Annadata

AI based crop recommendation system

Problem statement

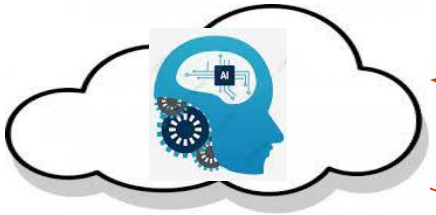
- Every crop has a **specific requirement** of **climatic** conditions and **soil health**(nutrients and pH level).
- **Farmers** are generally **confused** regarding the best choice of crops to be grown for best yields and best profits.
- Hence they seek guidance by physically contacting **Agricultural Scientists** or consulting among peer farmers.
- Farmers living in **remote areas** find it **difficult** to physically consult experts and arrive at an **appropriate** guidance.

AI based Online Crop Guidance

- We will be using **Machine Learning algorithm** on a Kaggle provided dataset deifining co-relation between different climatic condition and nutrient content of soil and corresponding crop.
- Based on the pattern learnt fron the dataset, the **ML model** would be able to **recommend** an appropriate choice of **crops** to be grown as per the input given by **farmers** defining **climatic conditions and soil health**.
- It is a **web based application** named ***Annadata*** which could be accessed on **any device.**

Architecture of Annadata

Heroku cloud API



AI model embedded on Python Flask server

Input Data sent through API

ReactJS front-end

After processing the input on soil nutrients and climatic conditions, the AI model sends back the name of crop which would give maximum yield and maximum profit

Farmer feeds information on soil nutrient content and climatic conditions.

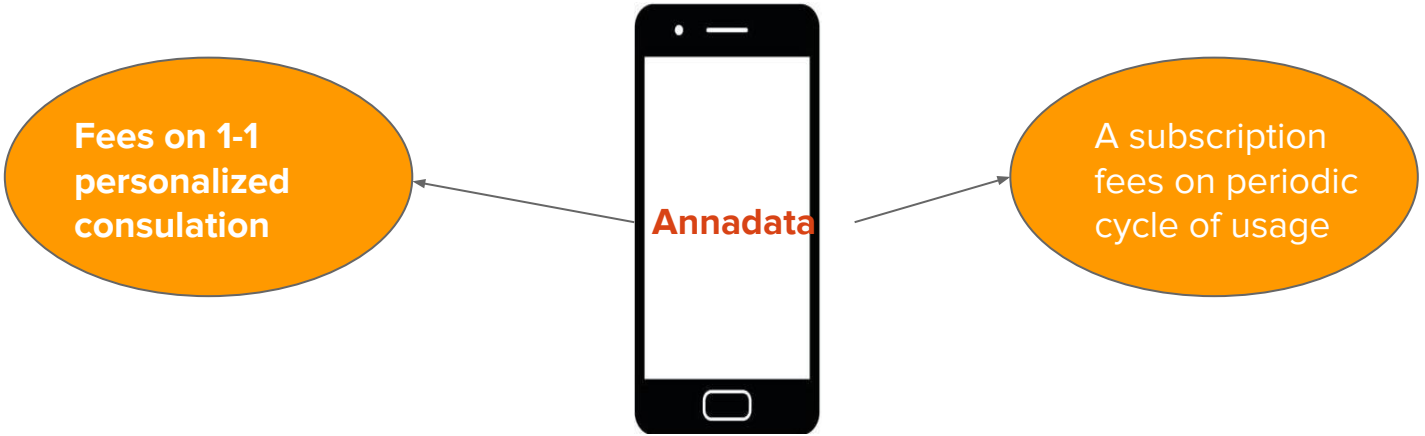
Target Auidience

Nagar Panchayat

Farmer's co-operative societies

Individual farmers

Revenue Model



We would be charging a subscription fees for using our application for single usage or using it for periodic monthly, half-yearly or annual subscription plans. We would also be providing personalized consultation to farmers for which an additional fees would be charged.

Video demonstration of Prototype(Click to Play)