V.S.B. ENGINEERING COLLEGE

(Approved by AICTE, New Delhi, Affiliated to Anna University)

An ISO 9001:2015 Certified Institution

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Electronics and Communication Engineering

IBM NALAIYA THIRAN

Title : Fertilizer Recommendation System For Disease Prediction

Domain name : Artificial Intelligence

Leader name :Kalaiselvi P

Team members :1.Chandra L

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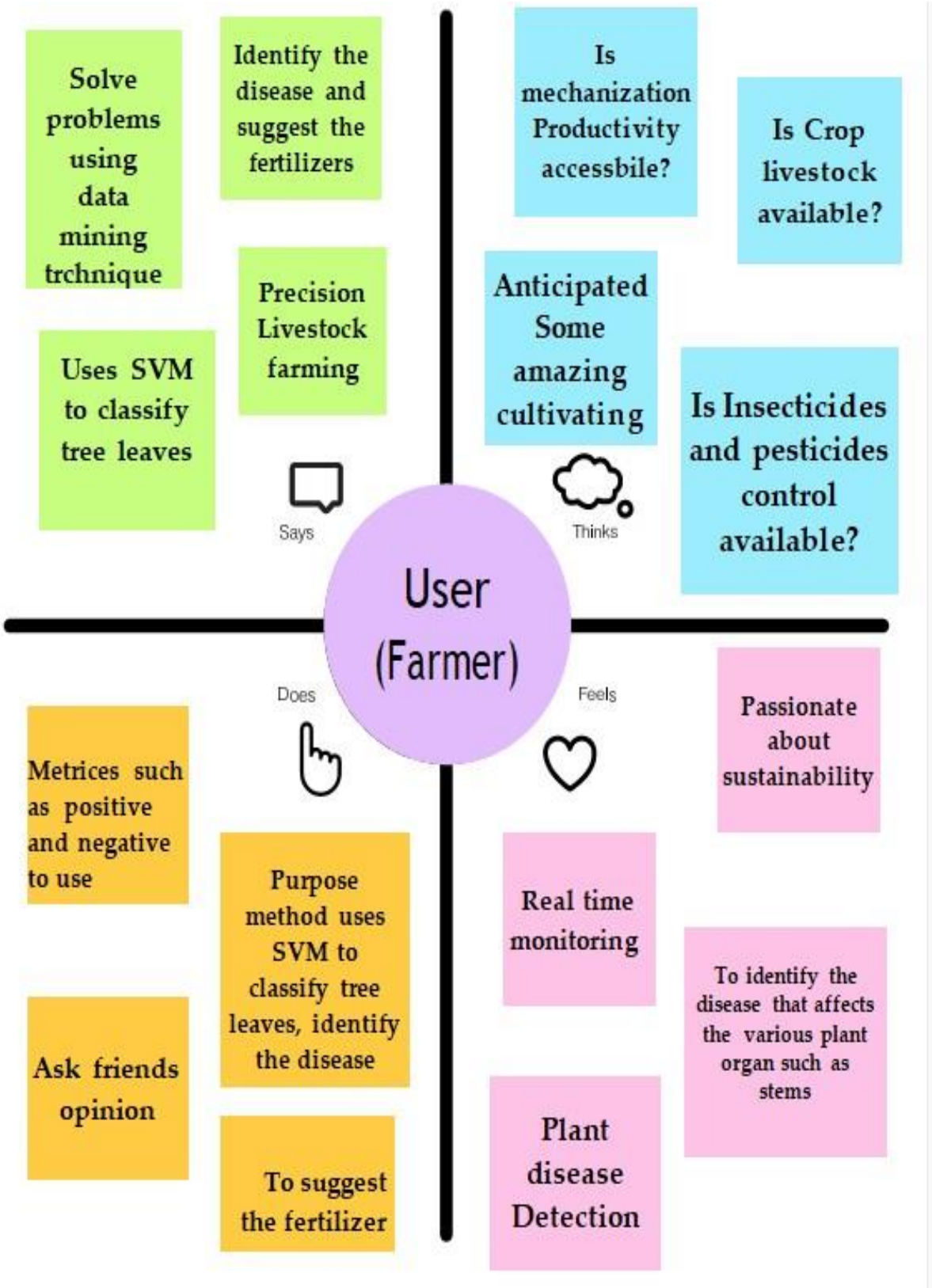
Industry Mentor : Durga Prasad

Faculty Mentor :Mahesh Kumar K


Solve problems using data mining trchnique
Identify the disease and suggest the fertilizers
Is mechanization Productivity accessbile?
Is Crop livestock available?
Precision Livestock farming
Anticipated Some amazing cultivating
Uses SVM to classify tree leaves
Is Insecticides and pesticides control available?
Says
Thinks
User (Farmer)
Does
Feels
Metrices such as positive and negative to use
Passionate about sustainability
Purpose method uses SVM to classify tree leaves, identify the disease
Real time monitoring
To identify the disease that affects the various plant organ such as stems
Ask friends opinion
To suggest the fertilizer
Plant disease Detection

Problem Statement:

Infectious plant diseases are mainly caused by **pathogenic organisms such as fungi, bacteria, viruses, protozoa, as well as insects and parasitic plants** . With the development of agriculture, infectious plant diseases have become an increasingly significant factor affecting crop yield and economic efficiency.

Most plant diseases – around 85 percent – are caused by **fungal or fungal-like organisms**. However, other serious diseases of food and feed crops are caused by viral and bacterial organisms. Certain nematodes also cause plant disease

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. The proposed system is a software solution for automatic detection and classification of plant leaf diseases. The scheme consists of four main steps, first a color transformation structure for the input RGB image is created, then the green pixels are masked and removed using specific threshold value followed by segmentation process, the texture statistics are computed for the useful segments, finally the extracted features are passed through the classifier.