



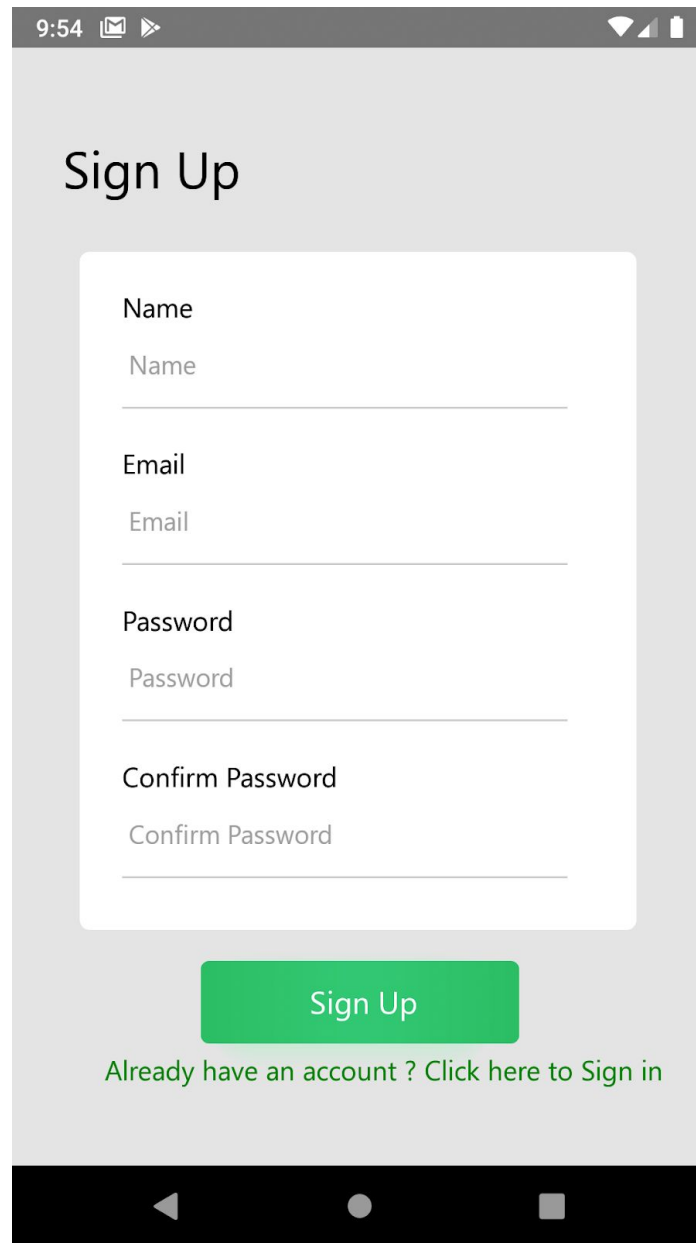
User Manuals  
Group Number - 27

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## Mobile Application Manual

### User signup



The screenshot shows a mobile application interface for user sign-up. At the top, a status bar displays the time 9:54, signal strength, and battery level. The app's title bar is dark gray. The main content area has a light gray background. The title 'Sign Up' is centered at the top in a large, black, sans-serif font. Below the title is a white rounded rectangle containing four input fields. Each field has a label above it and a placeholder text below it: 'Name' (placeholder: 'Name'), 'Email' (placeholder: 'Email'), 'Password' (placeholder: 'Password'), and 'Confirm Password' (placeholder: 'Confirm Password'). Below the input fields is a green button with the text 'Sign Up' in white. At the bottom of the white rectangle, there is a link in green text: 'Already have an account ? Click here to Sign in'. The bottom of the screen shows a black navigation bar with three icons: a back arrow, a home circle, and a recent apps square.

9:54

## Sign Up

Name

Name

Email

Email

Password

Password

Confirm Password

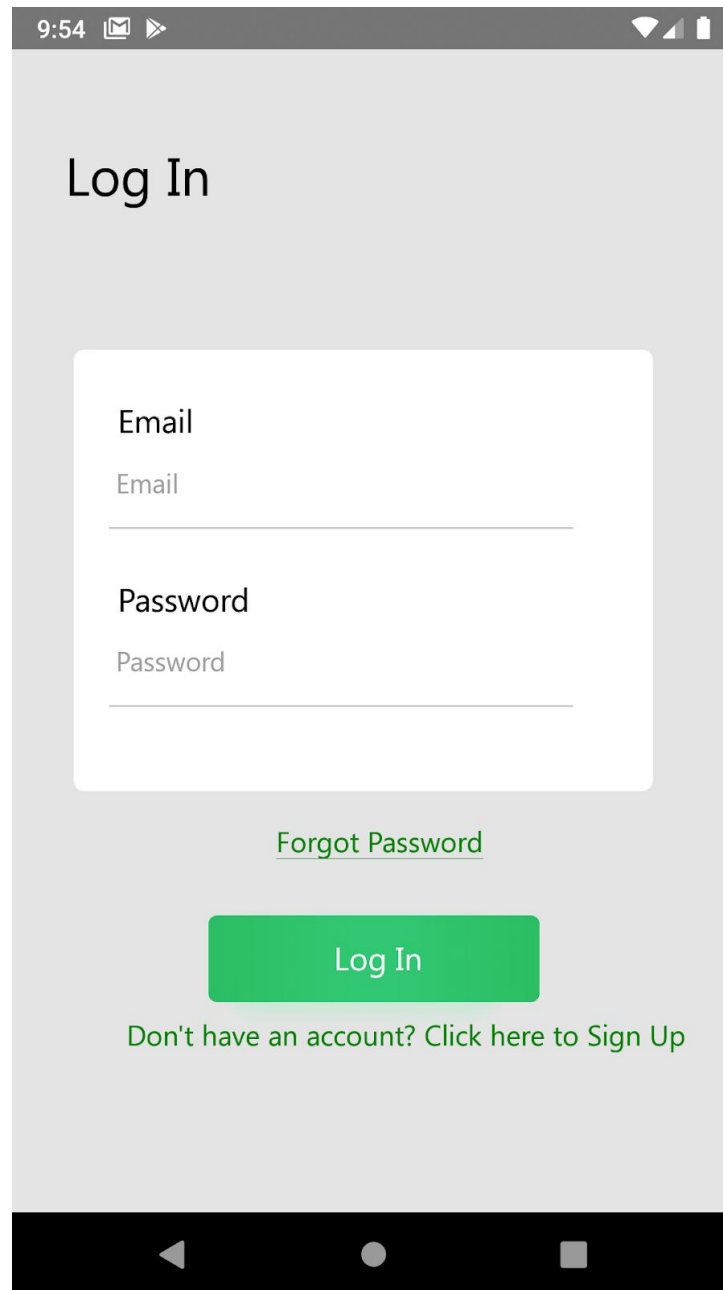
Confirm Password

Sign Up

Already have an account ? Click here to Sign in

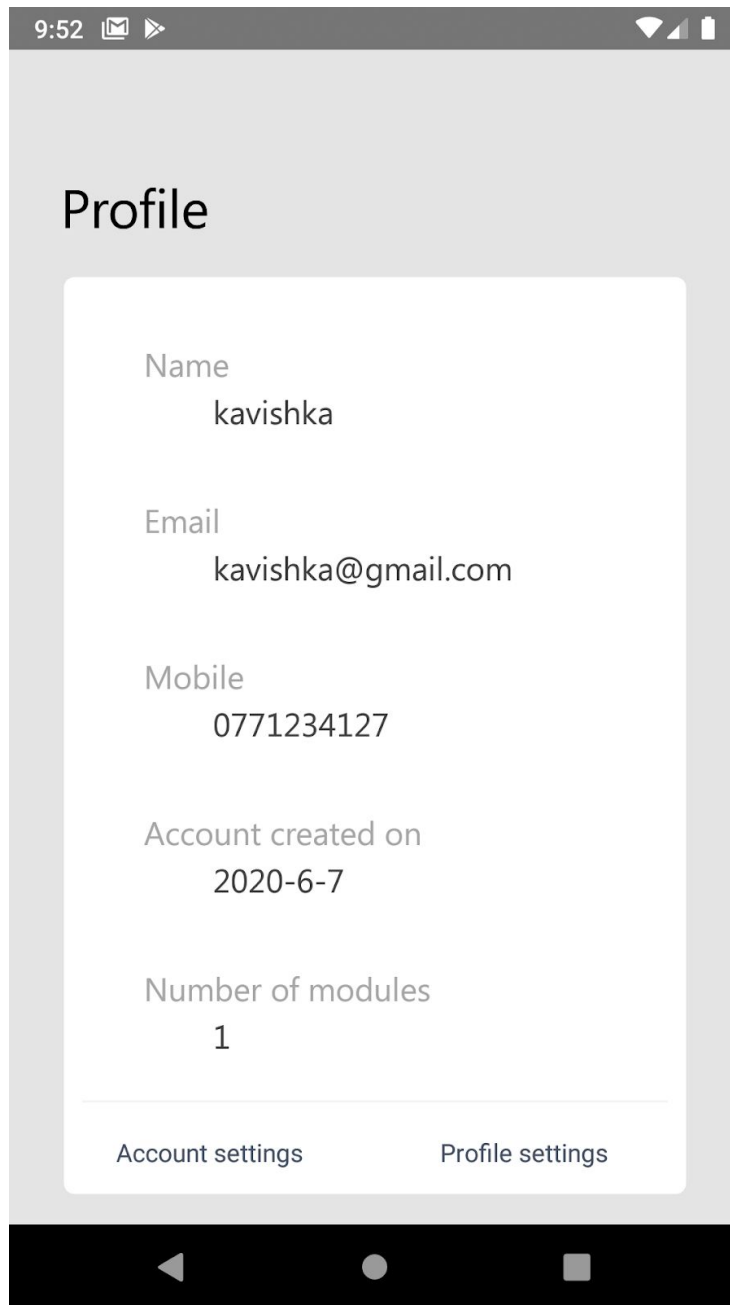
Users can sign up to this app by providing necessary information here. If you are already signed up then you can navigate to the login page.

