# Soil Farming Agent

REPORT

Introduction:

Soil Farming Agent is an innovative web application designed to enhance agricultural practices by providing comprehensive soil and crop management information. This application serves as a crucial tool for farmers, enabling them to understand the unique characteristics of various soil types and the optimal crops that thrive in them. By leveraging expertise from soil and crop specialists, the platform offers updated and reliable data for both admins and users. Admins can efficiently manage and update soil details and distributor information, while users can access this valuable information to make informed farming decisions. Built using HTML, CSS, JavaScript, and Firebase, the application ensures a robust, user-friendly, and scalable solution for modern agriculture.

Introduction Page:

Welcome to Soil Farming Agent
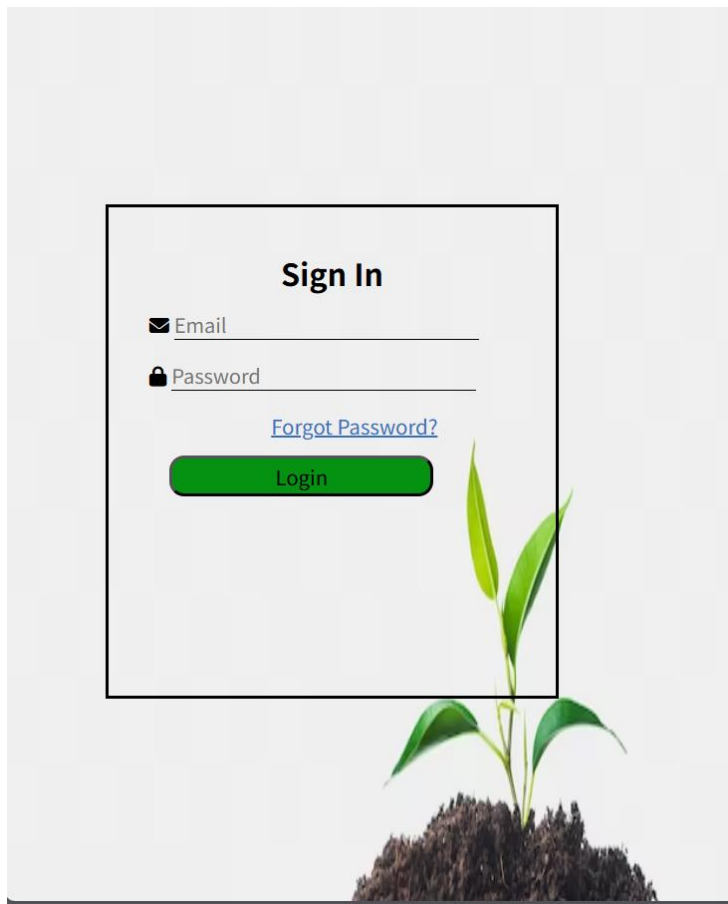
Admin | User
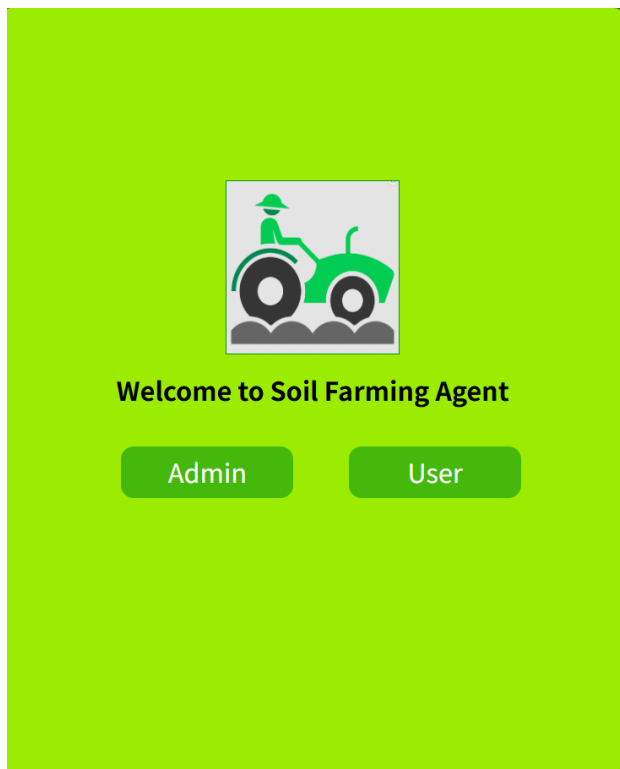
Here there will be 2 types of users

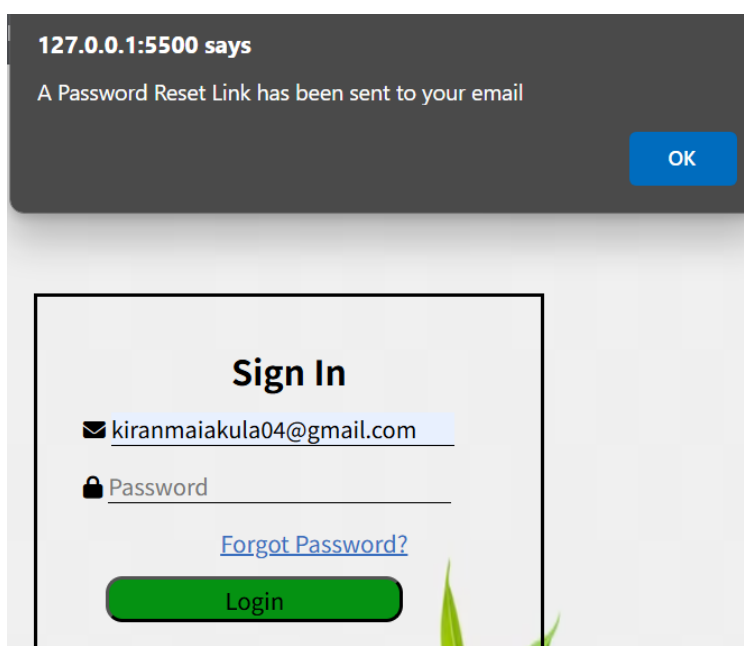1-->Admin: Admin is the person who can edit, add or delete the content.

