Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	16 October 2022
Team ID	PNT2022TMID24449
Project Name	Fertilizers Recommendation System For Disease Prediction

Technical Architecture:

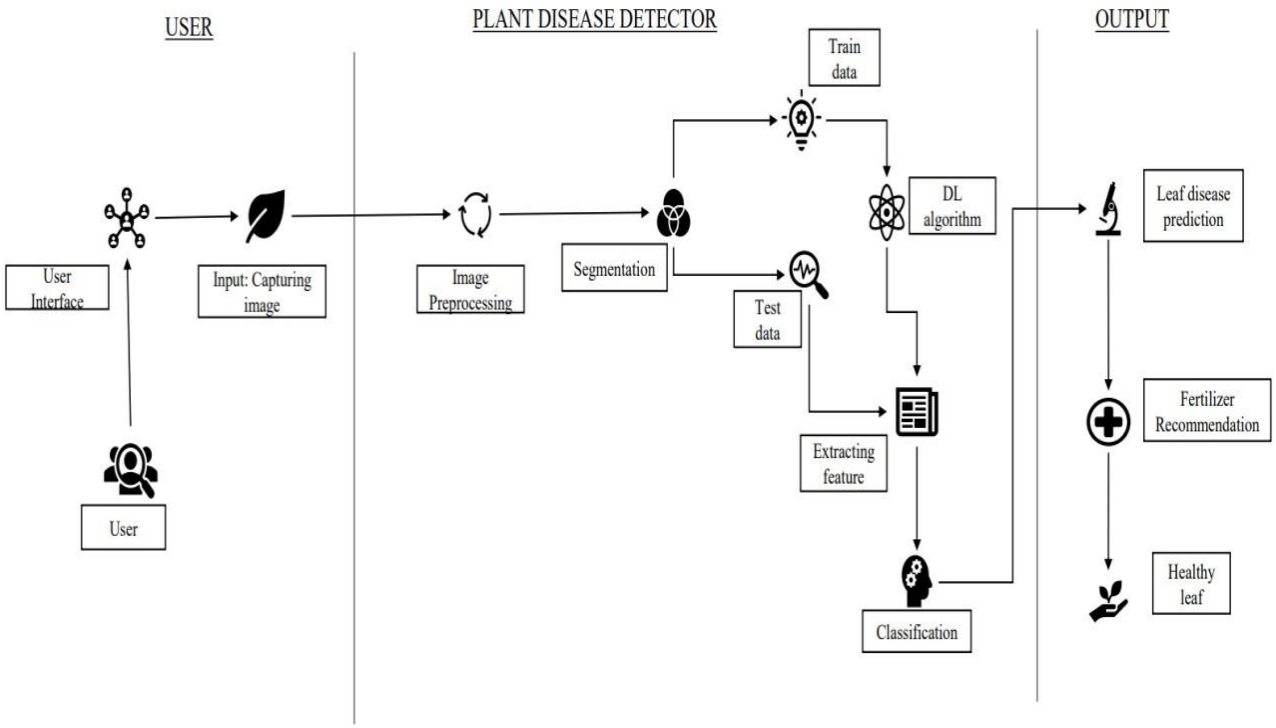

Table -1: Components & Technologies :

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,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, data.gov, UCI machine learning repository, etc.
5.	File Storage	File storage requirements	IBM, Local File system.
6,	Modules	Purpose of deep learning modules	Image Recognition Modules,etc.
7.	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.	Login	List of the access control implementation	Security - OWASP
3.	Scalable Architecture	Justify the scalable architecture	PyCharm
4.	Availability	Justify the availability of website	Web application access to all.
5.	Performance	Design consideration for the performance of the website	Convolutional Neural Networks.