GROUP 121

GREEN-DOCTER

TEAM MEMBERS

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CONTENTS

INTRODUCTION

Identification of the plant diseases is the key to prevent losses in the yield. Health monitoring and disease detection on plants is very critical for sustainable agriculture. It is very difficult to monitor the plant diseases manually. It requires a tremendous amount of work, expertise in the plant diseases, and also excessive processing time. Hence, image processing and machine learning algorithms are used for the detection of plant diseases.

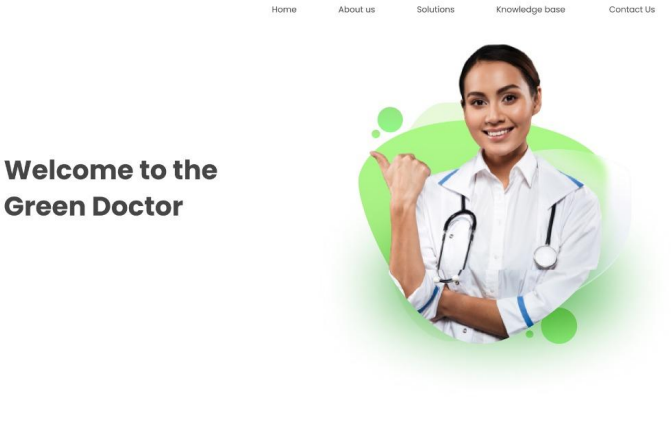
EXISTING SYSTEM

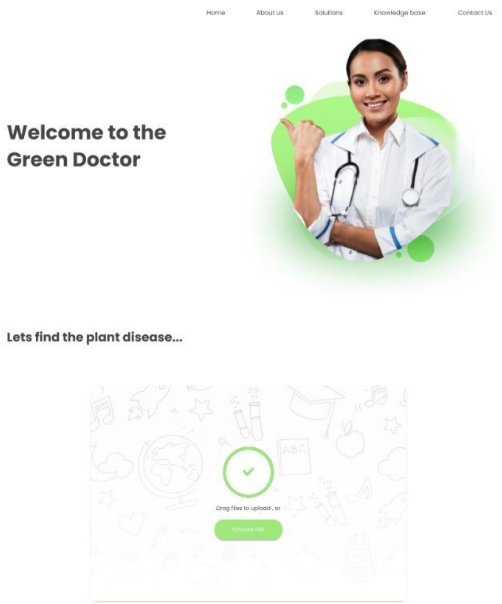
- The working of existing system is examined and studied for this purpose.
- The existing system is manually checking the plants
- The disease detection only based on the knowledge of the farmer

PROPOSED SYSTEM

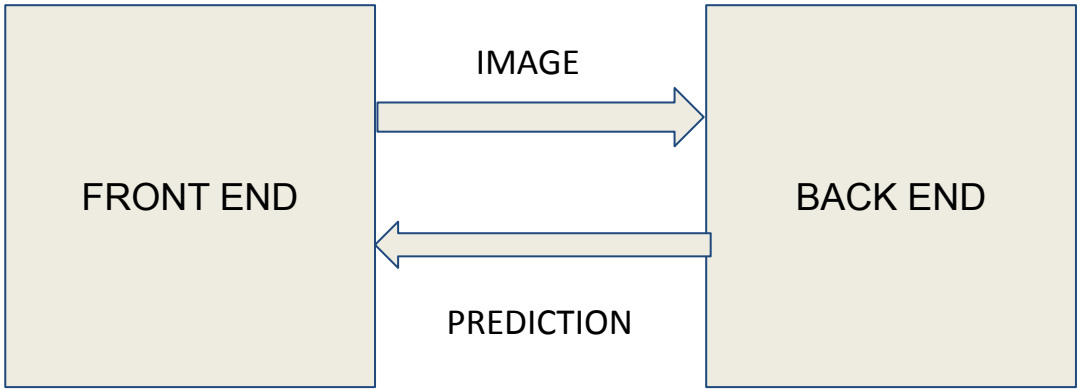
- Farmer assistance to identify the detected disease is provided through the web based application.
- The disease data set is used to train a ResNet50 model
- Using the data set tensor flow API will analyze various disease models

USER INTERFACE





SEQUENCE DIAGRAM



METHODOLOGY

- ➔ Involves the steps like image acquisition, image pre-processing, image segmentation, feature extraction and classification.
- ➔ Tomato leaf disease data set is used to train a ResNet50 model.
- ➔ The data set contains 10 classes , each with 1000 images to train the network.
- ➔ Using this dataset and tensor flow API will analyze various disease models.

SOFTWARE AND HARDWARE SPECIFICATION

- **Hardware Requirements**

    - Processor-pentium or above
    - Hard disk space-2.9GHz
    - Main Memory-2Gb
    - Mouse
    - Keyboard

- **Software Requirement**

    - Python
    - Flask
    - Tenser flow
    - Bootstrap
    - Java script
    - Keras,Pillow,Humpy

Thank you