

PROJECT OBJECTIVE

Date	03/11/22
Team id	PNT2022MID30822
Project name	Fertilizer recommendation system for disease prediction
Maximum marks	4 marks

The detection of plant leaf is a very important factor to prevent serious outbreak. Automatic detection of plant disease is essential research topic. The commitment of a plant is very imperative for both human life and condition. Plants do experience the ill effects of ailments, similar to people and creatures. There is the quantity of plant maladies that happen and influences the typical development of a plant. These ailments influence finish plant including leaf, stem, organic product, root, and blossom. More often than not when the illness of a plant has not been dealt with, the plant bites the dust or may cause leaves drop, blossoms and organic products drop and so on. Suitable determination of such illnesses is required for precise ID and treatment of plant sicknesses. Plant pathology is the investigation of plant infections, their causes, methodology for controlling and overseeing them. Yet, the current strategy incorporates human inclusion for order and distinguishing proof of maladies. This strategy is tedious and expensive. Programmed division of illnesses from plant leaf pictures utilizing delicate registering approach can be sensibly valuable than the current one. In this paper, we have presented a strategy named as Bacterial searching improvement based CNN for recognizable proof and characterization of plant leaf illnesses naturally. For doling out ideal weight to CNN we utilize Bacterial searching streamlining (BFO) that further expands the speed and exactness of the system to recognize and arrange the districts tainted

various infections on the plant leaves. The locally developing calculation expands the effectiveness of the system via looking and gathering of seed focuses having regular characteristics for highlight extraction process. To chip away at parasitic maladies like basic rust, cedar apple rust, late scurvy, leaf twist, leaf spot, and early blight. The proposed strategy achieves higher precision in recognizable proof and characterization of infections.

Farmers' conventional methods of agricultural cultivation are ineffective. It does not make proper use of all available resources. Farmers are unable to detect crop diseases due to a lack of knowledge and old practices at which often result in soil nutrient deterioration and exhaustion. As a result, crop failure occurs. Growing only certain crops depletes the soil, and if the crops are harmed by illnesses, farmers are uninformed of how to recover such crops. Food needs cannot be met until and unless efficient resource management and use is implemented.