Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	31 October 2022
Team ID	PNT2022TMID25585
Project Name	Fertilizers Recommendation SystemFor Disease Prediction
Maximum Marks	4 Marks

Technical Architecture:

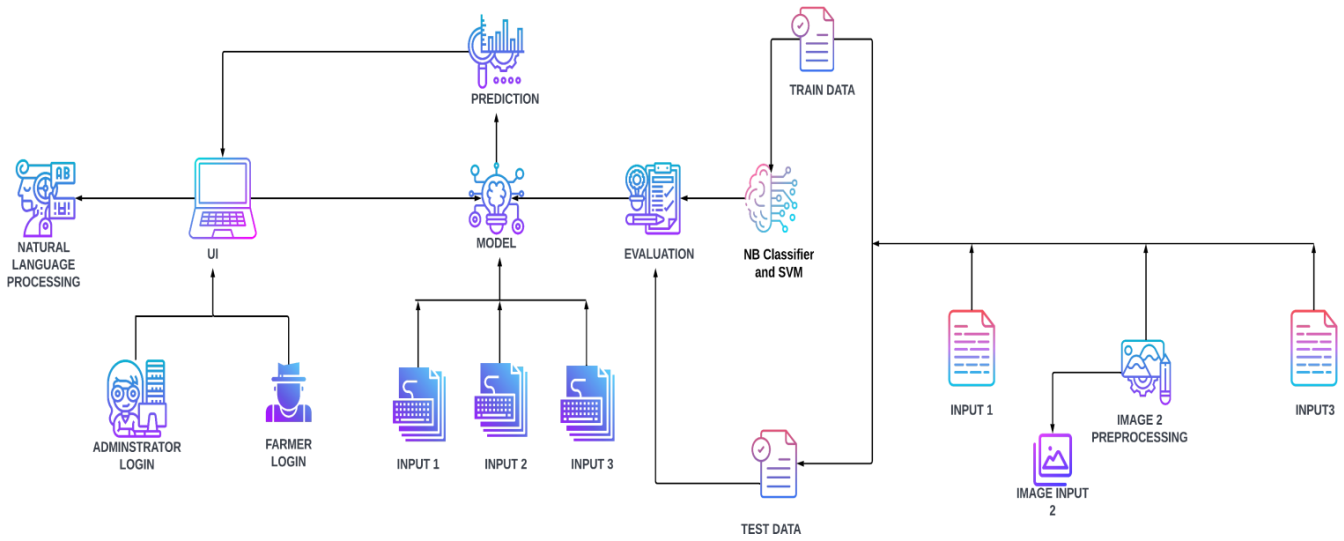

Table-1 : Components & Technologies

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,JSP
2.	Application Logic-1	A page to upload images as input	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 Cloud Databases forMySQL**
6.	**File Storage**	**To store data in a hierarchicalstructure**	**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 Frameworks	Flask micro web framework	**Written in Python.It is classified as amicro frame work because it does not requireparticular tools or libraries. It has nodatabase abstraction layer, form validation, orany 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 IDServices**

3.	**Availability**	**Available for all data size**	**-**
4.	**Performance**	**Can extend the storage accordingto our needs**	**Python,AngularJS**