PROJECT DEVELOPMENT PHASE

SPRINT 2

SMART AGRICULTURE SYSTEM FOR VARIOUS CROP PROTECTION

- Agriculture is the essential tool for any country as it not only increases the revenue but also is important for one's survival. The system proposed here is an advanced irrigation system approach that can be employed to the cultivation of various crops.
- The main objective of this system is to develop a system that can able to smartly operate the irrigation system and also monitor the status of the crop, detect the disease that through the leaf in the crop, that is mainly caused by animals in the fields. Alongside the usage it unites its advantages especially on the sector of execution time rate.
- This paper is structured upon Indian agriculture system and Indian weather conditions. This model applies the technology of the Internet of Things to implement real-time analytics of the collected data. Multiple sensors are deployed in the field to create an on-field dataset into the cloud system. The cloud system scraps the required data from the meteorological center and compares it with the on-field data set. The analysis is then done using the concepts of data science to determine the amount of water to be released according to each crop type in the field. The proposed system is highly efficient and economically feasible. The system also provides a mobile application which helps the farmer to track the developments occurring throughout the field.

In this project we have analysed different image parameters or features to identifying different plant leaves diseases to achieve the best accuracy. Obviously this improves the damage control by insect attacks. Previously plant disease detection is done by visual inspection of the leaves or some chemical processes by experts. For doing so, a large team of experts as well as continuous observation of plant is needed, which costs high when we do with large farms.

IoT Enabled Smart Irrigation System | IEEE Conference Publication | IEEE Xplore

A Smart Farming and "Crop Monitoring Technology" in Agriculture Using IOT (ijraset.com)