

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

Date	03 October 2022
Team ID	PNT2022TMID47755
Project Name	Project - Fertilizers Recommendation System For Disease Prediction
Maximum Marks	4 Marks

Technical Architecture:

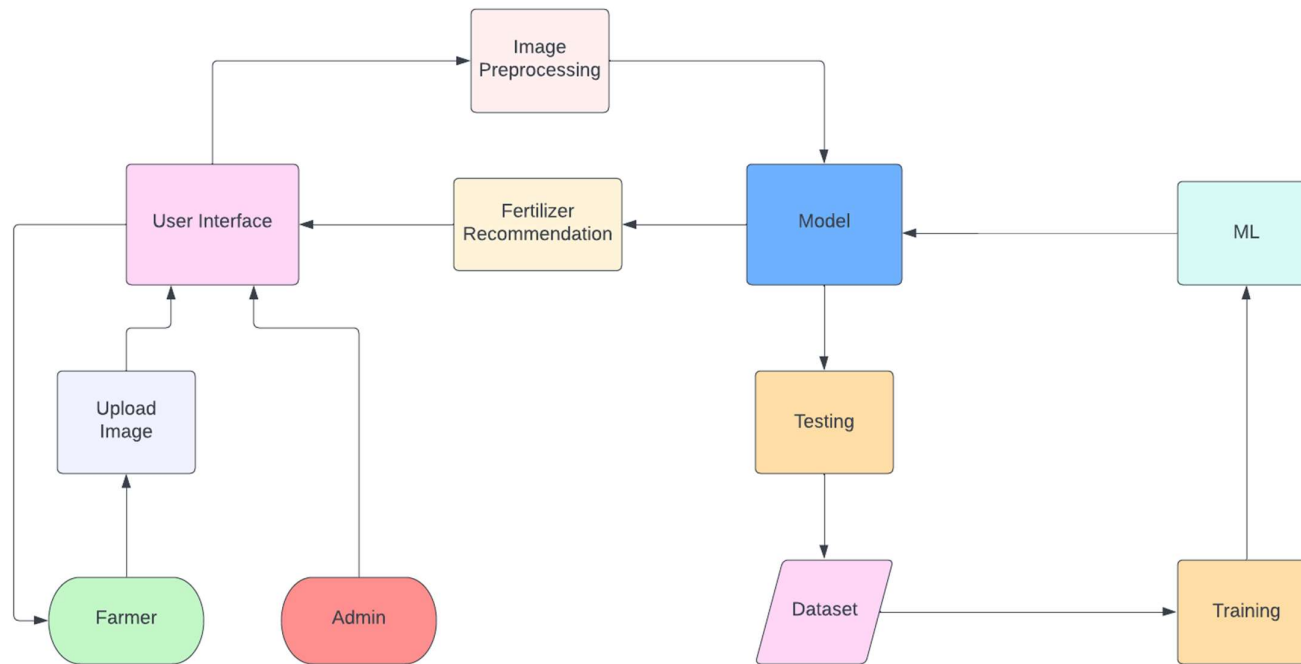


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application	HTML, CSS, JavaScript
2.	Application Logic-1	A Web page to upload Image of leaf with disease	Python
3.	Application Logic-2	Process the Image to given as input to Model	Python
4.	Application Logic-3	Trained Model gets the Image and use ML for prediction of disease	Python
5.	Database	Store Image data	MySQL
6.	Cloud Database	Database Service on Cloud Platform	IBM DB2
7.	File Storage	Store the data in a structure	Local Filesystem
8.	Machine Learning Model	A trained model is used for prediction of disease using Algorithms	Random Forest
9.	Infrastructure (Server / Cloud)	Application Deployment on Cloud Platform	IBM cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	A Web Framework written in python. It is Light Weighted	Flask Web Framework
2.	Security Implementations	<ul style="list-style-type: none">• Preventing from any malware attacks• Only accessible to Authorised Person	IBM cloud app ID
3.	Availability	Should be available at any time to every users	IBM cloud platform
4.	Performance	Should have a quick response time and user friendly	Python, Flask