

PROJECT DESIGN PHASE-II

TECHNOLOGY STACK (ARCHITECTURE & STACK)

Date	17 October 2022
Team ID	PNT2022TMID47415
Project Name	Fertilizer Recommendation System For Disease Prediction
Maximum Marks	4 Marks

TECHNICAL ARCHITECTURE

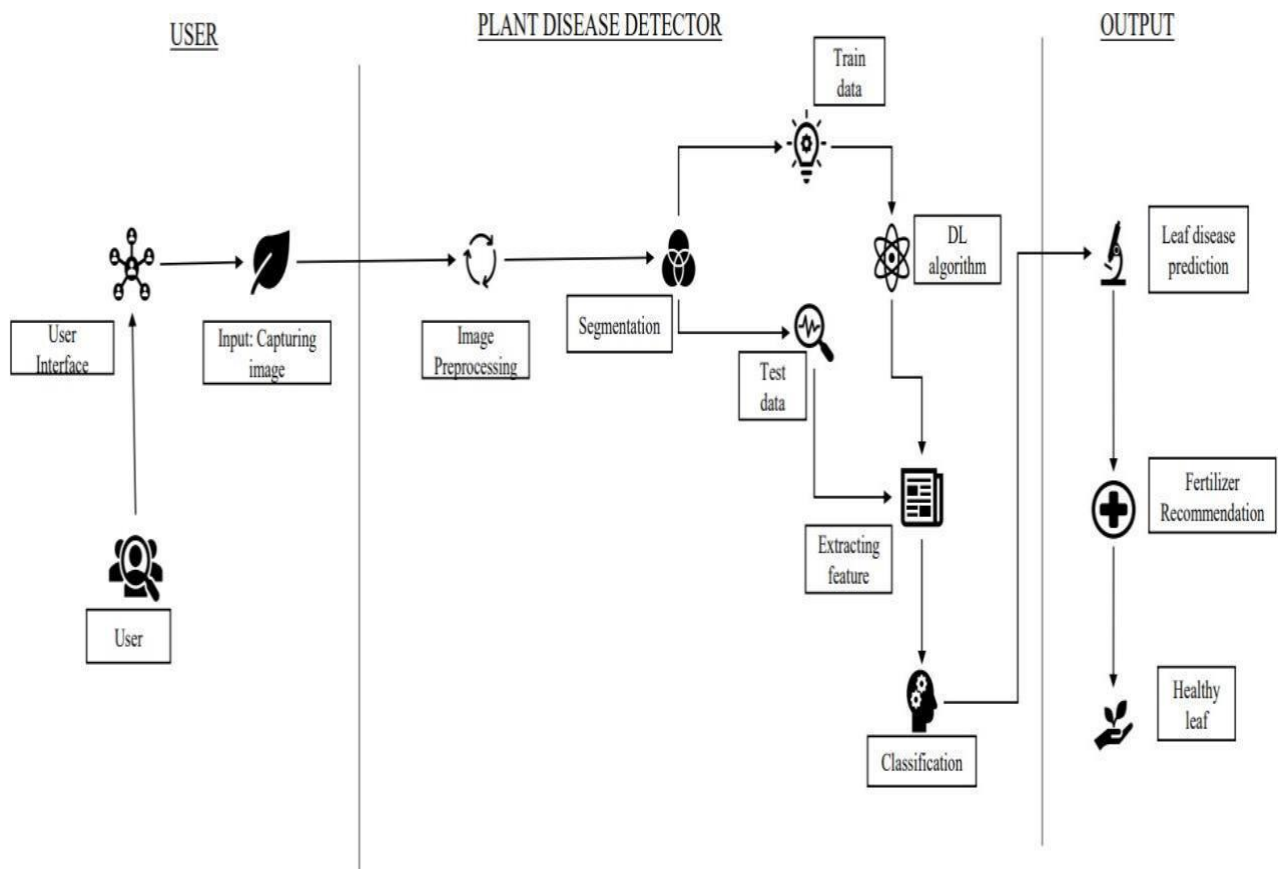


TABLE -1: COMPONENTS & TECHNOLOGIES

S.NO	COMPONENT	DESCRIPTION	TECHNOLOGY
1.	User Interface	How user interacts with the website.	HTML, CSS, etc..
2.	Disease Prediction	Here the disease in the leaf is predicted	Keras, TensorFlow, OpenCV, CNN.
3.	Fertilizer Recommendation	The fertilizer is recommended for the predicted disease	User interface, HTML, CSS.
4.	Dataset	The training and testing data are collectively stored	Kaggle.com, machine learning repository, etc..
5.	Database	Data Type, Configurations etc..	My SQL etc.
6.	File Storage	File storage requirements	IBM, Local File system.
7.	Modules	Purpose of deep learning modules	Image Recognition Modules, etc..
8.	Cloud Database	Database Service on Cloud	IBM Cloud etc..
9.	Infrastructure (Server)	Application development on Local System-local server configuration	Local File system.

TABLE – 2: APPLICATION CHARACTERISTICS

S.NO	CHARACTERISTICS	DESCRIPTION	TECHNOLOGY
1.	Opensource Framework	List of the opensource framework used	Open source-PyCharm, Anaconda navigator, flask framework.
2.	Scalable Architecture	Justify the scalable architecture	Anaconda Navigator
3.	Availability	Justify the availability of website	Web application access to all.
4.	Performance	Design consideration for the performance of the website	Convolutional Neural Networks and