Project Design Phase-

IITechnologyStack(Architecture&Stack)

Date	07November2022
TeamID	PNT2022TMID22667
ProjectName	FertilizersRecommendationSystemForDiseasePrediction

TechnicalArchitecture:

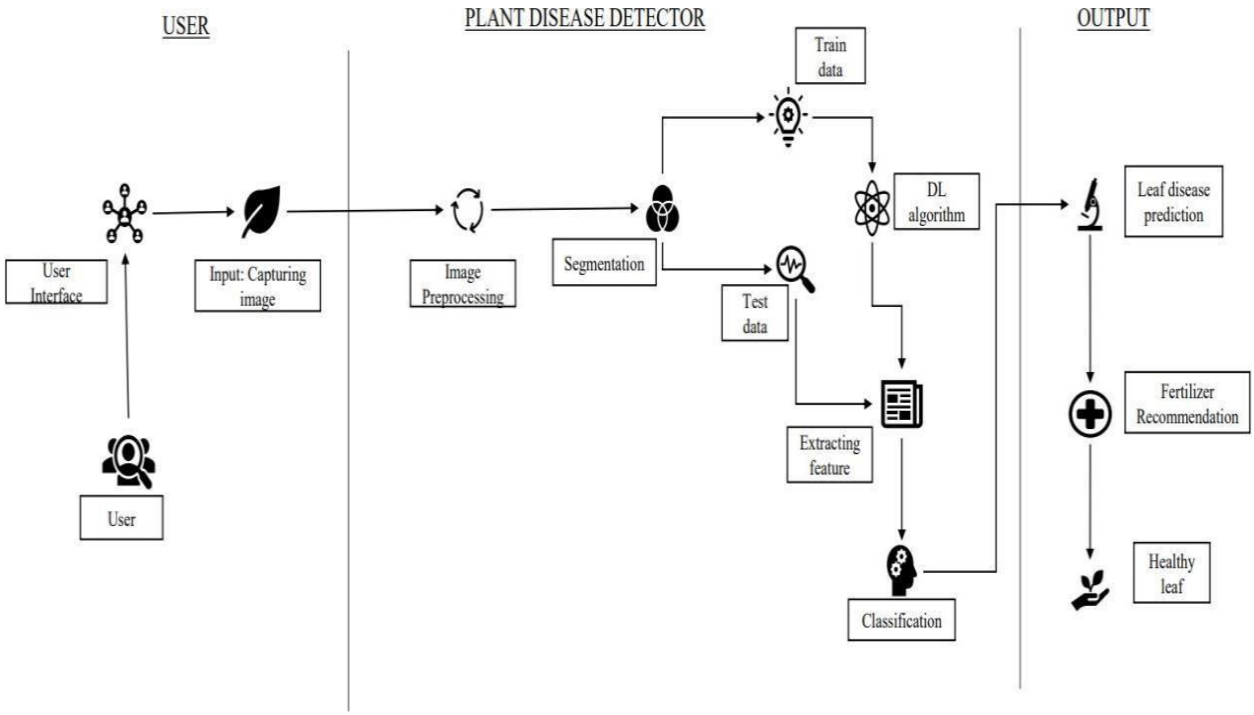

Table -1:Components&Technologies:

S.NO	Component	Description	Technology
1,	UserInterface	How user interactswith thewebsite.	HTML,CSS,etc,.
2,	DiseasePrediction	Herethediseaseintheleafis predicted	Keras,CNN.
3.	FertilizerRecommendation	The fertilizer isrecommendedfor thepredicteddisease	Userinterface,HTML,CSS.
4.	Dataset	The training and testingdataarecollectively stored	Kaggle.com, data.gov, UCImachinelearning repository,etc.
5.	FileStorage	Filestoragerequirements	IBM,LocalFile system.
6,	Modules	Purpose of deeplearningmo dules	Image RecognitionModul es,etc.
7.	Infrastructure(Server)	Application developmentonLocalSyste m-localserver configuration:	LocalFilesystem.

Table–2:ApplicationCharacteristics:

S.NO	Characteristics	Description	Technology
1.	OpensourceFramework	List of theopensou rce frameworkused	Open source-PyCharm,anaconda navigator,flaskframew ork.
2.	Login	Listof theaccesscontrol implementation	Security -OWASP
3.	ScalableArchitecture	Justifythescalable architecture	PyCharm
4.	Availability	Justify the availability ofwebsite	Web application accesstoall.
5.	Performance	Design consideration fortheperformanceof the website	Convolutional NeuralNetworks.