IoT based Plant Health Monitoring using Machine Learning

School of Engineering & Applied Sciences

Instructor: Prof. Anurag Lakhlani

Description

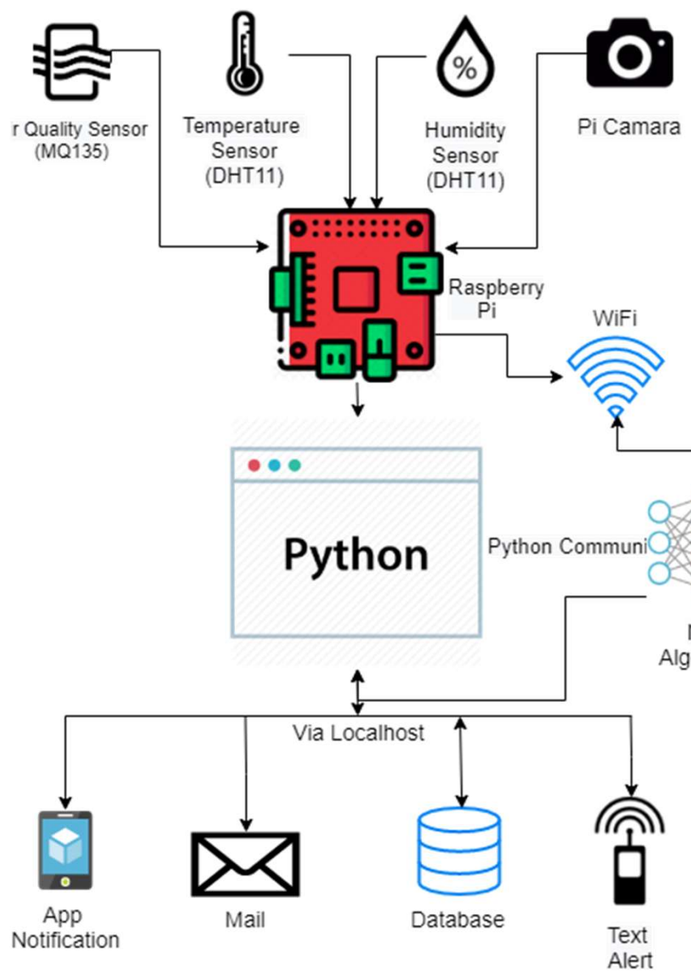
Even though India is an agricultural country, numerous farmers fail to get good profits from the crops for the reason that they can't manage two essential factors, which determine plant growth as well as productivity. The temperature surrounding the plants must remain in a certain range. High humidity can result in crop transpiration, condensation of water vapor on various surfaces, and water evaporation from the humid soil. Also a disease in a single plant/crop can spread in all of them quite quickly and thus must be dealt with immediately. To overcome such challenges, this plant health monitoring system comes to the rescue. It can be used not only in farms, but also in homes, offices or any other place that you want to cultivate your plants in.

Devices like Moisture sensor, Temperature sensor, CO2 sensor, Light Sensor, Humidity Sensor can be attached to a Raspberry Pi Microprocessor. The data can be processed and insight can be obtained into the plant growth. The images taken by the camera can be processed using Image Processing Algorithms and Machine Learning algorithms can be used to make predictions about the health of the plant.

Group - 13

- Saloni Chudgar (1641013)
- Abhi Patel (1641021)
- Nildeep Jadav (1641024)
- Manav Chotalia (1641036)

Block Diagram



Flow Chart