2-->User: User is the person who can see the details ,they have no access of edit or delete or add the details.

❖ Admin Page:

This is the Sign in or login page using email and password credentials admin will enter the main page.

When we forgot the password then we can click on **Forgot Password?** Link. Using that we will get a mail when we press the link in email we can reset the password.

1:54 AM (0 minutes ago)

Hello,

Follow this link to reset your admin-page-f6841 password for your kiranmaiakula04@gmail.com account.

https://admin-page-f6841.firebaseapp.com/__/auth/action?mode=resetPassword&oobCode=EVA-i8K7mGq7jkTxtjT_2emlKlrwhxvsw8s_
0hrG3qYAAAGQibgnkA&apiKey=AIzaSyDansjoKrJPA8hDv3CqRYjPz8l2e-N2Wus&lang=en
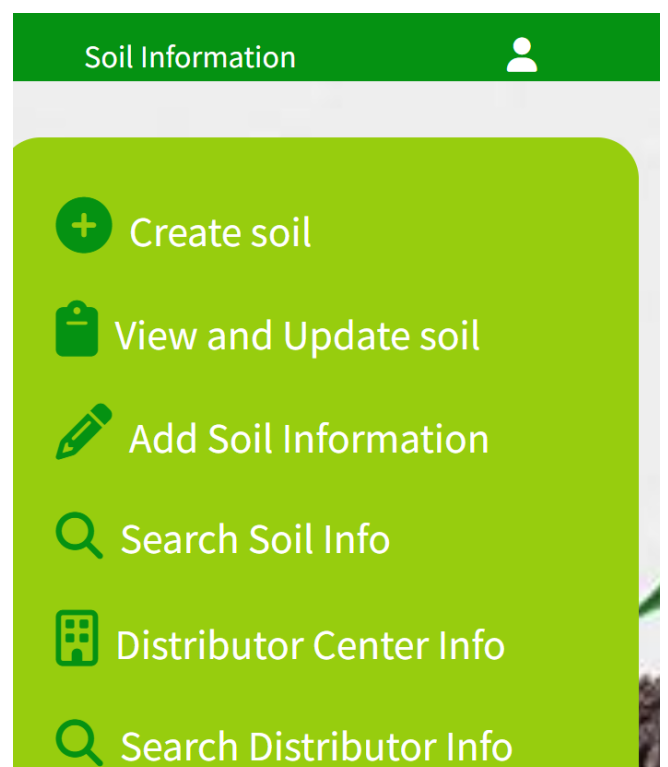
Reset your password

for **kiranmaiakula04@gmail.com**

New password

SAVE

After login successful we will move into the homepage of admin.

Soil Farming Agent 🌾

Soil Information

➕ Create soil

📋 View and Update soil

✏️ Add Soil Information

🔍 Search Soil Info

🏢 Distributor Center Info

Soil Information

➕ Create soil

📋 View and Update soil

✏️ Add Soil Information

🔍 Search Soil Info

🏢 Distributor Center Info

🔍 Search Distributor Info

➢ Profile

Soil Farming Agent 🌾

Soil Information 👤

👤 **Profile**

Email: kiranmaiakula04@gmail.com
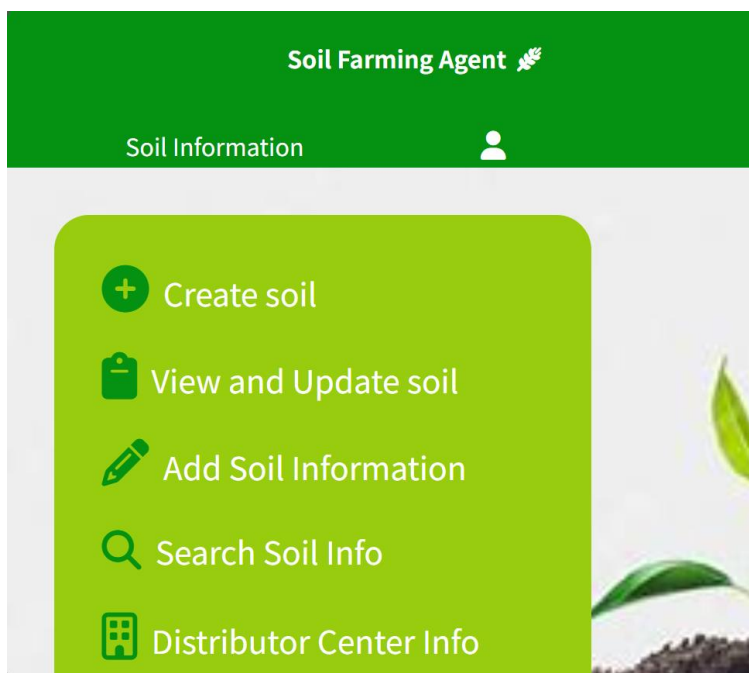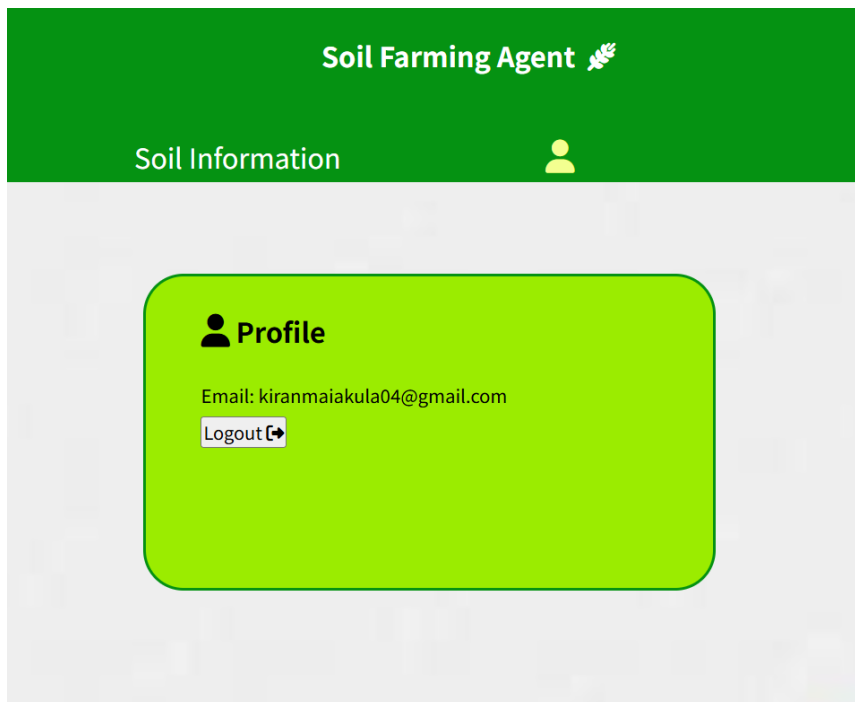
Logout ➡

