Spark Hack Team Name - Three_climb

Soumyajit Kundu
B.E. Printing Engineering
Jadavpur University

Souvik Saha
B.E. Printing Engineering
Jadavpur University

Suman Khan
B.E. Printing Engineering
Jadavpur University

Solution To

How can crop health monitoring and management, including early detection of diseases and pests, and timely recommendations for pesticide usage and other preventive measures, be achieved through the employment of AI and IoT technologies?

PROPOSED SOLUTION

- We plan to develop a website for identifying and predicting diseases in crops like Tomato, Apple, Blueberry, Cherry, Corn, Grape, Strawberry ,orange and others.
- The website will predict diseases like early blight, late blight, bacterial spot, Black rot or determine if the crop is healthy.

PROPOSED SOLUTION

- This also includes the pests commonly associated with crops, such as ants, bees, earthworms, grasshoppers, beetle ,caterpillar among others.
- It will provide recommendations on which pesticides should be used if diseases or pests are detected in the crop

TECHNOLOGY INVOLVED

- We will employ a deep learning model to predict diseases in crops . We will be using Kaggle for making the model.

- Streamlit will be used to make and deploy the Website.

Features

This Website will contain -

- An Image uploader option which predict crops and diseases.
- A Page which will have commonly associated pests with crops.
- A Page which will have recommended pesticides for diseases and pests.

Future Scope

- Farmers can snap pictures to spot diseases quickly, saving time and effort
- Its user-friendly nature makes it perfect for broad adoption, especially on large farms.

Thank You