## User login

A mobile application login screen with a light gray background. At the top, a status bar shows the time 9:54 and icons for email, play, Wi-Fi, and battery. The title "Log In" is displayed in a large, black, sans-serif font. Below the title is a white rounded rectangle containing two input fields. The first field is labeled "Email" and has a light gray placeholder text "Email". The second field is labeled "Password" and has a light gray placeholder text "Password". Below the input fields is a green link that says "Forgot Password". At the bottom of the white rectangle is a green button with the text "Log In" in white. Below the button is a green link that says "Don't have an account? Click here to Sign Up". At the very bottom of the screen is a black navigation bar with three white icons: a back arrow, a circle, and a square.

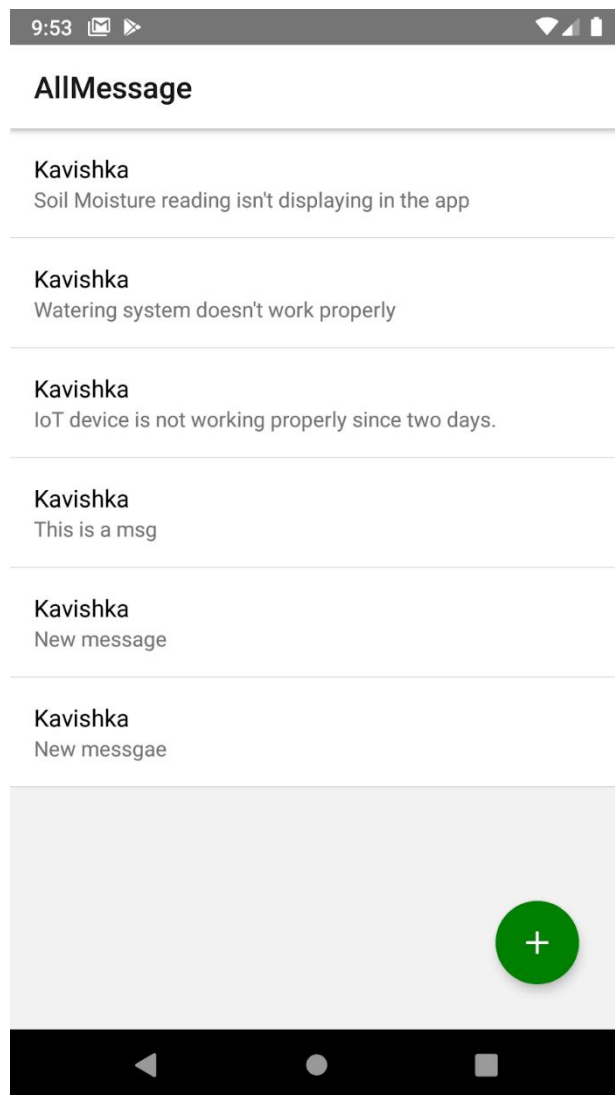
Users who are already signed up , can login to the account using this . If you are not signed up you can navigate to the signup page by clicking appropriate text .

## Profile



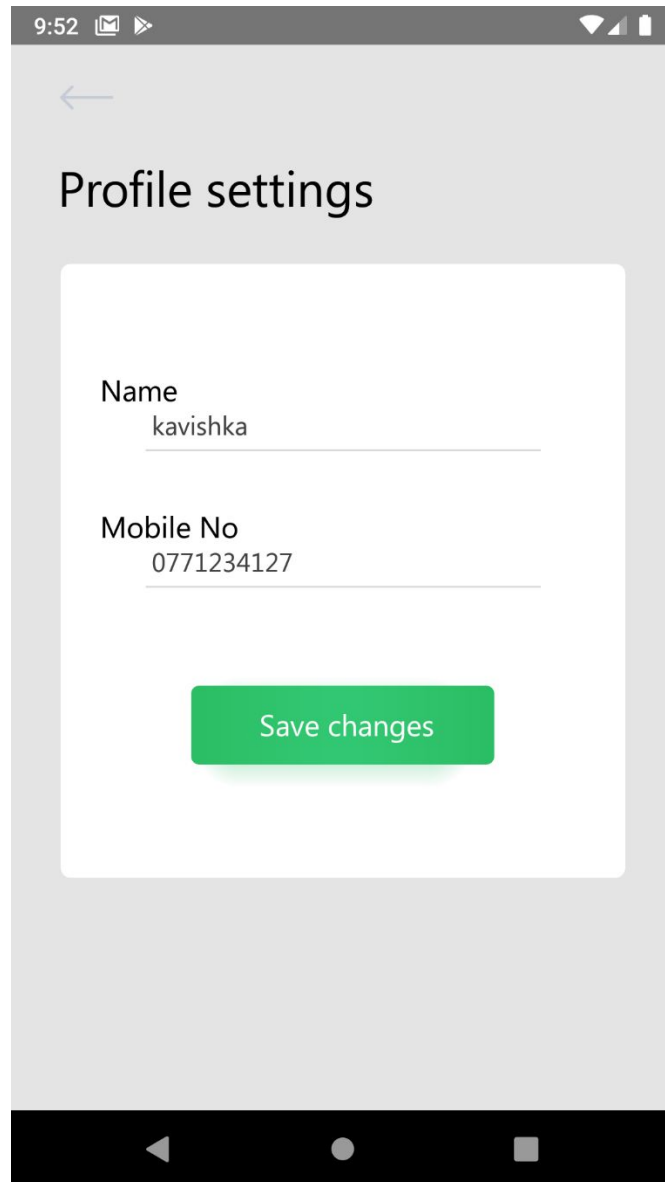
You can see the information related to your account using this screen. There are two buttons at the bottom to navigate to account settings screen and profile settings screen

## Chat



This screen shows all the recent chats of the user

## Profile settings



A screenshot of a mobile application's 'Profile settings' screen. The screen has a light gray background. At the top, there is a dark gray status bar showing the time '9:52' and icons for mail, play, Wi-Fi, and battery. Below the status bar is a light gray header area with a back arrow icon on the left and the title 'Profile settings' in the center. The main content area is a white rounded rectangle containing two form fields. The first field is labeled 'Name' and has the text 'kavishka' entered. The second field is labeled 'Mobile No' and has the text '0771234127' entered. Below these fields is a green button with the text 'Save changes'. At the bottom of the screen is a black navigation bar with three icons: a back arrow, a circle, and a square.

