Project Design Phase-I
Solution Architecture

Date	03-11-23
Team ID	Team-592384
Project Name	Deep Learning Model For Detecting Diseases In Tea Leaves
Maximum Marks	5 Marks

Solution Architecture:

The solution architecture shows a system for disease prediction on tea leaves using a deep learning model. The system has the following components:

1. User interface: This is the interface that users interact with to submit tea leaf images and receive disease predictions.
2. Deep learning model: This is a machine learning model that has been trained on a dataset of tea leaf images and disease labels. The model can be used to predict the risk of disease in a new tea leaf image.
3. Data pipeline: This is the process of collecting, preprocessing, and feeding data to the deep learning model. The data pipeline includes the following steps:
   - Collect tea leaf images: Tea leaf images can be collected from a variety of sources, such as farmers, tea factories, and research institutions.
   - Preprocess the images: The images need to be preprocessed before they can be fed to the deep learning model. This may involve resizing the images, converting them to grayscale, and normalizing the pixel values.
   - Feed the images to the deep learning model: The preprocessed images are fed to the deep learning model for training and prediction.
4. Prediction: The deep learning model predicts the risk of disease in a new tea leaf image. The prediction is then displayed to the user.

The solution architecture also shows that the system can be used to predict disease in test data. This can be used to evaluate the performance of the deep learning model and to identify areas where the model can be improved.

Overall, the solution architecture shows a system for disease prediction on tea leaves using a deep learning model. The system has the potential to improve the accuracy and efficiency of disease prediction, which could lead to better health outcomes for tea growers and consumers.

Solution Architecture Diagram:

Solution Architecture for Disease Prediction on Tea LeavesDeep Learning Model