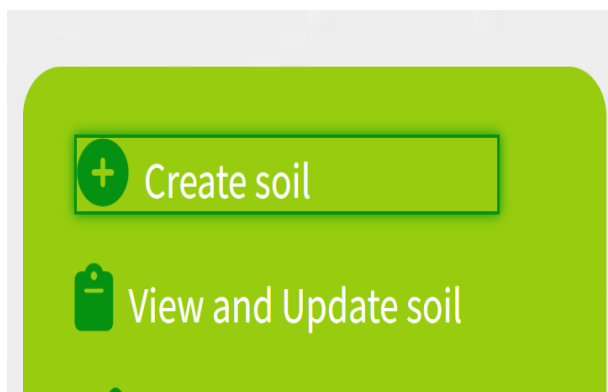We can see our profile our logged email. We can get back to homepage (Soil Information) by double clicking profile icon or by clicking on Soil information link. If we press on logout button, we will directly get the Introduction Page.

➢Create soil:

⊕ Create soil

🏷 View and Update soil

127.0.0.1:5500 says

Data stored successfully

OK

Soil Information 👤

◀◀

Post Soil Information

Posted By:
kiranmaiakula04@gmail.com

Soil Type
Sand

Insert

When we click on Create soil button we will get the Post Soil Information page we will able to see who has been adding and when we click on Insert button we will get alert Data stored successfully. We can go back to homepage when we click on that backward sign.
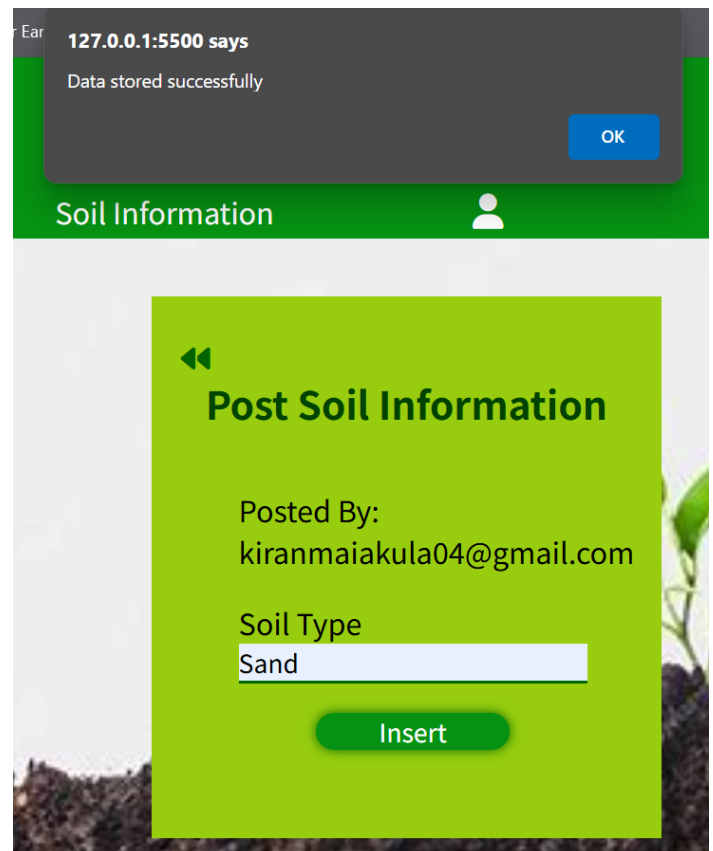
➢View and Update soil
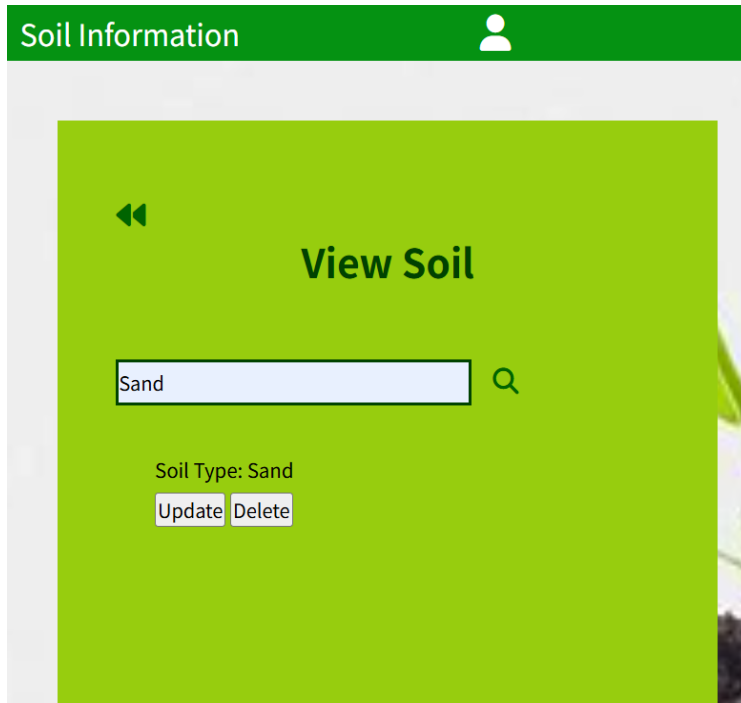
When we click on View and Update soil button we will get this view soil page when we search soil type if we have that soil type we will get the info with update and delete button or else we will get alert of **No data found.**
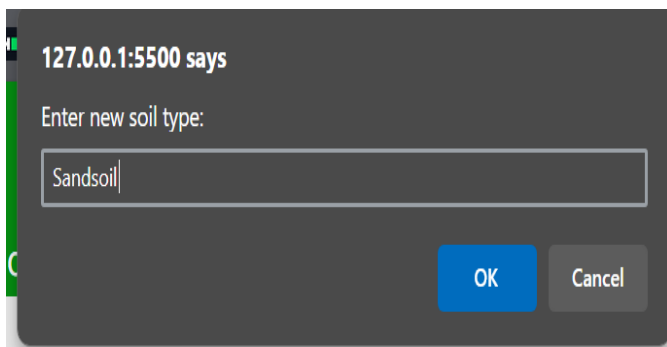
When we click on Update button we will get this prompt when we update then click on ok if soil type is updated we will get alert of Soil type updated successfully or else we will get prompt with unsuccessful with error with which we are facing error.