9:52

←

Profile settings

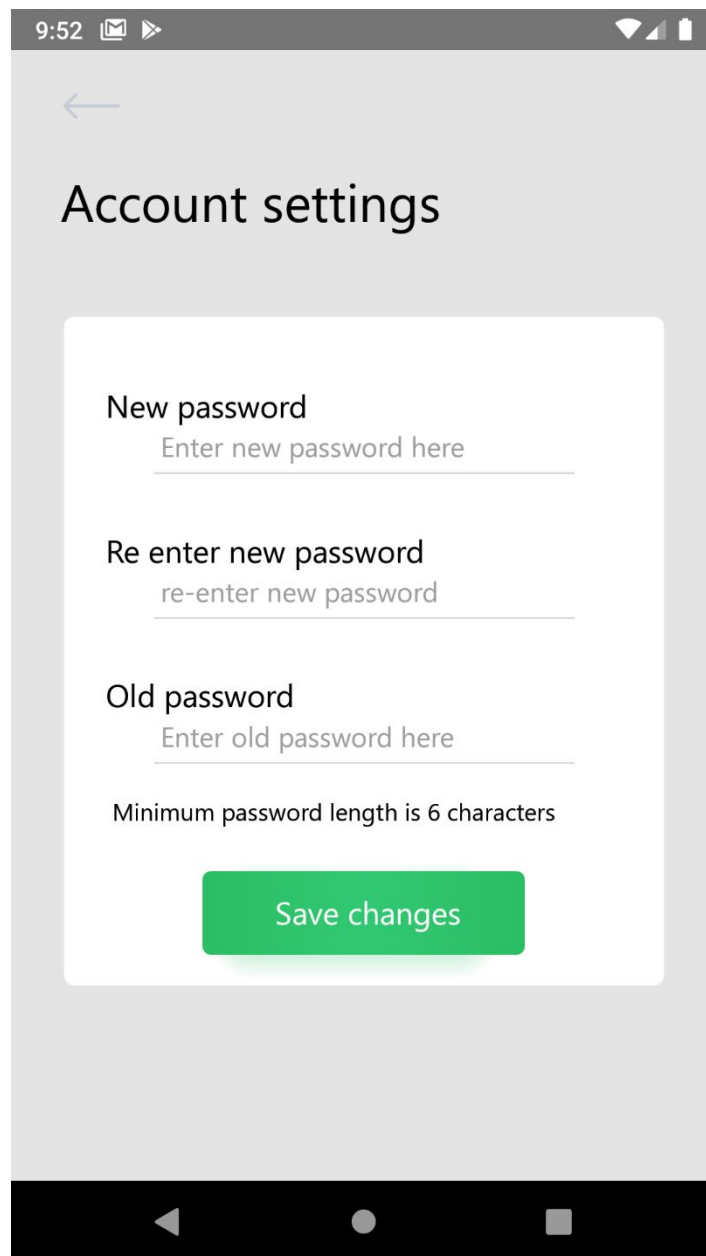
Name  
kavishka

Mobile No  
0771234127

Save changes

Using this screen users can change their username and mobile number

## Account settings



The image shows a mobile application screen titled "Account settings". At the top, there is a status bar with the time "9:52" and icons for mail, play, Wi-Fi, and battery. Below the status bar is a navigation bar with a back arrow. The main title "Account settings" is displayed in a large font. Below the title, there is a white card containing three password input fields. The first field is labeled "New password" with a placeholder "Enter new password here". The second field is labeled "Re enter new password" with a placeholder "re-enter new password". The third field is labeled "Old password" with a placeholder "Enter old password here". Below these fields, there is a text label "Minimum password length is 6 characters". At the bottom of the card is a green button labeled "Save changes". The screen is framed by a black Android navigation bar at the bottom.

9:52

←

## Account settings

New password  
Enter new password here

Re enter new password  
re-enter new password

Old password  
Enter old password here

Minimum password length is 6 characters

Save changes

Using this screen users can change their password by providing older password



## Link units

9:48

Link units

Unit ID

Enter unit ID here

Device name

unique name for a device

Plant type

Chiily

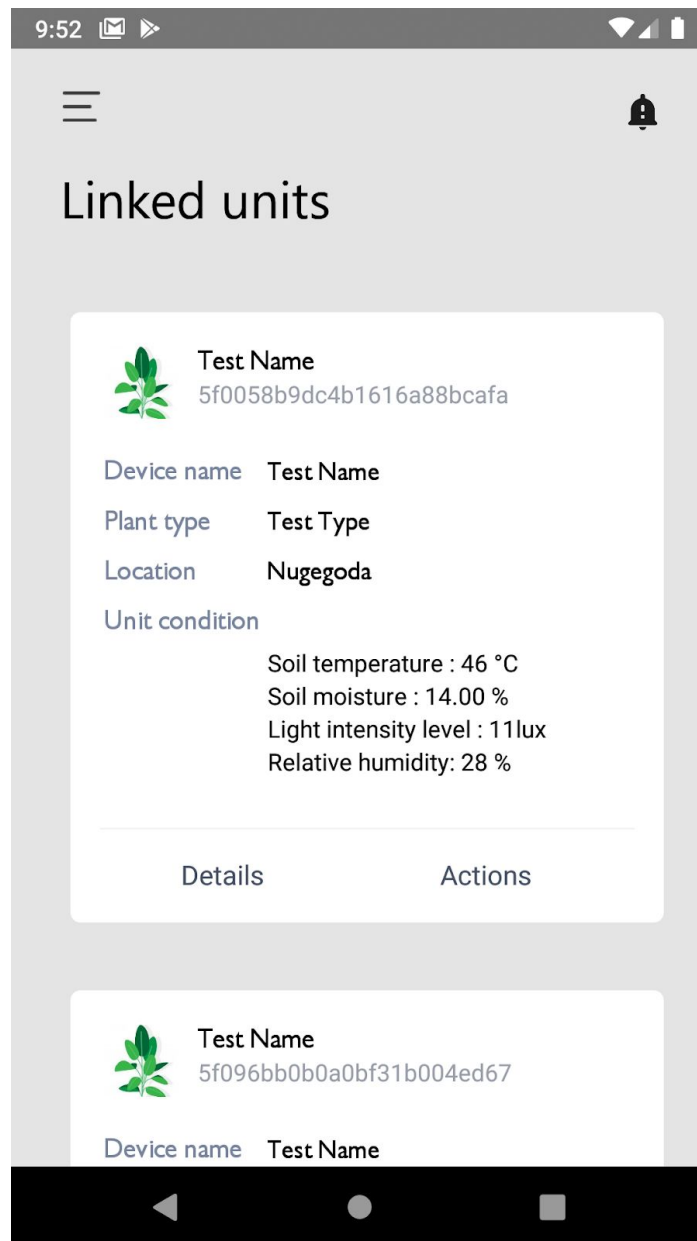
Location

Ampara

Save changes

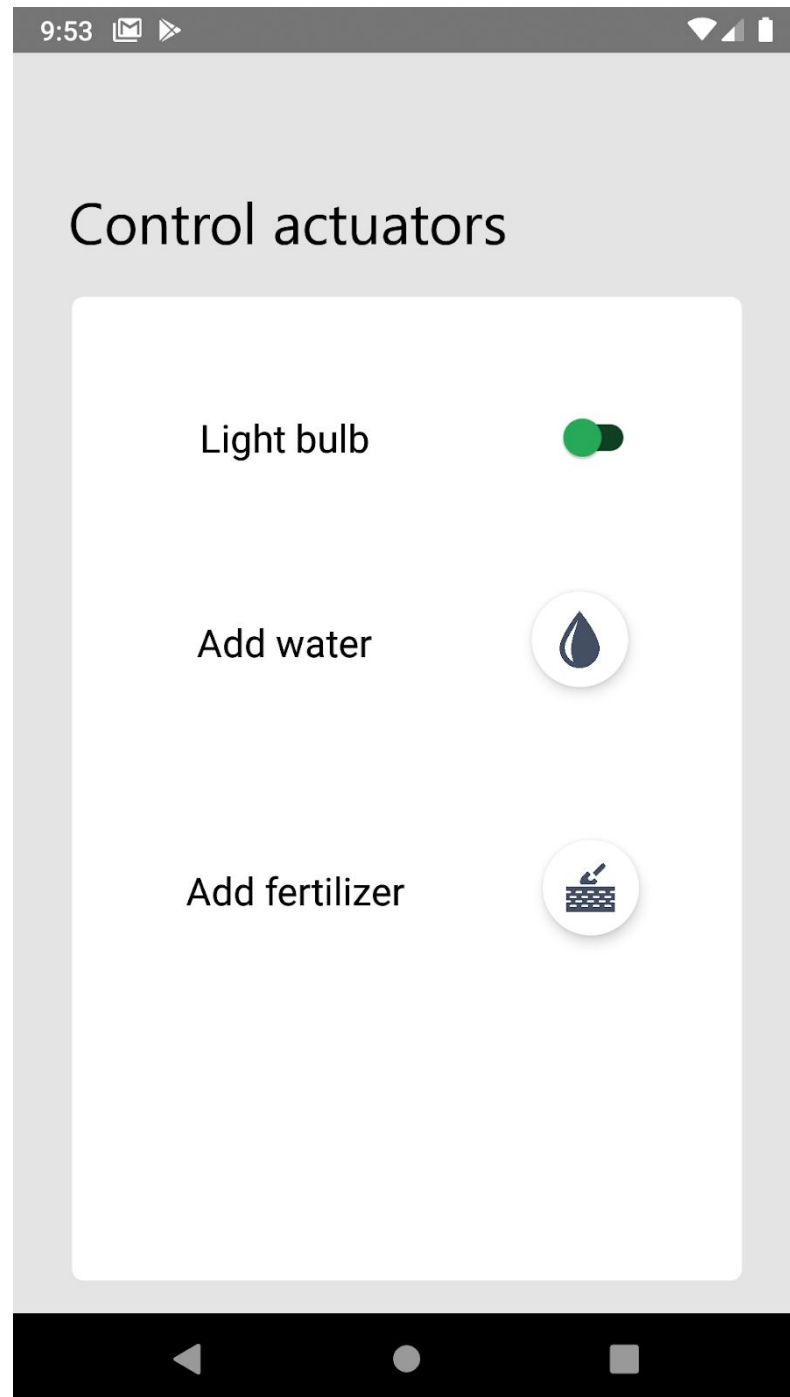
This screen helps users to add new IoT device to the account. Users should add the purchased device to the account to monitor and control them.

