Project Design Phase-II

Technology Stack (Architecture & Stack)

Technical Architecture:
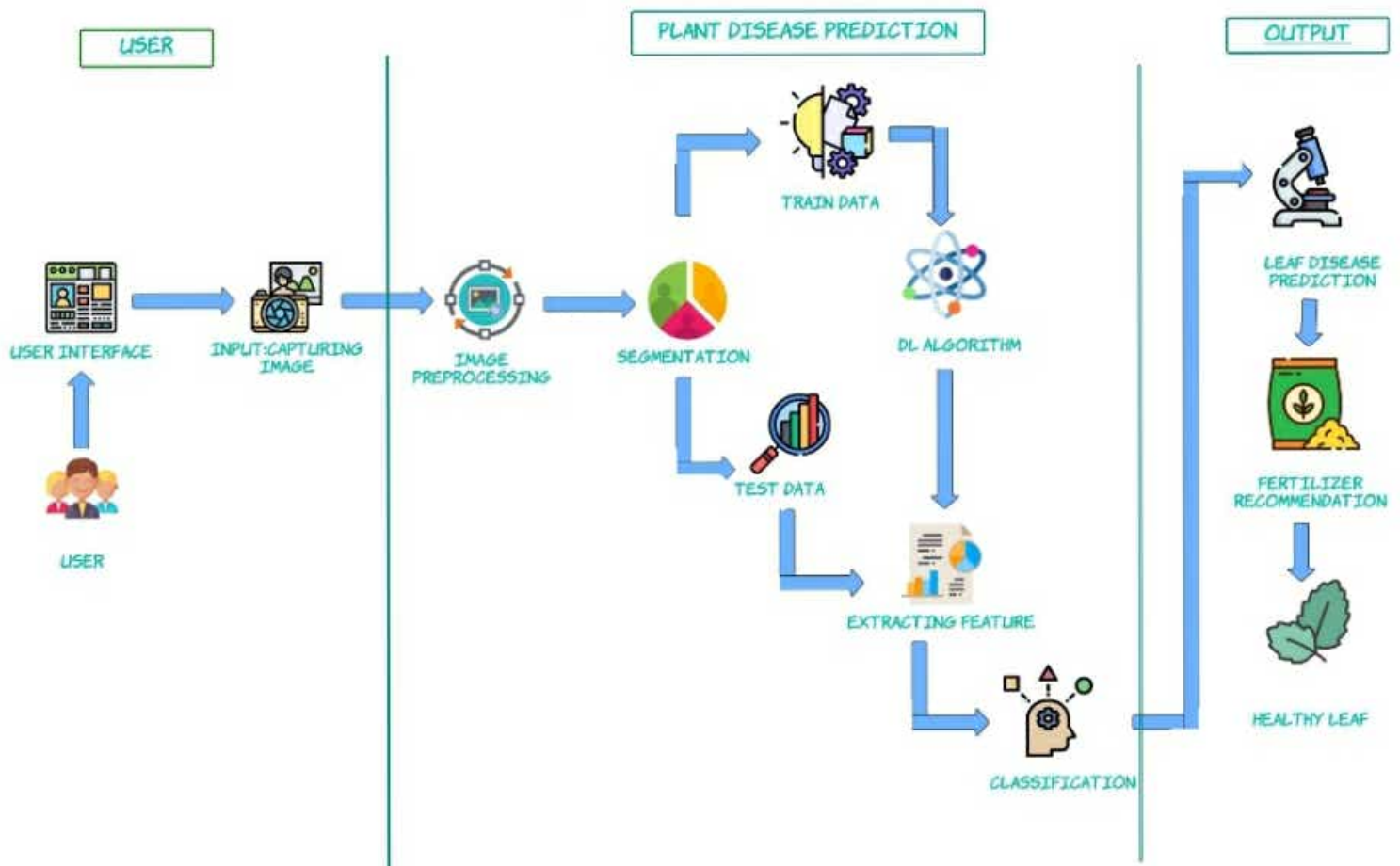
Table -1: Components & Technologies :

S.NO	Component	Description	Technology
1,	User Interface	The manner in which the user interacts with the website.	HTML,CSS, etc,.
2,	Disease Prediction	The disease in the leaf is predicted here.	Keras,CNN.
3.	Fertilizer Recommendation	The prescribed fertilizer is recommended for the predicted disease	User interface, HTML, CSS.
4.	Dataset	The training and testing data are kept together.	Kaggle.com, data.gov, UCI machine learning repository,etc.
5.	File Storage	Storage requirements for files	IBM, Local File system.
6,	Modules	The Purpose of deep learning Modules,consists of various deep learning modules.	Image Recognition Modules,etc.
7.	Infrastructure(Server)	Local System-local server configuration for application development	Local File system.

Table – 2: Application Characteristics:

S.NO	Characteristics	Description	Technology
1.	Opensource Framework	A list of the opensource frameworks that were used	Open source-PyCharm, anaconda navigator, flask framework.
2.	Login	Access control implementation list	Security - OWASP
3.	Scalable Architecture	Justify the scalability of the architecture.	PyCharm
4.	Availability	Justify the website's availability.	Access of Web application to all
5.	Performance	Design considerations for website performance	Convolutional NeuralNetworks.