View Soil

◀◀

Sandsoil   🔍
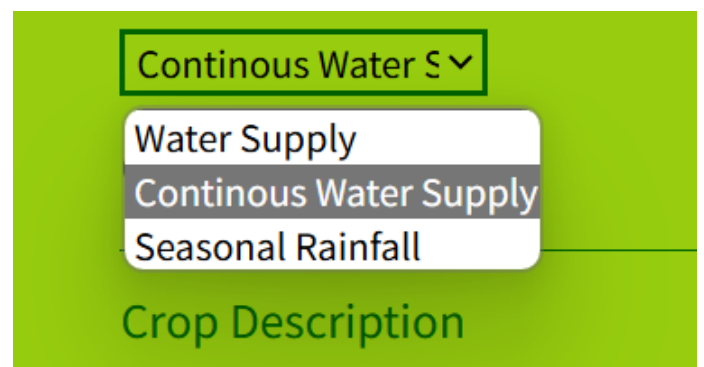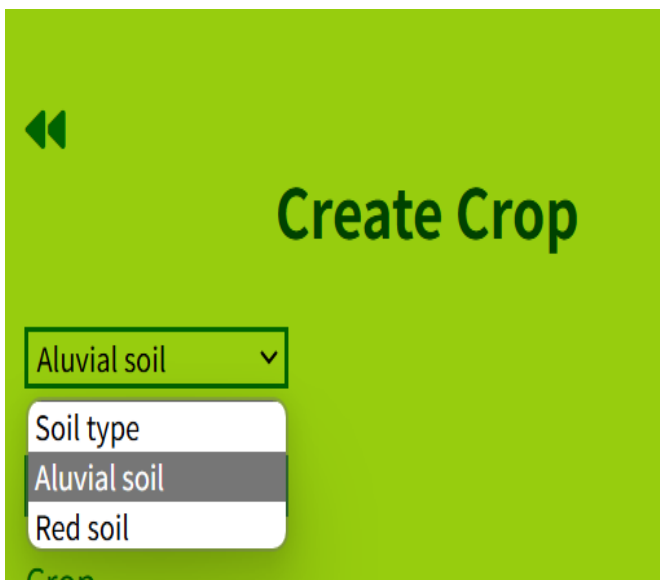
Soil Type: Sandsoil
Update Delete
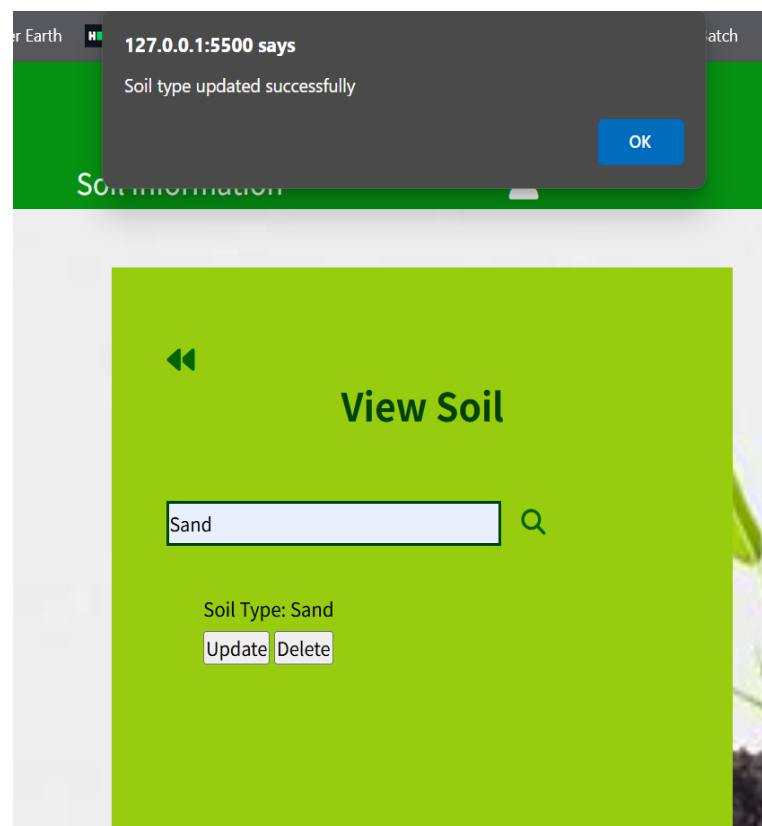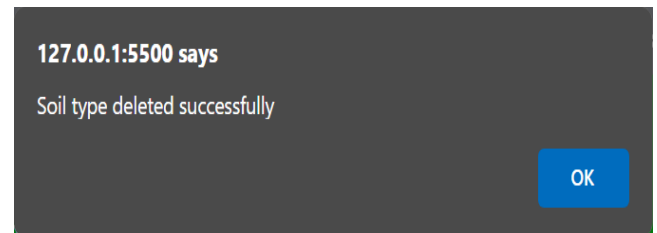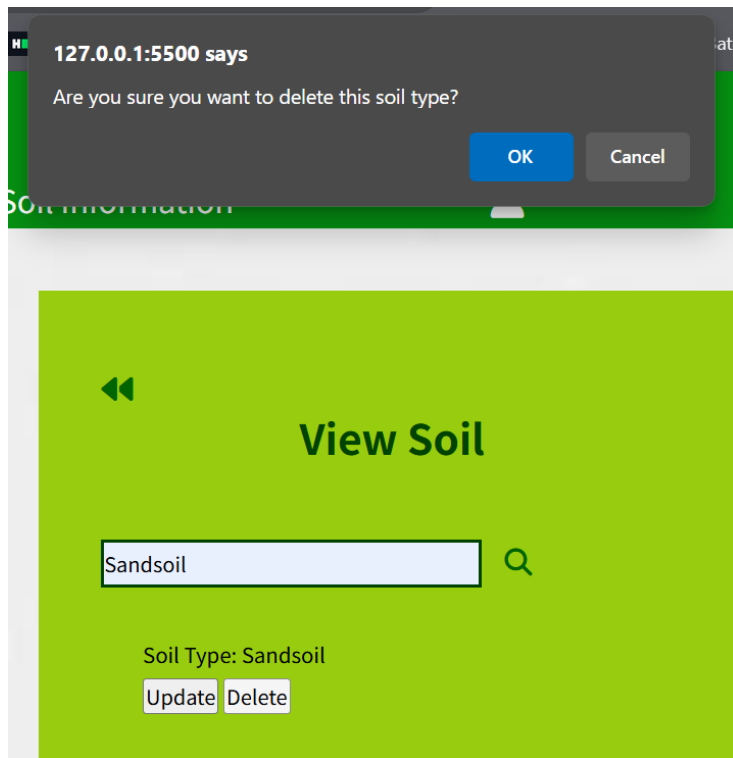
When we click on Delete button we will get this alert whether we want to delete it or not when we press on ok we will get another alert that soil type is deleted successfully. Then when we press on Ok it will take back to homepage. If there is an error it will give   alert unsuccessful with error in console log we can able to see what error is.