## Linked units



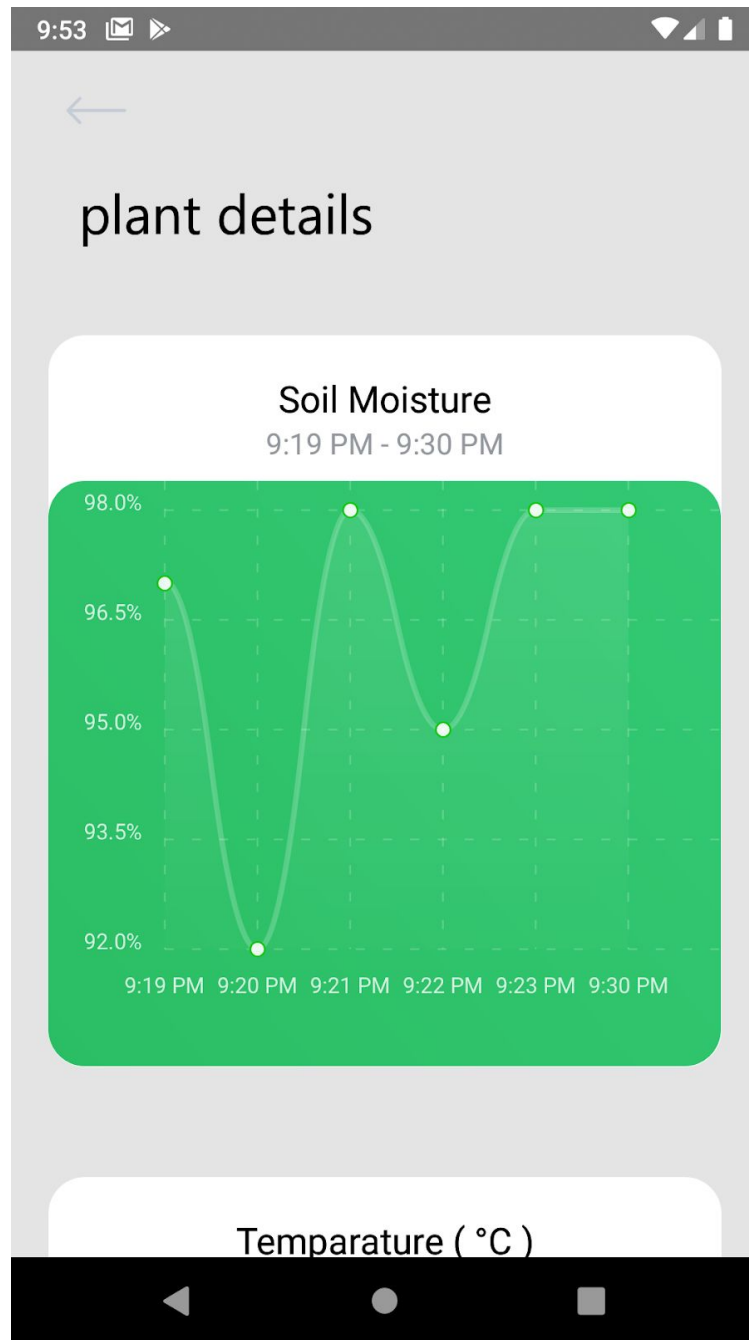
This screen shows all the IoT devices connected to the users account . Each of these cards shows details related to one IoT device. Each card has Details button and Actions button at the bottom. Actions button navigates into the control actuators screen and details button navigates to the view more details screen related to the IoT device.

## Control actuators



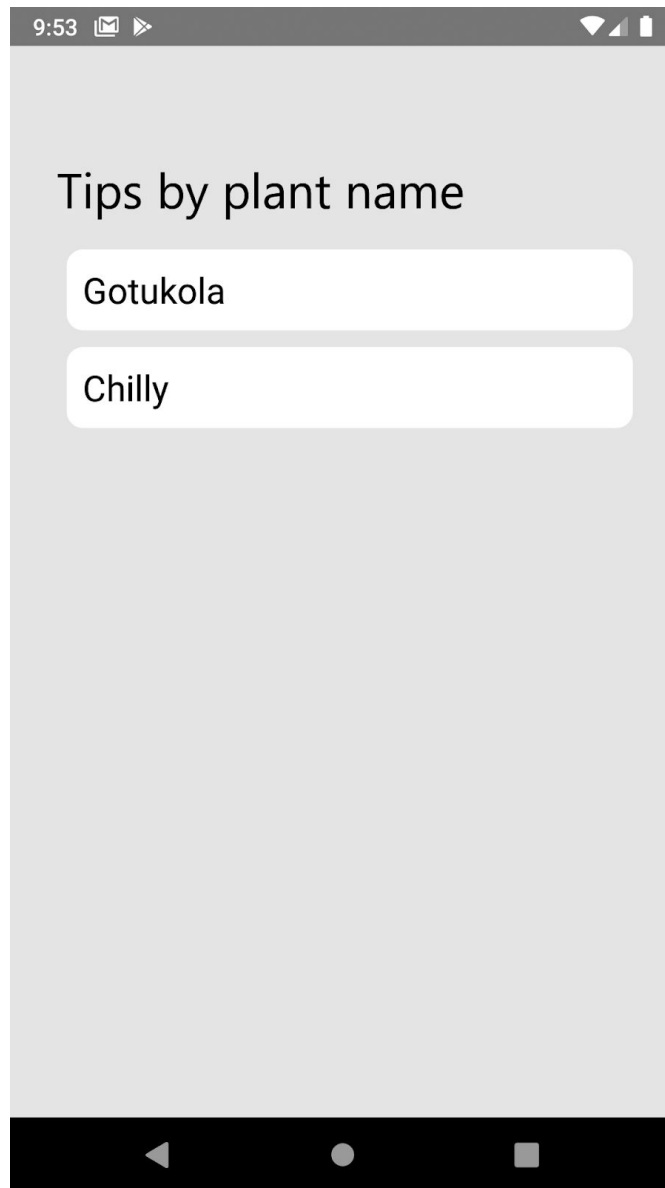
This screens allows users to control actuators which are connected with the plant

## Plant details



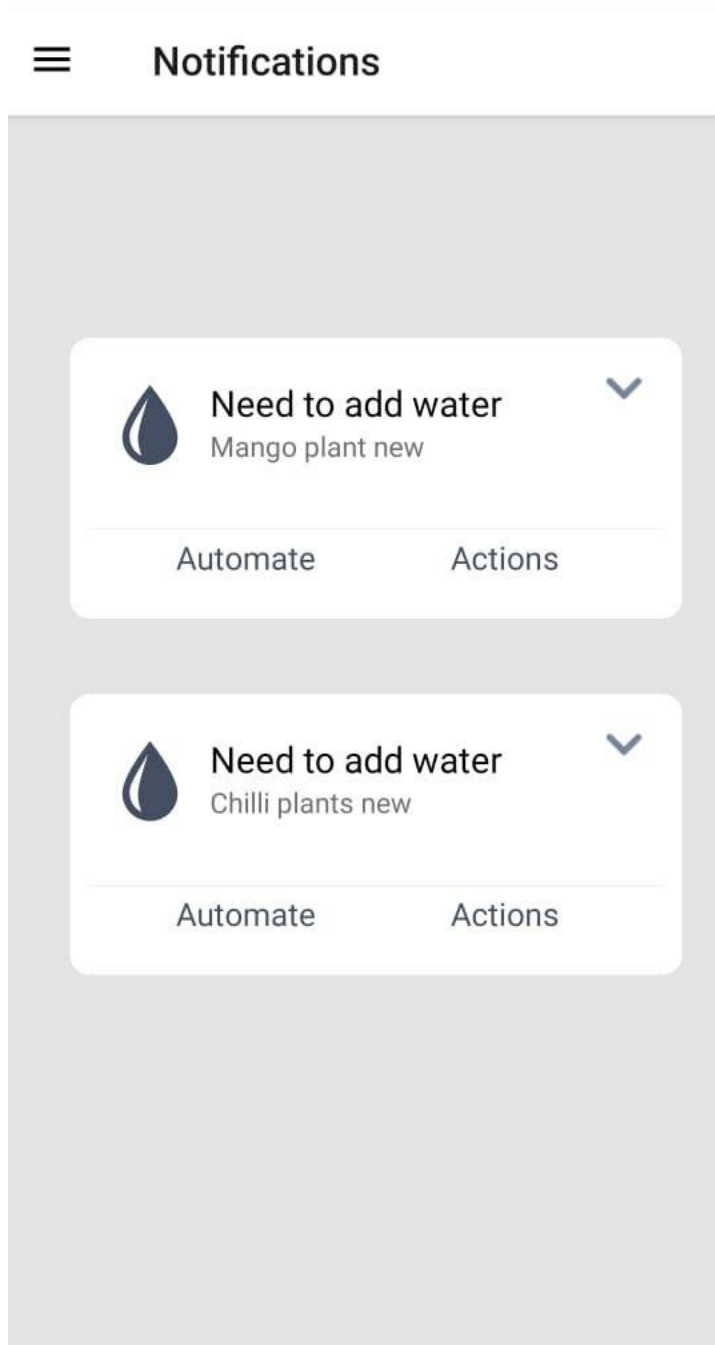
This screens shows some additional details related to the IoT device

## Planting tips



This screen shows all the plant types connected to the units already linked . By clicking on them you view tips related to those specific plant.

