FUTURE READY APPLICATIONS HACKATHON

WEED DETECTION AND CROP PREDICTION

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Do You Agree?

Cultivators of the earth are the most valuable citizens.

Thomas Jefferson

Problem Statement

WHAT FARMERS FACE.

Farmers grow crops, but every year crops are affected by weed growth. The growth of weeds leads to increase in use of herbicides, which sometimes destroy the crop more than the weed itself. So, what do we do?
Here's what we have to offer.

Solution

We provide a solution to this in two steps.

Step 1 :
Detect the weeds, filter them out from the crops and create a differentiation set between them. (Trained on a crop and weed dataset)

Step 2 :
Based on the ground nutrient content, predict for farmers what kind of crops can be grown in that soil.

Future Implementation?

Approach

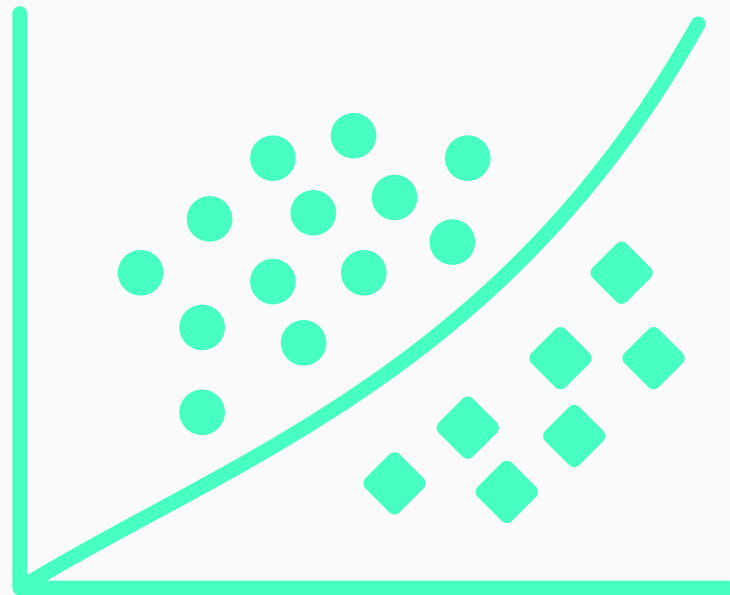**Dataset :** Deepweeds dataset, Crop recommendation dataset

Implementation model :
Convolutional Neural Networks, Decision tree classifier

Reason for use :
Classification between weed or crop, and decision making between what crop to grow.
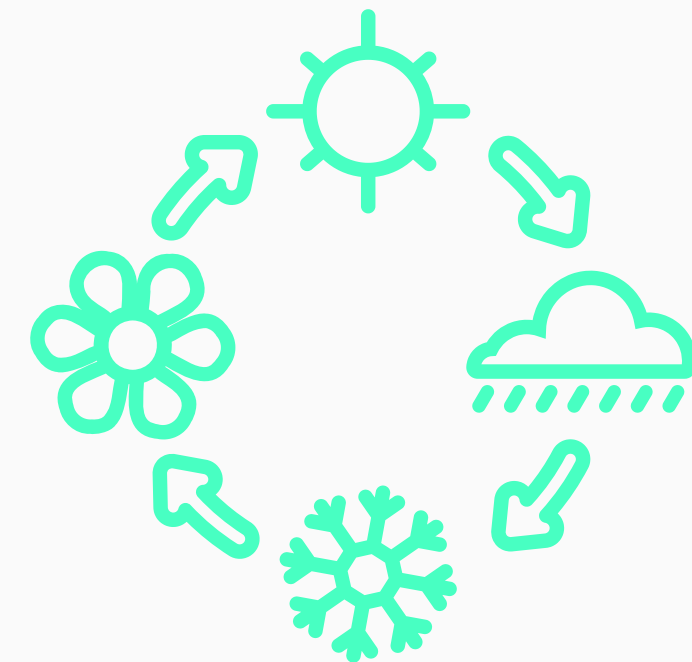
ISSUES & THREATS

Current challenges

Possible Misclassification

Financial Challenges

Current unavailability to predict crops based on season

Azure services used:

Machine Learning Studio

Azure ML

Thank you.