PROJECT STRUCTURE

Team ID	PNT2022TMID10715
Project Name	Fertilizers Recommendation System For Disease Prediction

Fertilizer Recommendation System For Disease Prediction :-

Project Structure:

The dataset folder contains two folders for the fruit and vegetable dataset which again contains a test and train folder, each of them have images of different diseases.

The Flask folder has all the files necessary to build the flask application

- The static folder has the images, style sheets, and scripts that are needed in building the web page.
- Templates folder has the HTML pages.
- Uploads folder has the uploads made by the user.
- App.py is the python script for server-side computing.
- .h5 files are the model files that are to be saved after model building.
- Precautions excel files contain the precautions for all kinds of diseases.

Fruit-Training.ipynb, Vegetable-Training, and Plant-Disease-Testing.ipynb are the training and testing notebooks.

IBM folder contains IBM deployment files.

Data Collection:

Create Train and Test folders, each folder having subfolders with leaf images of different plant diseases. You can collect datasets from open sources like kaggle.com, data.gov, UCI machine learning repository, etc. The folder provided in the project structure section has the link to download datasets that can be used for training. Two datasets will be used, we will be creating two models one to detect vegetable leaf diseases like tomato, potato, and pepper plants, and the second model would be for fruit diseases like corn, peach, and apple.

Image Preprocessing:

Now that we have all the data collected, let us use this data to train the model.before training the model you have to preprocess the images and then feed them on to the model for training. We make use of Keras Image Data Generator class for image preprocessing..