`

➤Add soil information

◀◀

Create Crop

Aluvial soil   ▾

Soil type
Aluvial soil
Red soil

Crop

Continous Water S ▾

Water Supply
Continous Water Supply
Seasonal Rainfall

Crop Description

When we click on Add soil information we will get create crop page in which we will fill the details of crop details. We will get soil type options from database. Water supplies are of two types Continous Water supply and Seasonal Rainfall.

Data stored successfully

OK

Crop Process 1
Field preparation

Crop Process 2
Farming

Crop Process 3
Fertilizing

Crop Process 4
Irrigation

Crop Process 5
Weed Control

Crop Process 6
Harvesting

Sub Crop
nothing

Sub Crop Description
nothing

Submit

When we click on Submit button we will get an alert Data stored successfully. After when we press on OK we will get back to homepage.

➢ Search Soil Info

When we click on Search soil info button we will get into Crop information page. For updating we can just type at what we want to change. When we press on Update button whatever changes we have made will change.

127.0.0.1:5500 says

Soil information updated successfully!

OK

Process 3:
Fertilizing
Process 4:
Irrigation
Process 5:
Weed Control
Process 6:
Harvesting
Sub Crop:
No sub crop needed
Description of Sub Crop:
nothing

Update

Delete

When we click on Delete button we will get an alert whether you want to delete or not . After when we press on OK we will get whether it deleted or not then we will get back to homepage.
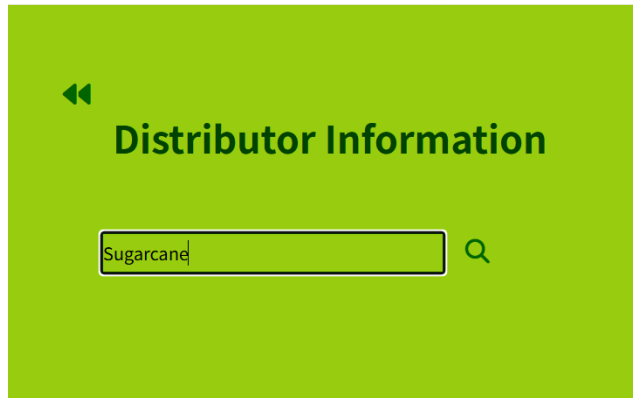
127.0.0.1:5500 says

Are you sure you want to delete this soil type?

