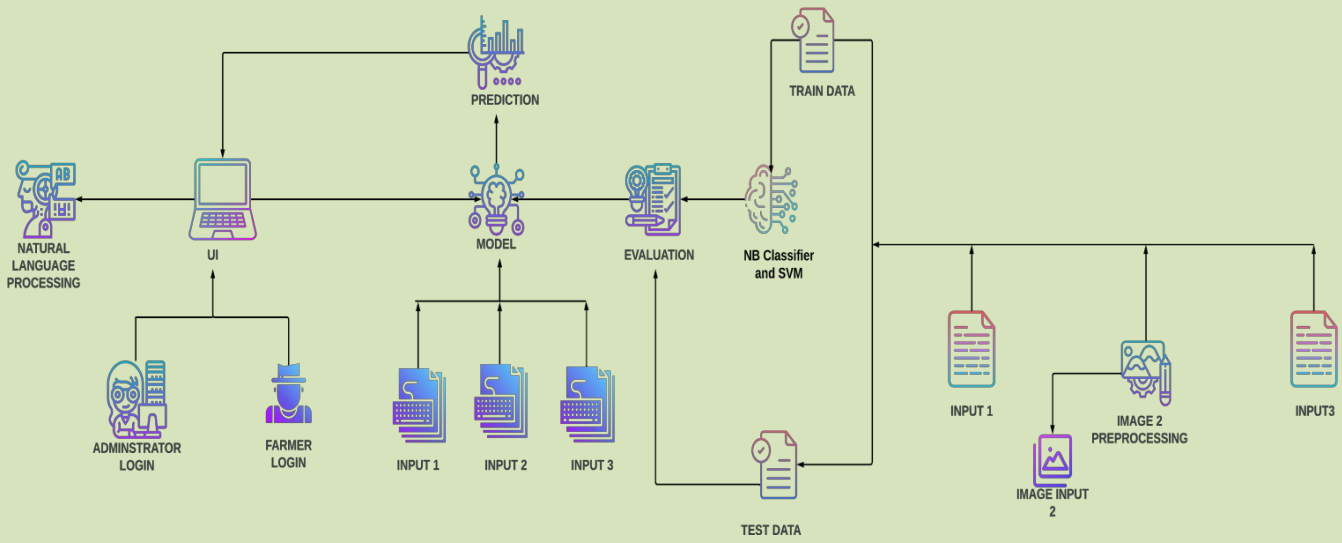

Table-1 : Components & Technologies

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,JS
2.	Application Logic-1	A page to upload images as input	Python

3.	Application Logic-2	To use the Machine Learning 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 access to the database is provided as-a-service	IBM Cloud Databases for MySQL
6.	File Storage	To store data in a hierarchicalstructure	Local File system
7.	Machine Learning Model	Here, we use a Support Vector Machine Algorithm that is used widely in Classification and Regression problems.	Random Forest ,XG Boost

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 require particular tools or libraries. It has no database abstraction layer, form validation, or any other components where preexisting third-party libraries provide common functions.
2.	Security Implementations	With all aspects of the job, including detecting malicious attacks, analyzing the network, endpoint protection and vulnerability assessment, Sign in encryption	IBM Cloud App ID Services

3.	Availability	Available for all data size	-
4.	Performance	Can extend the storage according to our needs	Python