VISHWAKARMA INSTITUE OF TECHNOLOGY

DEPARTMENT OF INSTRUMENTATION AND CONTROL ENGINEERING

ED DIV IC-A BATCH 3	ED GROUP 5	ACADEMIC YEAR 2020-21	SEMESTER-3
TITLE OF PROJECT	Machine Learning Based Crop Consultant		
DOMAIN	Machine Learning		
TOOLS	Python, HTML, CSS, JavaScript		
TECHNOLOGY	Machine learning, Deep learning		
NAME OF GUIDE	Prof. Milind Rane	Roll Numbers*:* - 65, 66, 67, 68	

SYNOPSIS

IMPORTANCE OF THE DECIDED PROJECT

Farming is one of the most important occupations in India. It is difficult for new farmers to identify which fertilizer to use for a particular crop and soil, and at the same time know the probable diseases for the crop. To make it easier for farmers, a website in this project will be developed, wherein fertilizers will be recommended using the data from the soil and the environmental conditions and disease prediction will be done for certain crops using suitable machine learning algorithms and computer vision techniques, respectively. A real time weather API will also be implemented in this website, which will allow the farmers to predict rains.

METHODOLOGY

1) Acquire the datasets for fertilizer prediction and crop disease prediction.
2) Model training for the two applications.
3) Integration of the model with the website.
4) Website development with frontend and backend.
5) Deployment of website on cloud platform.

TENTATIVE EXPECTED RESULTS

A website will be developed in which the user can input the soil and weather information and/or an image of the crop for fertilizer prediction and disease prediction, respectively. Real time weather will also be available for the user.