OK   Cancel

Process 3:

Fertilizing

Process 4:

Irrigation

Process 5:

Weed Control

Process 6:

Harvesting

Sub Crop:

nothing

Description of Sub Crop:

nothing

Update

Delete

➢ Distributor Centre Info
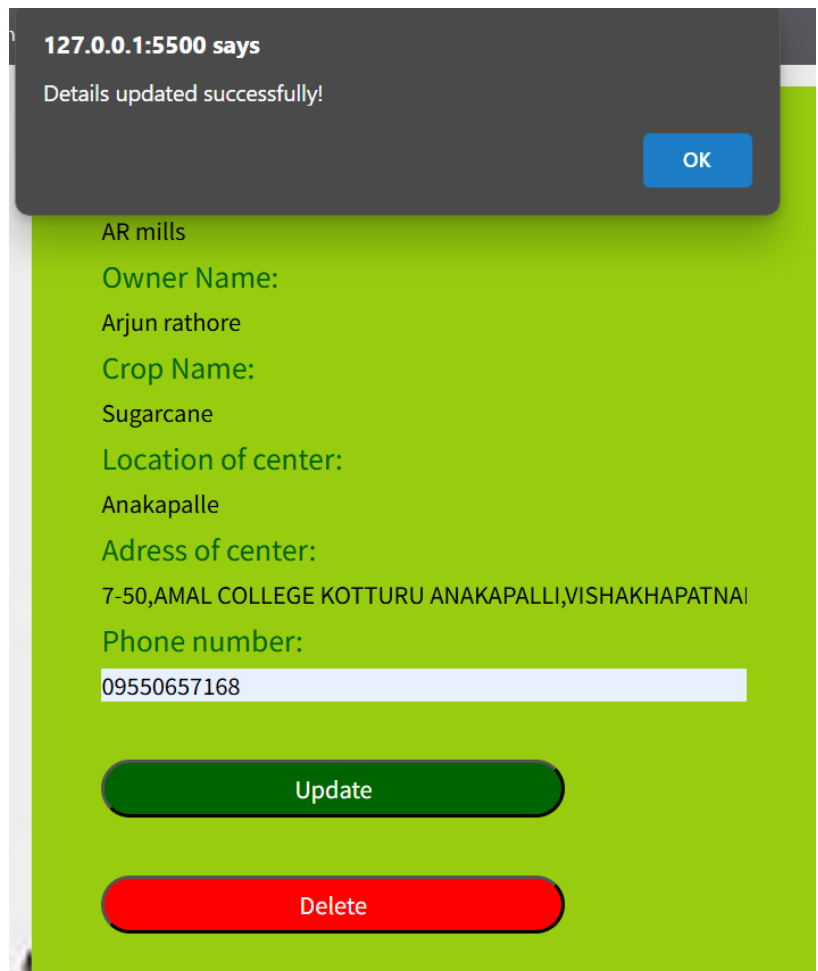
127.0.0.1:5500 says

Data stored successfully

OK

◀◀

Distribution Center

Distributor Center Name

AK rice mills

Owner Name

Kiranmai Akula

Crop Name

Maize

Location of center

Hyderabad

Center Address

Near banjara hills beside nagarjuna university Jubliee hills Hydera

Phone number

93247318137

Submit

When we click on Distributor Center Info button we will get into Distribution center page where we can add data ,when we press on submit the data will be transferred.

➤ Search Distributor Info

Distributor Information

Sugarcane 🔍

When we click on Search Distributor Info button we will get into Distributor Information page where we can edit, view and delete the data, when we press on update whatever we made change of the data will be updated. Similarly when we delete we will get alert and it will delete the distributor details.
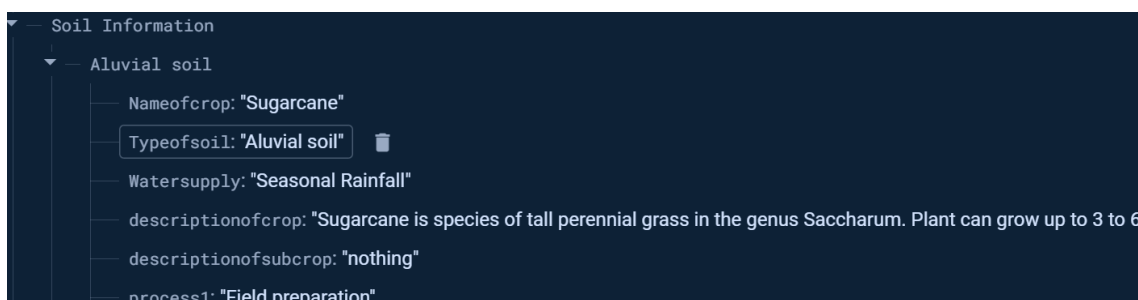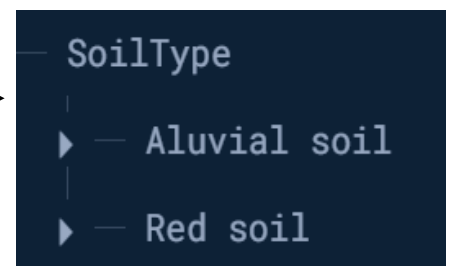
127.0.0.1:5500 says

Details updated successfully!

