PROJECT DESIGN PHASE –II

TECHNOLOGY STACK

(ARCHITECTURE & STACK)

TEAM ID	**PNT2022TMID31374**
PROJECT TITLE	**FERTILIZER RECOMMENDATION SYSTEM FOR DISEASE PREDICTION**

TECHNICAL ARCHITECTURE:

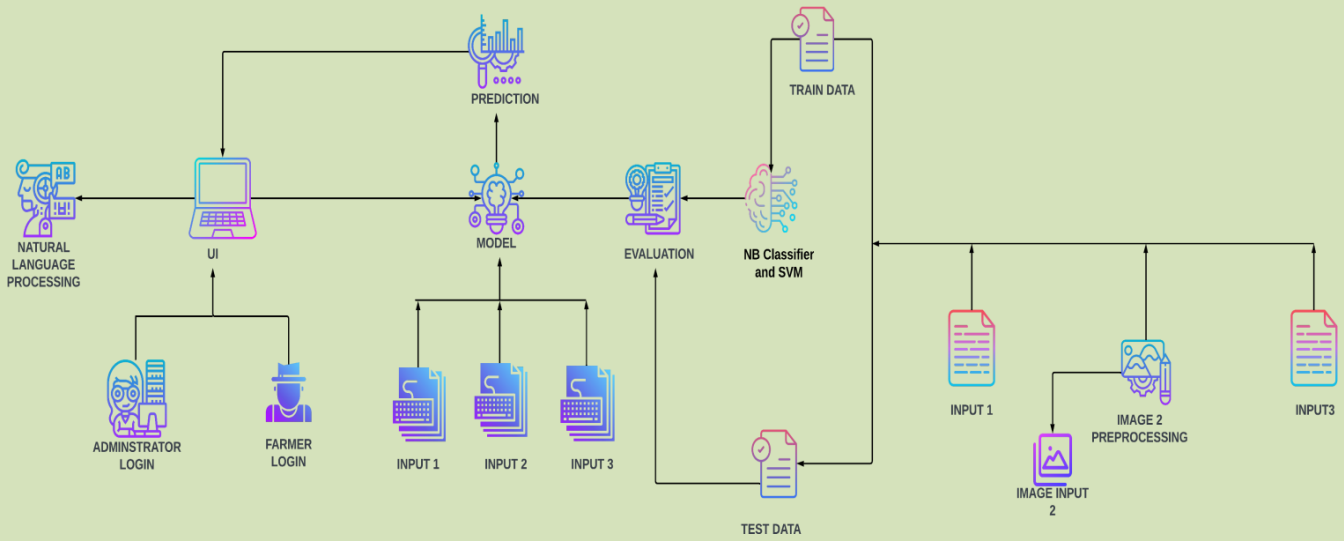

TABLE – 1 : COMPONENTS AND TECHNOLOGIES

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,JSP
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 accessto the database is provided as-a- service	IBM Cloud Databases for MySQL
6.	File Storage	To store data in a hierarchical structure	Local File system
7.	Machine LearningModel	Here, we use a Support VectorMachine Algorithm that is usedwidely in Classification and Regression problems.	Random Forest ,XGBoost

TABLE - 2 : APPLICATION CHARACTERISTICS

S.No	Characteristics	Description	Technology
1.	Open-Source Framewors	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 nodatabase 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 inencryption	IBM Cloud App IDServices
3.	Availability	Available for all data size	-
4.	Performance	Can extend the storage accordingto our needs	Python,AngularJS