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

Date	17 October 2022
Team ID	PNT2022TMID31637
Project Name	Fertilizers Recommendation System For Disease Prediction
Maximum Marks	4 Marks

Technical Architecture:

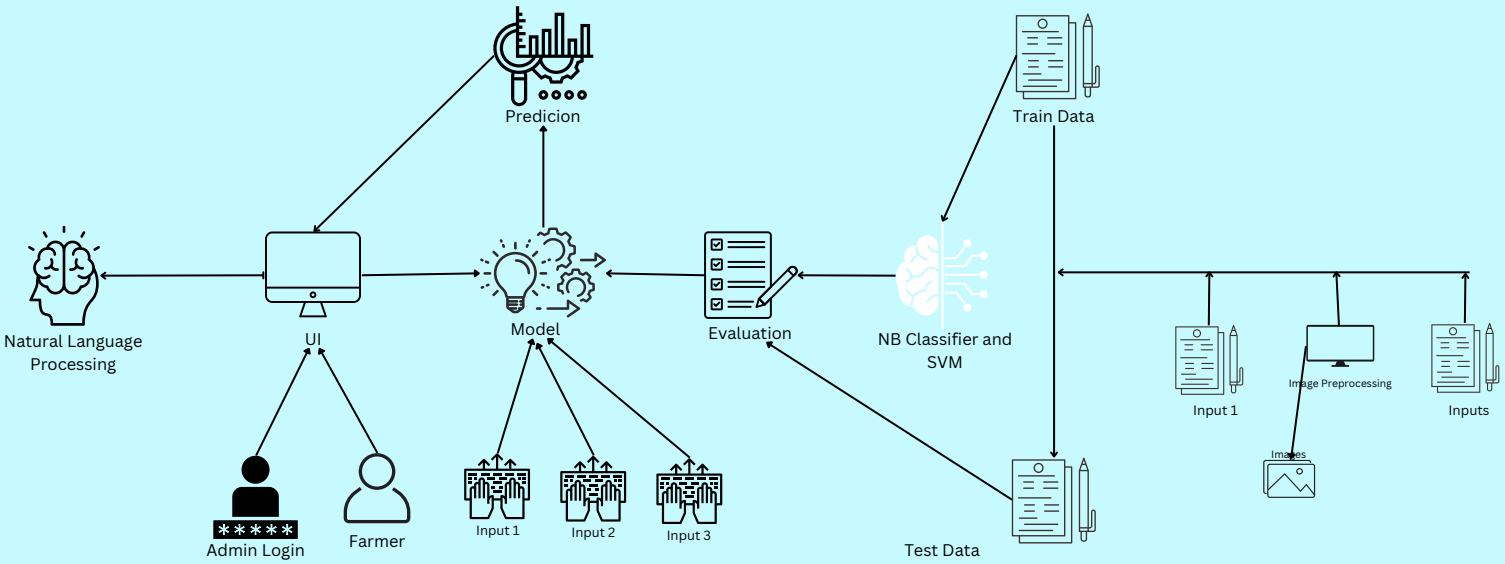

Table-1 : Components & Technologies

S.No	Component	Description	Technology
1.	User Interface	user engagement with the application. to illustrate communication and interaction between humans and computers.	HTML, CSS,JSP
2.	Application Logic-1	a page where images can be input	Python

3.	Application Logic-2	using a machine learning model to predict the outcome	Python
4.	Database	Graph-based images	MySQL
5.	Cloud Database	database that frequently operates on a cloud computing platform and is accessible as a service.	IM Cloud Databases for MySQL
6.	File Storage	to organise data into a hierarchy	Local File System
7.	Machine Learning Model	In this instance, we employ a Support Vector Machine algorithm, which is frequently applied to classification and regression issues.	Random Forest ,XG Boost

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Micro web framework Flask	composed in Python. Its status as a micro framework is a result of the fact that it doesn't need any special tools or libraries. It lacks any component where preexisting third-party libraries would normally perform standardized functions, such as a database abstraction layer, form validation, or other.
2.	Security Implementations	Detecting malicious attacks, examining network endpoint protection, performing vulnerability analyses, and encrypting sign-in information are all aspects of the job.	IBM Cloud App ID Services

3.	Availability	offered for all data sizes	-
4.	Performance	can increase storage capacity based on our needs	Python,AngularJS