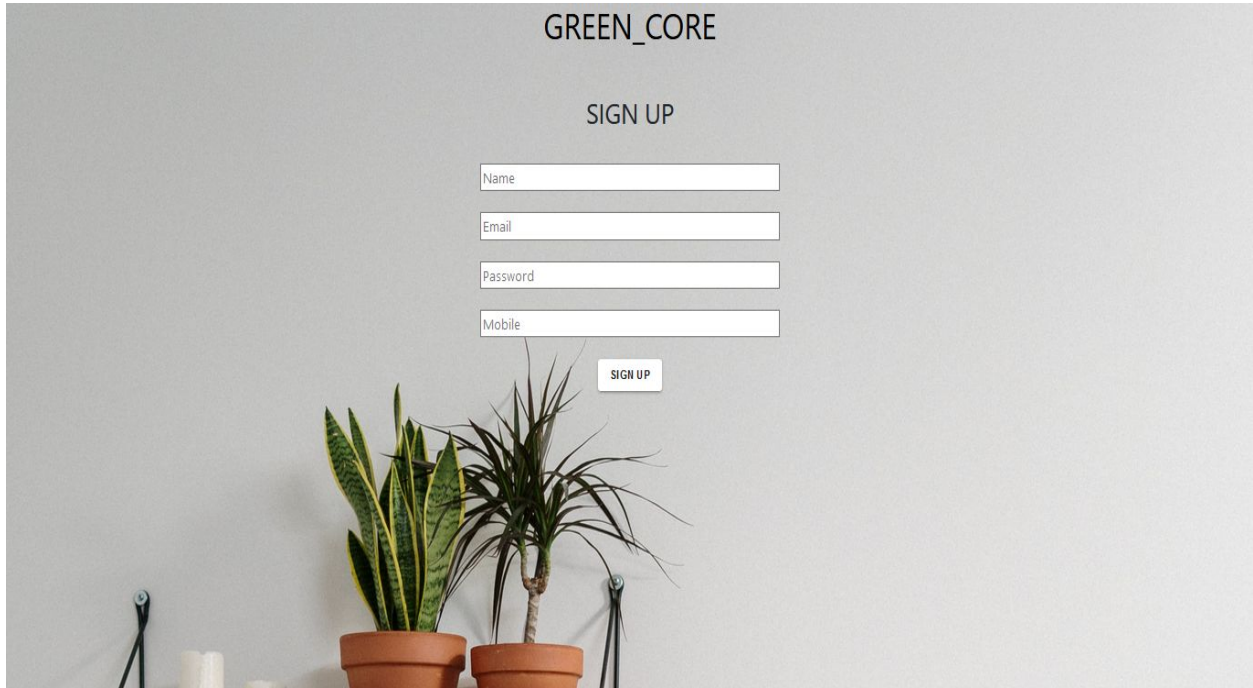
## Notifications



This screen shows notifications related to all the units owned by the user. User can automate the notification related actuator to prevent future notifications or Control the actuator manually by clicking Actions button

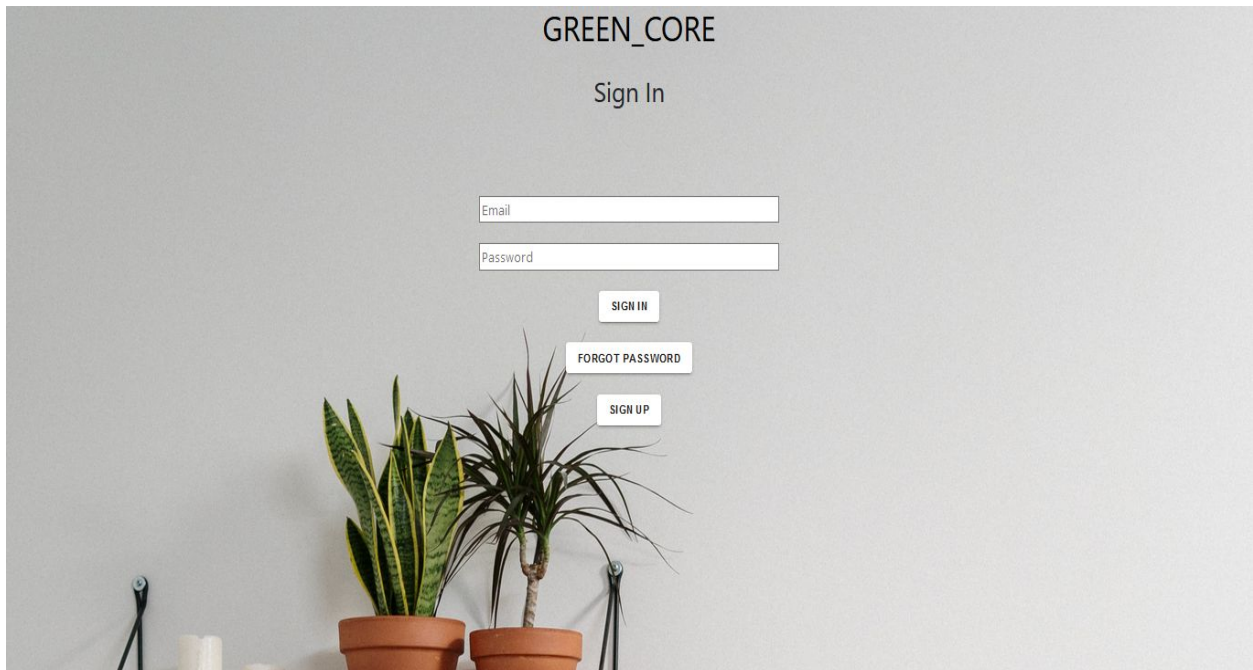
# Web Application Manual

## 1. User sign up

A screenshot of a web application's sign-up page. The background is a light gray wall with two potted plants (a snake plant and a spiky plant) and some black cables at the bottom. The text 'GREEN\_CORE' is centered at the top in a bold, black, sans-serif font. Below it, 'SIGN UP' is centered in a smaller, black, sans-serif font. There are four white input fields stacked vertically, each with a label on the left: 'Name', 'Email', 'Password', and 'Mobile'. Below the 'Mobile' field is a small, white rectangular button with the text 'SIGN UP' in black, sans-serif font.

New Administrators can register to the Green-Core Web Application using this screen. An administrator can register to the system by giving valid email, name, password and mobile number.

## 2. User Sign In



GREEN\_CORE

Sign In

Email

Password

SIGN IN

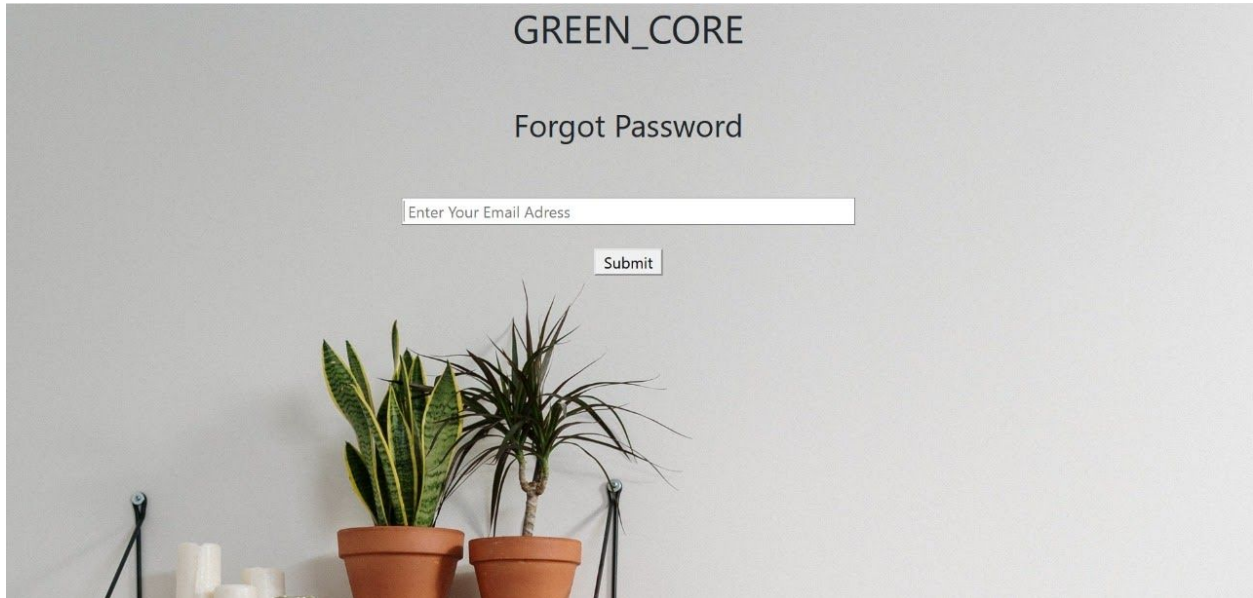
FORGOT PASSWORD

SIGN UP

Already existing administrators and newly registered administrators can log in to Green-core web application by entering correct email and password

