

# **V.S.B. ENGINEERING COLLEGE, KARUR**

## **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

### **IBM NALAIYA THIRAN**

#### **PROJECT**

#### **OBJECTIVES**

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| Date         | 14 November 2022   |
| Team ID      | PNT2022TMID33383   |
| Project Name | Fertilizers Recommendation System for Disease Prediction |

#### **PROJECT OBJECTIVES:**

Plant disease diagnosis is the foundation for efficient and precise plant disease prevention in today's complicated environment. Plant disease identification has become digitized and data-driven as smart farming has grown, allowing for advanced decision support, smart analysis, and planning. This work provides a deep learning-based mathematical model for detecting and recognizing plant diseases, which improves accuracy, generality, and training efficiency. The prevention and control of plant disease have consistently been broadly talked about in light of the fact that plants are presented to the external climate and are profoundly inclined to diseases. Typically, the precise and quick diagnosis of disease assumes a significant part in controlling plant disease, since helpful protection measures are frequently carried out after right diagnosis. Identification of the plant diseases is the way to prevent the misfortunes in the yield and amount of the rural item. Early Detection of Plant Leaf Disease is a significant need in a developing horticultural economy like India. Without legitimate recognizable proof of the disease, disease control measures can be an exercise in futility and cash and can prompt further plant misfortunes. Our task proposes a profound learning-based model which will be trained utilizing a dataset containing pictures of healthy and diseased crop leaves. The model will serve its target by ordering pictures of leaves into diseased classes dependent on the example of imperfection. The framework effectively recognizes various sorts of disease found in Crops.

#### **By the end of this project we will understand:**

- Pre-process the images.
- Applying the CNN algorithm to the dataset.
- How deep neural networks detect the disease.
- We will be able to know how to find the accuracy of the model.
- We will be able to build web applications using the Flask framework.