Project Title: Plantas Enfermedad

TEAM NO.:12

NAMES OF THE STUDENTS PARTICIPATED IN THE TEAM:

1)Abhishek Mauriya

2)Kausthub Balaji

3)DVS Chandrasekhar

4)Suraj G

5)Aniketh Bharadwaj

COLLEGE:Nitte meenakshi institute of technology

SEMESTER:5th

DEPARTMENT:Information Science And Engineering

CITY:Bangalore

STATE:Karnataka

PROJECT MENTOR NAME: Mala mishra

Project Details: Plantas Enfermedad is a Team Matrix initiative especially geared towards helping farmers. This project is a result of our vision to ease and improve one of the world's most important, hardest and under-valued professions using the wonders of deep learning. We aim to provide a fast and efficient solution to identify and control plant diseases in an easy efficient and reliant manner.

Problem Statement: Plant diseases have turned into a dilemma as it can cause significant reduction in both quality and quantity of agricultural products. Automatic detection of plant diseases is an essential research topic as it may prove benefits in monitoring large fields of crops, and thus automatically detect the symptoms of diseases as soon as they appear on plant leaves

Need of Project: Diagnosing a disease in plants traditionally requires calling an agricultural expert, who is knowledgeable and experienced enough to identify crop diseases based on the patterns of discolorations on the leaves. With the onslaught of the pandemic, we have realized the importance of having a solution that remotely and quickly diagnose diseases in crops on the spot . Therefore there is an urgent need to design a solution that can do just that.

Proposed Solution: The proposed system is a software solution for automatic detection and classification of plant leaf diseases.We have 6 different models ,corresponding to the plants we offer to diagnose. Every model is a mobile-net model built on tenserflow.js library using transfer learning. The server and it model itself if therefore easier to maintain and constantly improve upon. And the whole project with all its conveniences is part on a much bigger agricultural network project that we have planned, and this feature itself is going to be an integral part of it all.

Technology Used:

 HTML,CSS,JAVASCRIPT-Frontend Development

Flask(python)-Backend Devolpment

Database-sQl alchemy

Ml Models-python

Project Outcomes:
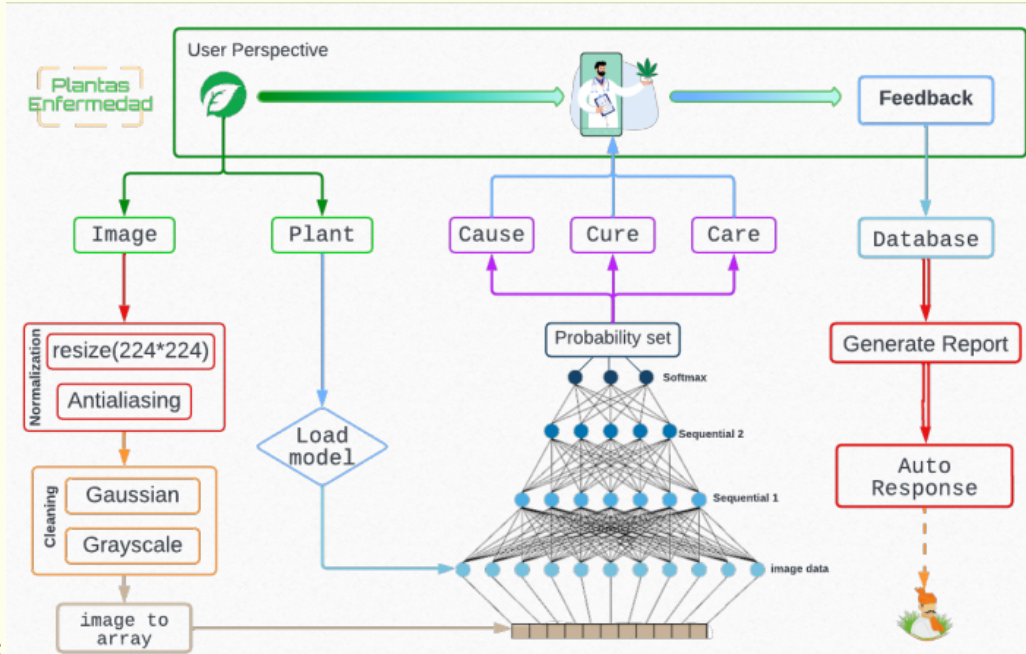
End-to-End diagnosis.

Made with the end users in mind.

Training data covers all factors.

Provides the cause, the cure and the care.

Accuracy – 93.8%

No extra hardware required.

Modelling

:

Results:

Future scope for project enhancement:

1) deployment of the project on selective domain
2) predicting the percentage of leave affected by the diseases
3) App for plant enfermedad
4) getting the website available in selective rural languages
5) Adding a technology the provides steps and pesticides to increase the quality of that plant