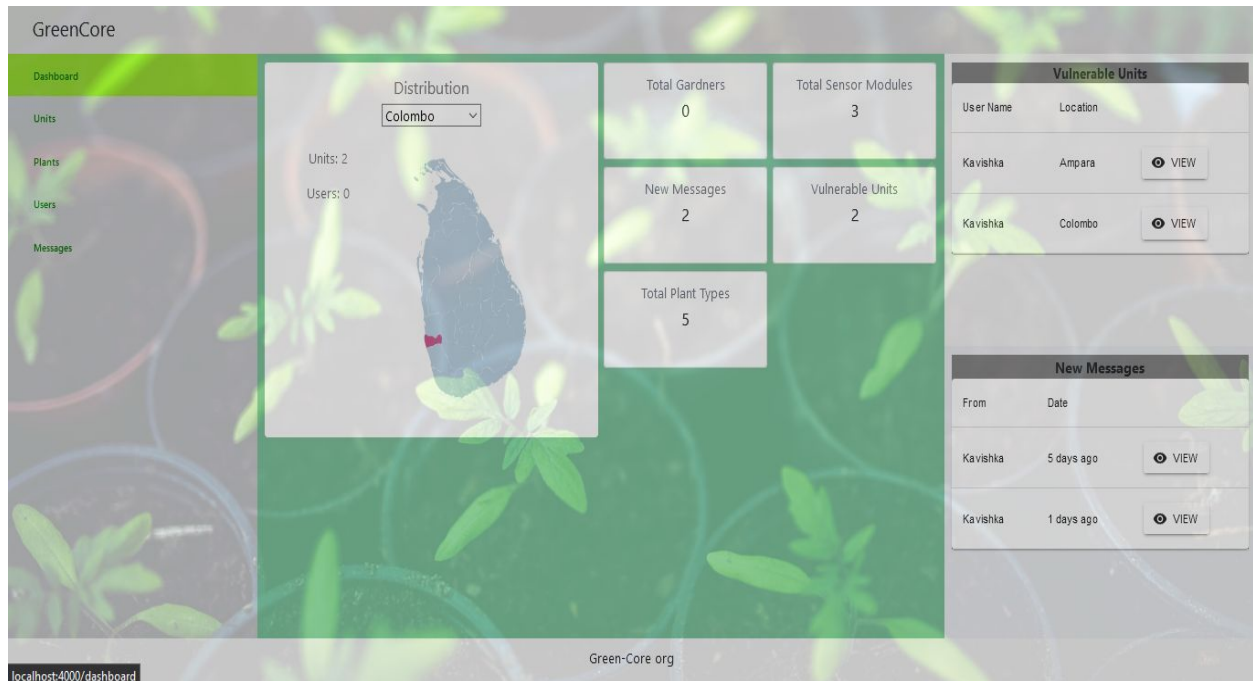


### 3. Forgot Password



In case the user (administrator) forgot password, user can reset password by providing valid email address used by user. Email with verification token will be sent to the user's email account user can reset password with provided token.

## 4. Dashboard



Users will be directed to the dashboard screen after successful sign in.

Users can see the districts wise IoT sensor Unit's location in the shown Sri Lanka Map. Total number of Gardeners, Total number of Sensor modules, Number of new messages, Number of vulnerable units detected, Total number of plant tips available can also be viewed in the Dashboard screen.

On the left side of the screen, the user can see the navigation side menu. On the right side of screen user can see new messages that sent from mobile app users and vulnerable units detected by system

## 5. Messages

### View All Messages

All Messages			
From	To	Date	
Kavishka	Admin	8/10/2020	<a href="#">VIEW</a>
Admin	Kavishka	8/10/2020	<a href="#">VIEW</a>
Kavishka	Admin	8/10/2020	<a href="#">VIEW</a>
Admin	Kavishka	8/10/2020	<a href="#">VIEW</a>
Admin	Kavishka	8/10/2020	<a href="#">VIEW</a>
Kavishka	Admin	8/10/2020	<a href="#">VIEW</a>
Kavishka	Admin	6/07/2020	<a href="#">VIEW</a>
Admin	Kavishka	8/10/2020	<a href="#">VIEW</a>

Vulnerable Units	
User Name	Location
Kavishka	Ampara <a href="#">VIEW</a>
Kavishka	Colombo <a href="#">VIEW</a>

New Messages	
From	Date
Kavishka	5 days ago <a href="#">VIEW</a>
Kavishka	1 days ago <a href="#">VIEW</a>

User can see all conversations had with Mobile App users and Admins.

### New Messages

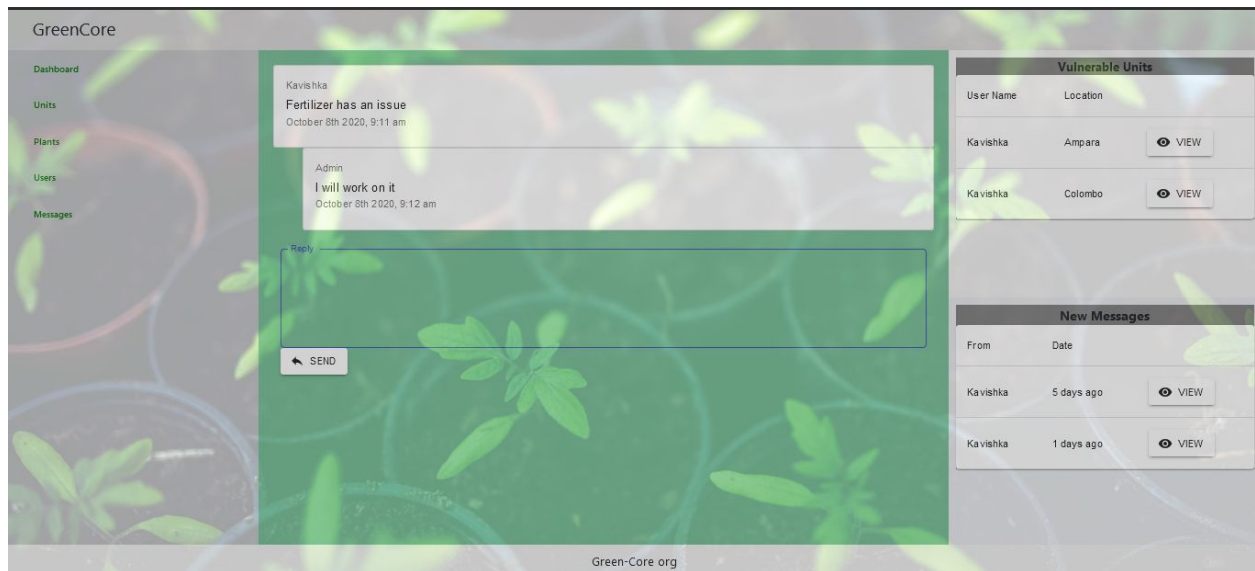
New Messages				
From	Date	Created At	Updated At	
Kavishka	5 days ago	9/10/2020	4/10/2020	<a href="#">VIEW</a>
Kavishka	1 days ago	9/10/2020	8/10/2020	<a href="#">VIEW</a>

Vulnerable Units	
User Name	Location
Kavishka	Ampara <a href="#">VIEW</a>
Kavishka	Colombo <a href="#">VIEW</a>

New Messages	
From	Date
Kavishka	5 days ago <a href="#">VIEW</a>
Kavishka	1 days ago <a href="#">VIEW</a>

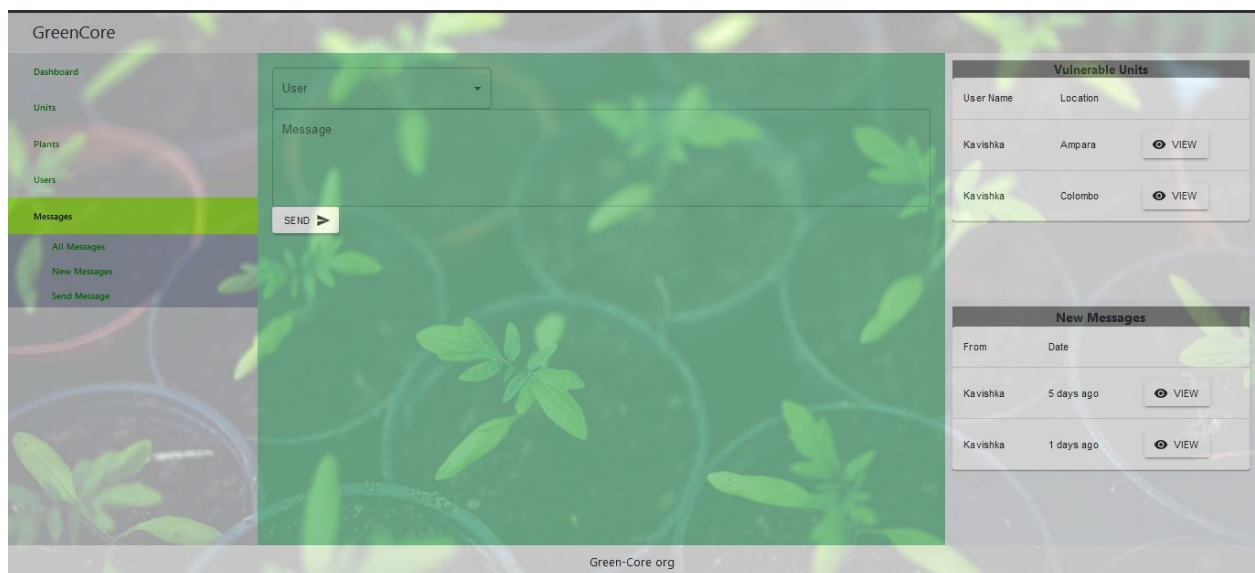
User can see all the new messages sent by Mobile App users

## View Single Message



Single Conversation in detailed view

## Send Messages



User can send messages to Mobile App users to help them with their issues.

