

Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	19 october 2022
Team ID	PNT2022TMID43230
Project Name	Fertilizers Recommendation System For Disease Prediction
Maximum Marks	

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Example: Order processing during pandemics for offline mode

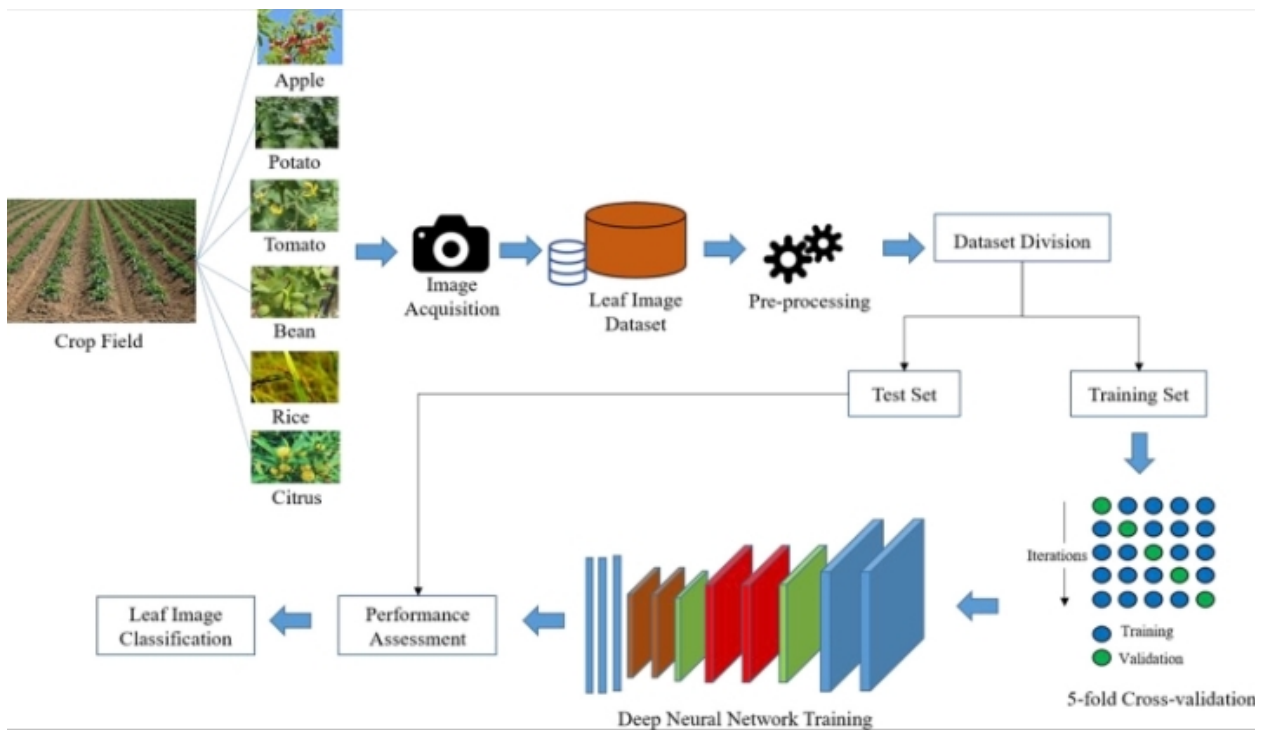


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User interface	User interacts with the application using a website.	Python Flask
2.	Application logic-1	To upload images as input	Python
3.	Application logic-2	Logic for a process in the application	IBM Watson STT service
4.	Database	Structured data-images	MySQL
5.	Cloud Database	Database that runs on a cloud computing platform and access to the database as service	IBM cloud
6.	File storage	File storage requirements	IBM, Local File system
7.	Machine learning model	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	Used to design the web page and read image data through these pages	HTML, CSS,Bootstrap,Flask
2.	Security Implementation	Detecting malicious attacks,Analysing the network endpoint protection	IBM cloud App ID services
3.	Scalable Architecture	The scalability architecture used is 2-tier architecture.The client is the user and the server is the IBM cloud server.	Python Flask,IBM cloud
4.	Availability	Justify the availability of website	Web application access to all
5.	Performance	The app runs on a mobile device under various load and circumstances.	Python, Angular