**Fruit Disease Detection using Color, Texture Analysis and ANN**

**OBJECTIVE:**

Our goal is to detect the fruit diseases by using ANN model andK-means clustering method. Such an application is immensely useful in the field of farming and it is inexpensive for the user. We will also use image processing to understand the images of fruits with diseases.

**Project flow:**

CNN model

K-Means Clustering

Testing

Upload dataset

Disease detected

Classification

Upload image

Training

Pre-processing

start

The flow for the project is given below:

**Advantages:**

* Detecting diseases early on helps us in preventing further damage to farms.
* Automatic detection can save manual labor.
* Saves money to the person in charge.

**HARDWARE & SOFTWARE REQUIREMENTS**

# H/W Configuration:

# Processor - I3/Intel Processor

* Hard Disk -160GB
* Key Board - Standard Windows Keyboard
* Mouse - Two or Three Button Mouse
* Monitor - SVGA
* RAM - 8Gb

**S/W Configuration:**

* Operating System : Windows 7/8/10
* Server side Script : Python, Anaconda
* IDE : Pycharm
* Libraries Used : Numpy, IO, OS, Flask, keras,
* Technology : Python 3.6+