Project Design Phase-I
Solution Architecture

Date	12 November 2022
Team ID	PNT2022TMID42961
Project Name	Project - Fertilizers Recommendation System for Disease Prediction
Maximum Marks	4 Marks

1. **Image Acquisition:** The diseased plant images are captured using a digital camera.
2. **Pre-processing:** The images are pre-processed to improve the quality of the image. The image is converted into grayscale and the background is removed.
3. **Segmentation:** The image is segmented into different parts like leaves, stem, etc. This helps in better classification of the diseases.
4. **Disease Prediction:** The disease is predicted by analysing the segmented image. The features of the diseased plant are extracted and matched with the dataset of diseased plants. The most similar plant in the dataset is considered as the diseased plant.
5. **Fertilizer Recommendation:** Based on the predicted disease, the fertilizer is recommended to the user.

Solution Architecture Diagram: