## **Project Design Phase-I**

#### **Solution Architecture**

Date	9 October 2022
Team ID	PNT2022TMID52605
Project Name	Fertilizers Recommendation System for Disease Prediction
Maximum Marks	4 Marks

### **Solution Architecture:**

Crop disease in plants is predicted and suitable fertilizer is suggested for better yield. the images of the diseased plants are obtained and it's pre-processed against the dataset of diseased plants. Deep Learning Algorithm is employed to process the images then it's evaluated. Then a model is made on the evaluations, it's then trained using no. of. inputs and predictions are given to the users which subsequently helps in recommending the fertilizers. The Convolutional layers are used to classify and process the images and further help in recommending fertilizers.

### Steps are:

- i. Image acquisition
- ii. Image Pre-processing
- iii. Pattern Extraction using Convolutional Neural Network (CNN)
- iv. Disease Prediction
- v. Fertilizer Recommendation

# **Solution Architecture Diagram:**

