

Background

Due to the extremes of temperature farmers have been dealing we have decided to set up a system to help farmers plan what to grow based on recent temperature readings.

The main objective of this project is to develop an application, serving as a proof of concept to make suggestions for farmers on the sustainable types of crops to grow based on historical temperature data.

The application allows the user to add a desired location and specific date and present them with the forecasted temperature and weather conditions based on historical data spanning a period of 12 months prior. The application also enables the user to check seasonality of crops and estimate the impact of prevalent weather on a crop of interest, assuming that the temperature remains consistent throughout the entire season.

Farmers are informed on the safe temperature range within which different types of crop provide good yield, and the exact number of degrees beyond the safe range which would endanger the expected output yield. Farmers are also informed on the number of days the crop will survive based on forecasted weather conditions.