## 6. Units

### View all units

GreenCore

Dashboard

Units

All Units

Vulnerable Units

Plants

Users

Messages

User Name	Location	Created At	Updated At	
Kavishka	Colombo	4/07/2020	8/10/2020	<a href="#">VIEW</a>
Kavishka	Ampara	4/07/2020	7/07/2020	<a href="#">VIEW</a>
Kavishka	Colombo	4/07/2020	7/07/2020	<a href="#">VIEW</a>

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Vulnerable Units

User Name	Location	
Kavishka	Ampara	<a href="#">VIEW</a>
Kavishka	Colombo	<a href="#">VIEW</a>

New Messages

From	Date	
Kavishka	5 days ago	<a href="#">VIEW</a>
Kavishka	1 days ago	<a href="#">VIEW</a>

View All using sensor modules in Green-Core system

### View single unit

GreenCore

Dashboard

Units

Plants

Users

Messages

Basic Details

User Name: KAVISHKA

Location: COLOMBO

Created At: 4/07/2020

Updated At: 8/10/2020

[VIEW USER](#)

Soil Moisture Sensor Details

Temperature Sensor Details

Light Intensity Sensor Details

Humidity Details

Water Motor Actuator Details

Light Actuator Details

Green-Core.org

Vulnerable Units

User Name	Location	
Kavishka	Ampara	<a href="#">VIEW</a>
Kavishka	Colombo	<a href="#">VIEW</a>

New Messages

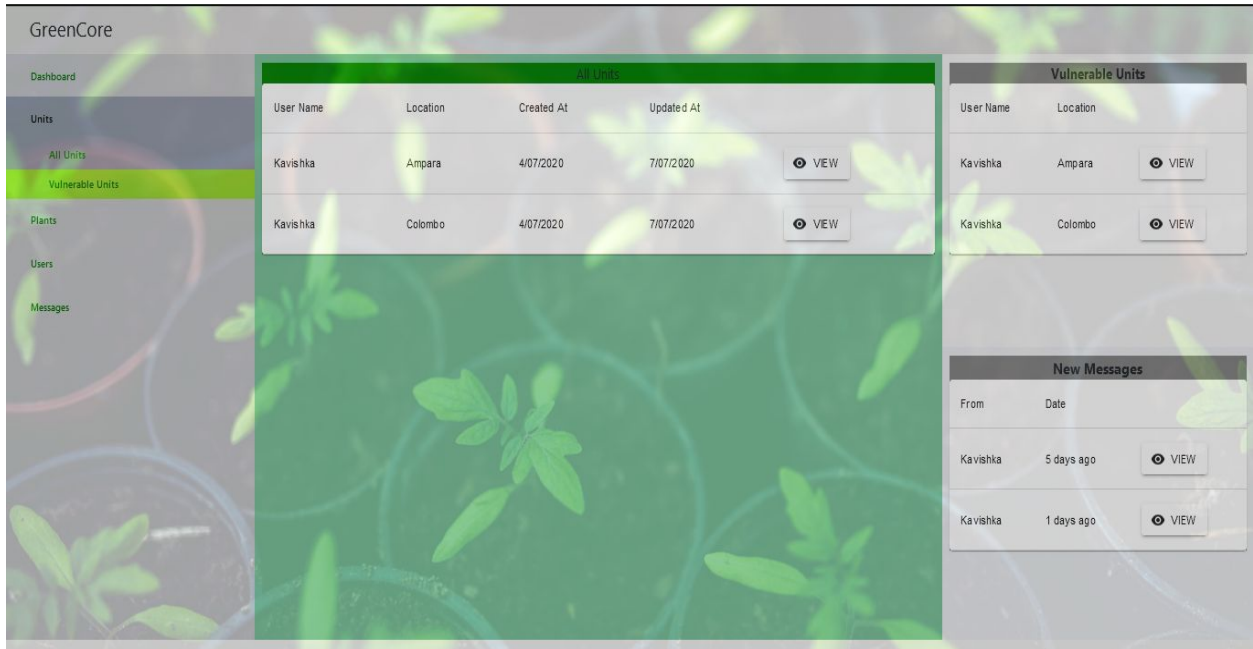
From	Date	
Kavishka	5 days ago	<a href="#">VIEW</a>
Kavishka	1 days ago	<a href="#">VIEW</a>

User can see more details about the sensor module 's performance by selecting the view button.



## 7. Vulnerable units

### View All vulnerable units



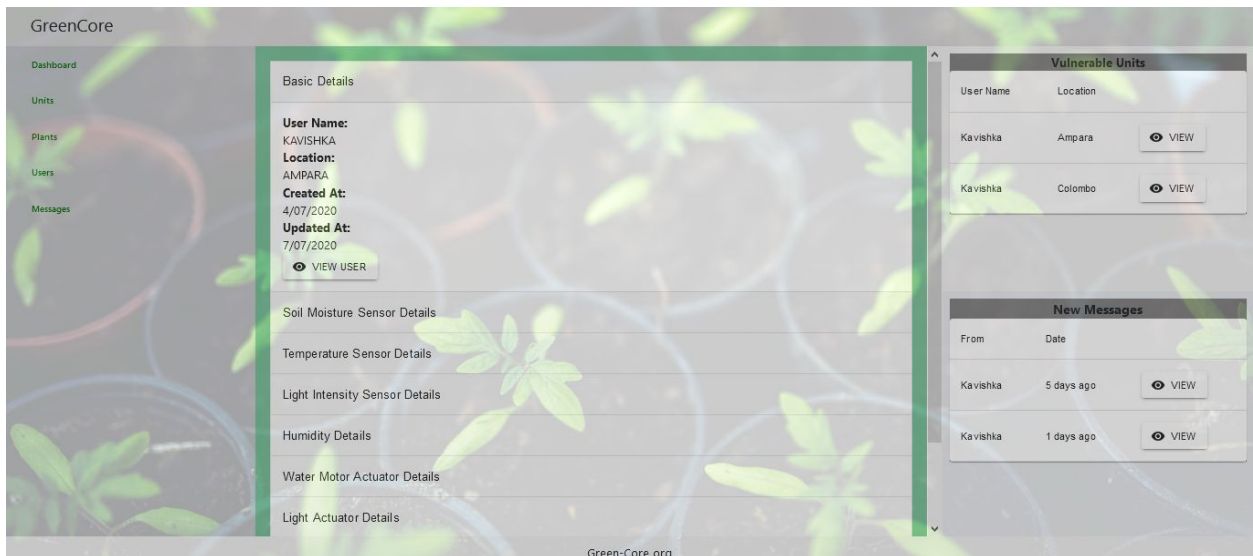
All Units				
User Name	Location	Created At	Updated At	
Kavishka	Ampara	4/07/2020	7/07/2020	<a href="#">VIEW</a>
Kavishka	Colombo	4/07/2020	7/07/2020	<a href="#">VIEW</a>

Vulnerable Units	
User Name	Location
Kavishka	Ampara
Kavishka	Colombo

New Messages	
From	Date
Kavishka	5 days ago
Kavishka	1 days ago

System will detect Sensor modules that not working properly and show up in this screen as vulnerable units.

### View single vulnerable units



Basic Details	
User Name:	KAVISHKA
Location:	AMPARA
Created At:	4/07/2020
Updated At:	7/07/2020
<a href="#">VIEW USER</a>	

Vulnerable Units	
User Name	Location
Kavishka	Ampara
Kavishka	Colombo

New Messages	
From	Date
Kavishka	5 days ago
Kavishka	1 days ago

User can see the detailed view of vulnerable units and take necessary actions regarding it

## 8. Users

### View All users

GreenCore			
	Name	Email	Role
	Niroshana	a@a.com	admin
	Amal	a@d.com	admin
	kavishka	kavishka@gmail.com	user
	nimal	nimal@gmail.com	user
	nimal	nimal@gmail.com	user
	sarath	sarath@gmail.com	user
	saradi	saradi@gmail.com	user
	nuwan	nuwan@gmail.com	user

Vulnerable Units	
User Name	Location
Kavishka	Ampara
Kavishka	Colombo

New Messages	
From	Date
Kavishka	5 days ago
Kavishka	1 days ago

All the users in the Green-Core system.

### View single user

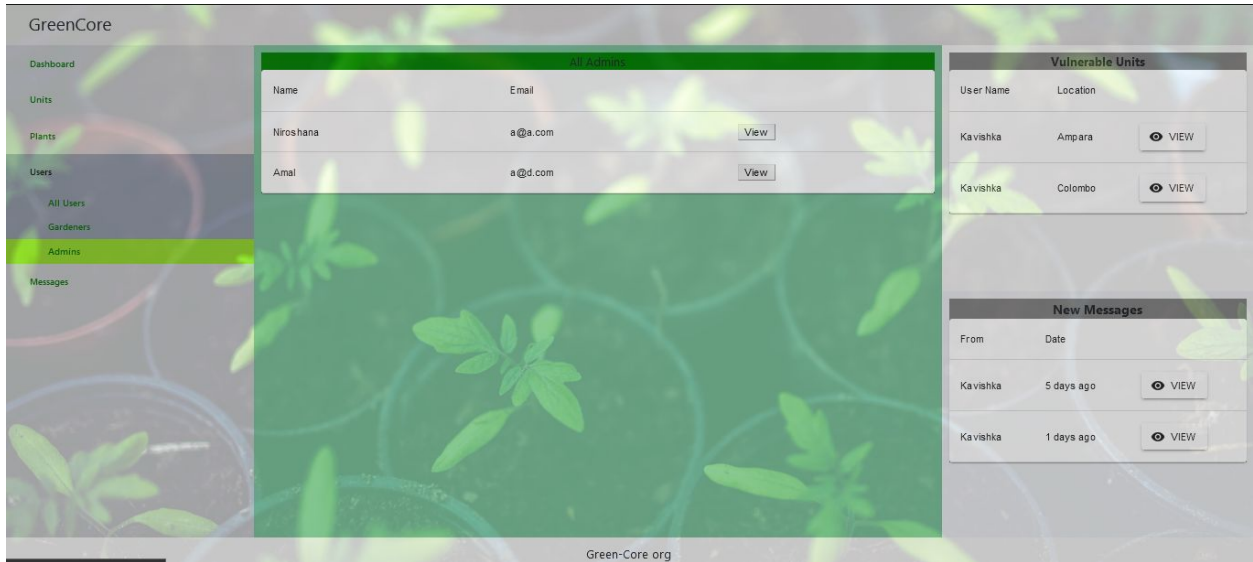
GreenCore	
	NIROSHANA
	a@a.com
	admin

Vulnerable Units	
User Name	Location
Kavishka	Ampara
Kavishka	Colombo

New Messages	
From	Date
Kavishka	5 days ago
Kavishka	1 days ago

Profile view of User in Green-Core System

## View Admins



The screenshot displays the GreenCore web application interface. The sidebar on the left contains a navigation menu with the following items: Dashboard, Units, Plants, Users, All Users, Gardeners, Admins (highlighted), and Messages. The main content area is titled 'All Admins' and features a table with the following data:

