CROP RECOMMENDATION SYSTEM

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NEED FOR CROP RECOMMENDATION SYSTEM IN AGRICULTURE

- Agriculture is the backbone of our country. Our economy is built over the agricultural sector.
- If a new farmer decides to plant a crop, there may be a chance of fail to analyze the contents of the soil and planted crop is not suitable for the soil, he will not earned a desired yield.
- The process of inspecting the soil content will be proposed by our system, and it will suggest suitable crop.

PROBLEM STATEMENT

- The Soil Content is very important in farming, However, some issues arise, such as soil infertility, soil erosion, and so on. Despite the fact that enormous effort can be made to eliminate these issues.
- If the appropriate plant is not planted in the appropriate soil, the farmer will not receive the desired yield.
- When a farmer moves to a new area, he does not know anything about the soil characteristics in that area So, in order to learn about the characteristics of the soil, So he wants to test the soil in Soil Testing Centre.
- If the soil testing center is too far away, the farmer can test the soil and use this application

PROPOSED SYSTEM

- We have created a crop recommendation system to detect the soil contents(Nitrogen, Phosphorous, Potassium, Humidity, Temperature, Ph value, Rainfall)and also to predict the crop that is to be planted in the soil. The proposed model is one of the best ways to inspect the soil content. By training this in Machine Learning as well as Deep Learning.
- Soil Integrated Sensor is used to detect the mineral content, organic matter and some essential factors of the soil.
- We use an LED display to display all the contents in the soil so that the farmer can analyze it plant the suitable crop in that soil. The farmers can analyze what they wanted and get a suitable yield and a good profit.

- LED (Light Emitting Diode) display is used to display all the contents of the soil.
- We connect the AI system with the LED display so that the values that are obtained at the time of soil testing is seen on the screen so that the farmers will be able to find the suitable crop that is to be planted in that land.
- It can be easily recognised and helpful to farmers

- We have created the model using machine learning and used Django as the backend. We have also created a website so that once all the contents are entered the crop that is to be cultivated in the soil is given and also we have added fertilizer prediction so that the farmers can use the suitable fertilizer for that soil(black, red, mountain soil, etc.)
- The farmers can either access either through their mobile or through their laptops or desktops.
- This website is useful for those who are new to farming or to those who are already into the field of agriculture

THANK YOU