OK

AR mills

Owner Name:

Arjun rathore

Crop Name:

Sugarcane

Location of center:

Anakapalle

Adress of center:

7-50,AMAL COLLEGE KOTTURU ANAKAPALLI,VISHAKHAPATNAI

Phone number:

09550657168

Update

Delete

Test cases:

Login: kiranmai.a21@iiits.in
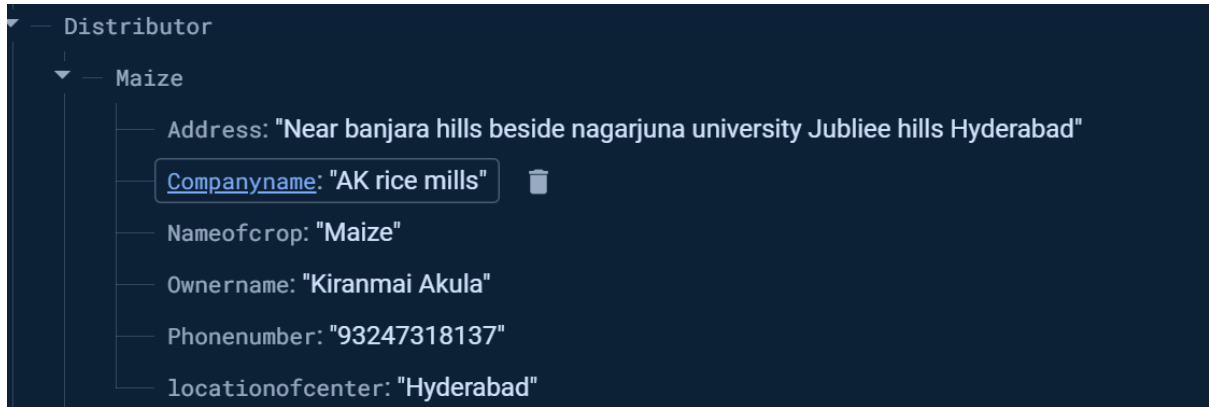
Password: AK1656

Crop information:

Soil type ⟶

```
— SoilType
  |
  ▸ — Aluvial soil
  |
  ▸ — Red soil
```

```
▼ — Soil Information
  ▼ — Aluvial soil
        Nameofcrop: "Sugarcane"
        Typeofsoil: "Aluvial soil"  🗑
        Watersupply: "Seasonal Rainfall"
        descriptionofcrop: "Sugarcane is species of tall perennial grass in the genus Saccharum. Plant can grow up to 3 to 6
        descriptionofsubcrop: "nothing"
        process1: "Field preparation"
```

Distributor information:

❖ **User**

Login page:

This is the sign in page of user, if you forgot the password you can click on **Forgot Password?** .If you don't have an account you can create an account using **Signup** link.

Signup page

This is the sign up page of user, you can create your account by filling following details. By clicking on Signup button you account will be created and you will go to Sign in page. There you to Login to that account and can access the user's webpage.

User Homepage:
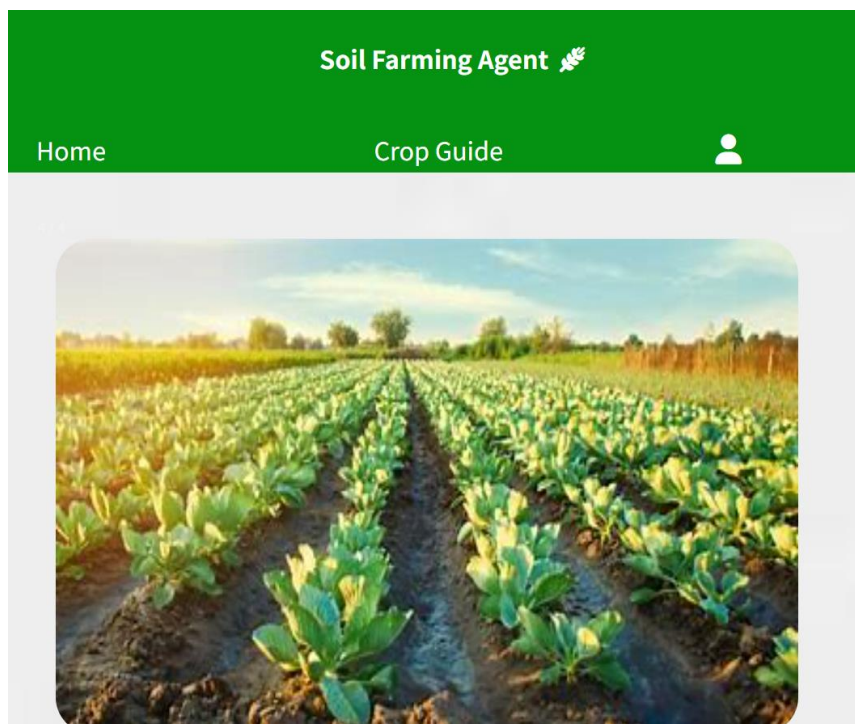
This is the user homepage there are 3 sections in the header Home Crop Guide and Profile. Home generally consists of what this website is , and what are soil types some description about that. This Crop guide consists of soil information and distributor information. Lastly Profile consists of logged username and email.

➢Home

Your Farming Companion!

Farming is not merely a profession,it's a way of life..

Soil is a crucial component in agriculture, serving as the foundation for crop growth and productivity. Different types of soil possess unique characteristics that determine their suitability for various crops. Understanding these traits is essential for optimizing agricultural practices and ensuring successful crop yields.

About Us

The Soil Farming Agent application is designed to provide comprehensive information about various soil types and their best-suited crops. The application allows users to view detailed soil characteristics and crop requirements, helping farmers and agricultural enthusiasts make informed decisions about their planting strategies.

See for more details

See for more details

Types of Soil

Email-id:kiranmaiakula04@gmail.com
Contact-me:9550665521

When we click on that image we will get the detailed description of soil types and what crops are suitable. We can go back to homepage by clicking on Home in header or by clicking on backward symbol.

