V.S.B. ENGINEERING COLLEGE, KARUR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINERRING

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PROJECT

OBJECTIVES

Date	17 November 2022
Team ID	PNT2022TMID33300
Project Name	Fertilizers Recommendation System for Disease Prediction

PROJECT OBJECTIVES:

Detection and recognition of plant diseases using artificial intelligence are very efficient in providing symptoms of identifying diseases at its beginning stage or earliest stage. But in recent days, the field was going down due to various natural calamities. In order to overcome the problem, various issues in this field need to be addressed. The soil type, fertilizer recommendation, diseases in plants and leaves. All these features need to be considered. Plant pathologists can analyze the digital images using digital image processing for diagnosis of plant diseases. Application of computer vision and image processing strategies simply assist farmers in all of the regions of agriculture. Generally, the plant diseases are caused by the abnormal physiological functionalities of plants. Therefore, the characteristic symptoms are generated
based on the differentiation between normal physiological functionalities and abnormal physiological functionalities of the plants. Mostly, the plant leaf diseases are caused by Pathogens which are positioned on the stems of the plants. These different symptoms and diseases of leaves are predicted by different methods in image processing. These different methods include different fundamental processes like segmentation, feature extraction and classification and so on. Mostly, the prediction and diagnosis of leaf diseases are depending on the segmentation such as segmenting the healthy tissues from diseased tissues of leaves.

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.