**Plant Disease Detection System for Sustainable Agriculture**

**Problem Statement**

Develop a CNN based model capable of detecting and classifying plant diseases from images of leaves of various crops such as apple,cherry,grape,and com.The model should accurately identify both healthy and diseased leaves while predicting the specific type of disease.This system will aid in precision agriculture by enabling early detection and effective disease management.

**Pipeline**

It nothing but step in which following process

1. Data collection & Data loading

Dataset

* Train: 1.Category 1 2. Category 2
* Test : 1.Category 1 2. Category 2
* Valid: 1.Category 1 2. Category 2

(We always has Train our model First and than Test it and it want to do Validation which was valid)

2.Zip

We are going upload the zip folder in google colab

3.Image Processing &Image Augmentation

In this there will be dimension of an image or object that we going to train to our model

Different angles and sizes of a images are called Image augmentation

4. CNN model

In this project we are going to use CNN which was Convolutional neural network after all

Of This we will build

5. test/evaluate

Test the model and evaluate