Soil Farming Agent 🌾
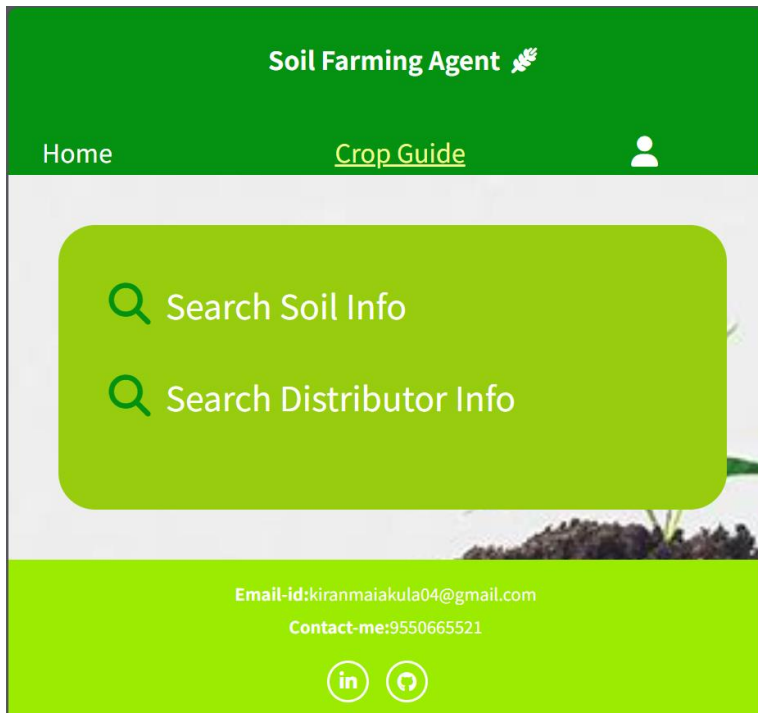
Home   Crop Guide   👤

◀◀
What is Soil?

Soil is the most important aspect for our life. The economy based sectors include soil in India. India is a land of vast dimensions with different conditions of geology, relief, climate and vegetation. Here, you can get different types of soil cultivation. Therefore, India has a large diversity of soil groups which include different types of soil. All the Soils are markedly different from each other. Various criteria have been applied to classify Indian soils like Geology, relief, fertility, chemical composition and physical composition and so on. Soil formation is so good in a particular climate that each climate type has its own soil.

## What Is the Role of Different Types of Soil In Agriculture?

Soil is a very important material or we can say that it is the foundation of agriculture. It is the loose surface that covers most agricultural land. This material is a mixture of inorganic particles and

Crop Guide:

This is the crop guide page, Here user can see the soil information and distributor information.

Search Soil Info
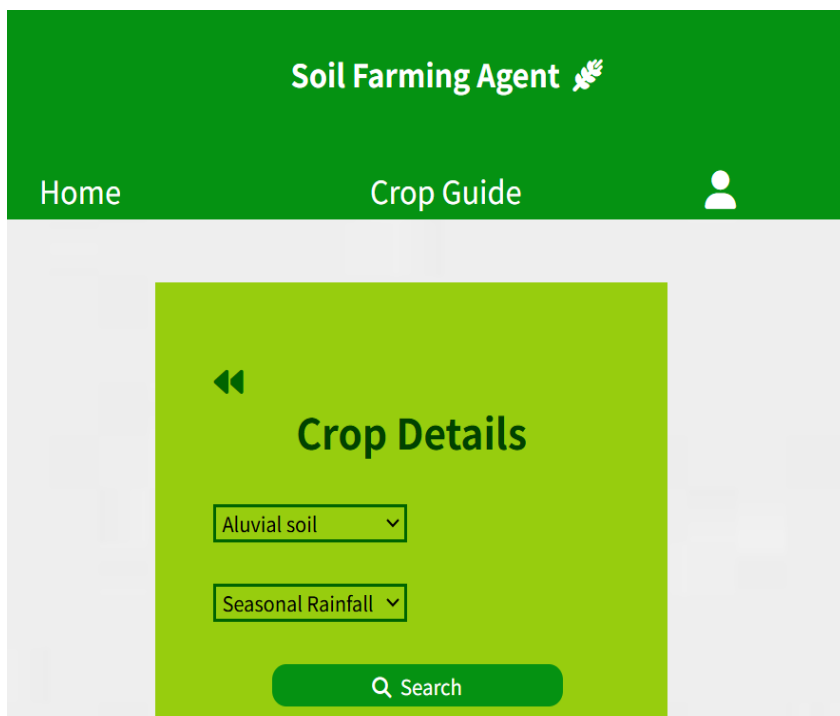
When we click the button Search Soil Info we will get this crop details page where we can select our soil type and water supply then click on Search button we will get the data from database which satisfies both characterstics.

Crop Information

Soil Type: Aluvial soil

Water Supply: Seasonal Rainfall

Crop Name: Sugarcane

Description: Sugarcane is species of tall perennial grass in the genus Saccharum. Plant can grow up to 3 to 6 feet in height.

Process 1: Field preparation

Process 2: Farming

Process 3: Fertilizing

Process 4: Irrigation

Process 5: Weed Control

Process 6: Harvesting

Subcrop: No sub crop needed

Subcrop Description: nothing

Search Distributor Info

When we click the button Search Distributor Info we will get this Distributor details page where we can select our Crop name and location then click on Search button we will get the data from database which satisfies both conditions.

Distributor Details

Maize ▾

Hyderabad ▾

🔍 Search

Distributor Information
Name of Distributor center: AK rice mills
Owner Name: Kiranmai Akula
Crop Name: Maize
Adress of center: Near banjara hills beside nagarjuna university Jubliee hills Hyderabad

Profile

Soil Farming Agent 🌾

Home   Crop Guide   👤

👤 **Profile**

First Name:Kiranmai
Last Name:Akula
Email:kiranmaiakula04@gmail.com

Logout ↪

When we click the button Profile symbol we will get this profile page where we can see the details of logger user. We can logout from this account by clicking on logout button we will get back to Intro page. If we double click on profile symbol we can go back to Home.