Name	Email	
Niroshana	a@a.com	<a href="#">View</a>
Amal	a@d.com	<a href="#">View</a>

The right sidebar contains two sections: 'Vulnerable Units' and 'New Messages'. The 'Vulnerable Units' section has a table with the following data:

User Name	Location	
Kavishka	Ampara	<a href="#">VIEW</a>
Kavishka	Colombo	<a href="#">VIEW</a>

The 'New Messages' section has a table with the following data:

From	Date	
Kavishka	5 days ago	<a href="#">VIEW</a>
Kavishka	1 days ago	<a href="#">VIEW</a>

The footer of the application shows 'Green-Core.org'.

User can see all administrators that have access to web application by selecting Admins submenu under Users in the sidebar navigation menu.



## 9. Plants

GreenCore

Dashboard

Units

Plants

All Plants

Users

Messages

### Plants

Plant	Number of users	Number of tips	Actions
Daspethiya	0	1	<a href="#">VIEW</a>
Banana	0	1	<a href="#">VIEW</a>
Chilli	0	2	<a href="#">VIEW</a>
Gotukola	0	2	<a href="#">VIEW</a>
Tomato	0	1	<a href="#">VIEW</a>

### Vulnerable Units

User Name	Location	
Kavishka	Ampara	<a href="#">VIEW</a>
Kavishka	Colombo	<a href="#">VIEW</a>

### New Messages

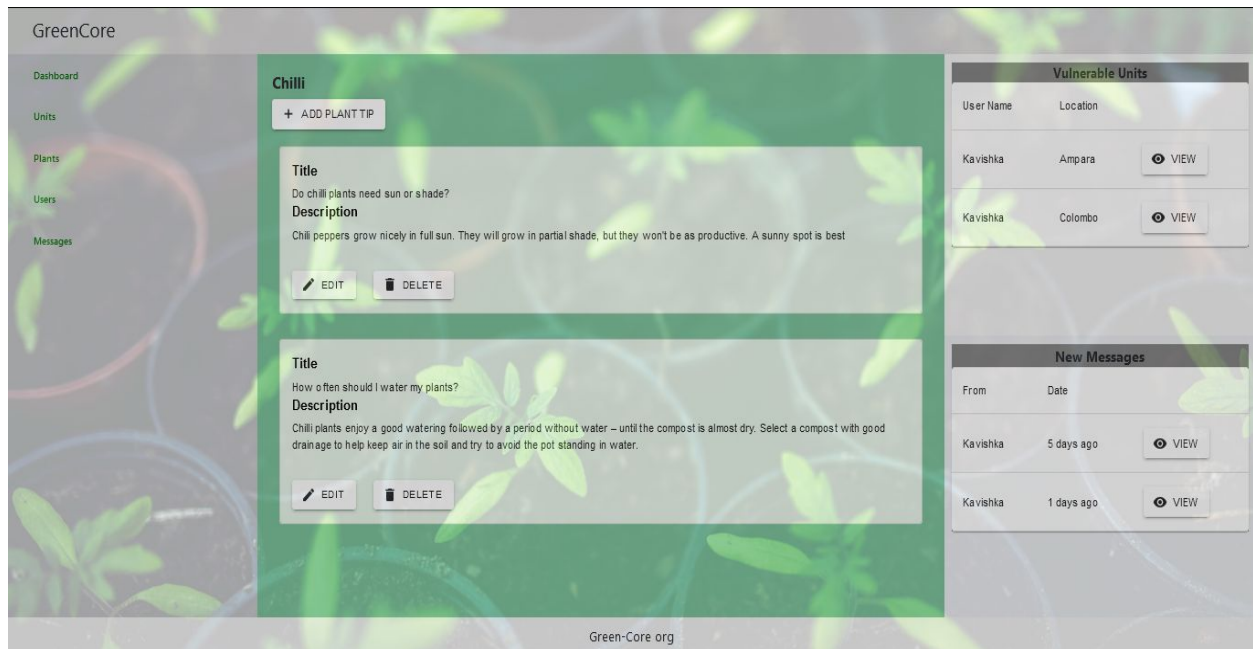
From	Date	
Kavishka	5 days ago	<a href="#">VIEW</a>
Kavishka	1 days ago	<a href="#">VIEW</a>

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User can navigate to Plants Screen by clicking All plants menu in the sidebar. User will see the list of plants currently available in the system and number of tips,, number of users who have that plant type .

## 10. Plant Tips

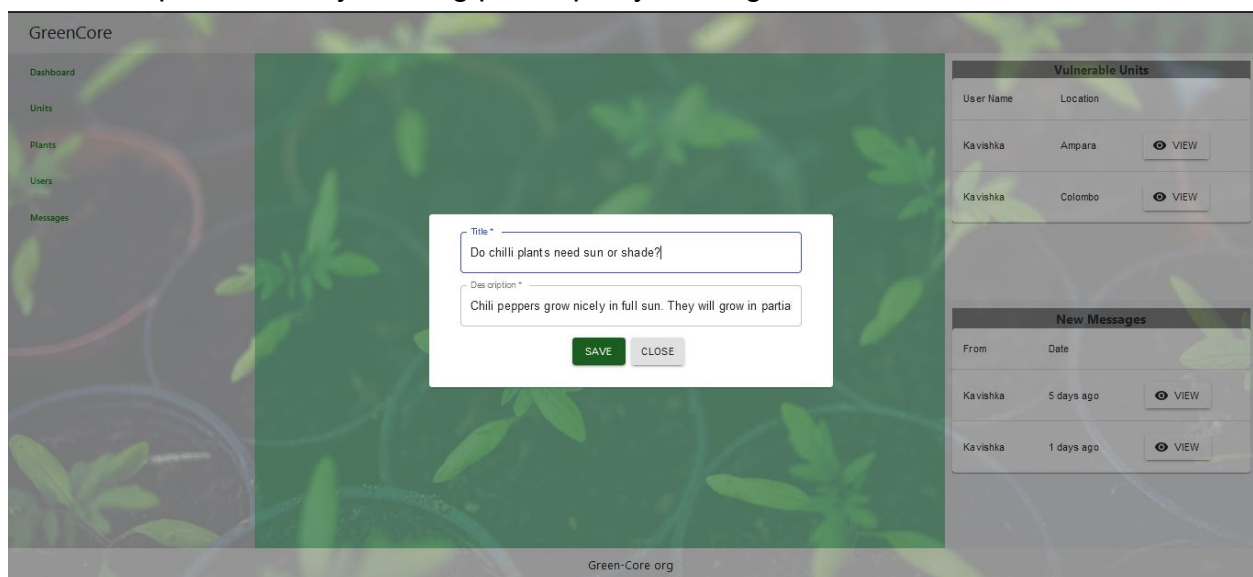
### View Plant tips



User can select plant type and click 'VIEW' to see all plant tips relevant to that plant type. User can see all the plant tips that mobile users can see using the mobile application.

### Update plant tip

User can update already existing plant tips by clicking the 'UPDATE' button.



## Add new plant tip

The screenshot shows the GreenCore dashboard with a sidebar menu on the left containing 'Dashboard', 'Units', 'Plants', 'Users', and 'Messages'. The main content area is a green field with a plant background. A white modal form is centered, prompting for a 'Title \*' and 'Description \*'. Below the form are 'SAVE' and 'CLOSE' buttons. On the right, there are two sections: 'Vulnerable Units' with a table of user locations and 'New Messages' with a table of recent messages.

Vulnerable Units	
User Name	Location
Kavishka	Ampara
Kavishka	Colombo

New Messages	
From	Date
Kavishka	5 days ago
Kavishka	1 days ago

User can add new plant tips by clicking the 'ADD PLANT TIP' button. A prompt box will be prompt and add new plant tips to the system by giving a Tip topic and description.

## Delete plant tip

The screenshot shows the GreenCore dashboard with the same sidebar and background as the previous image. A white modal form is centered, displaying the confirmation message 'Are you sure you want to delete the plant tip?' with 'YES' and 'NO' buttons. The right sidebar sections remain the same.

Vulnerable Units	
User Name	Location
Kavishka	Ampara
Kavishka	Colombo

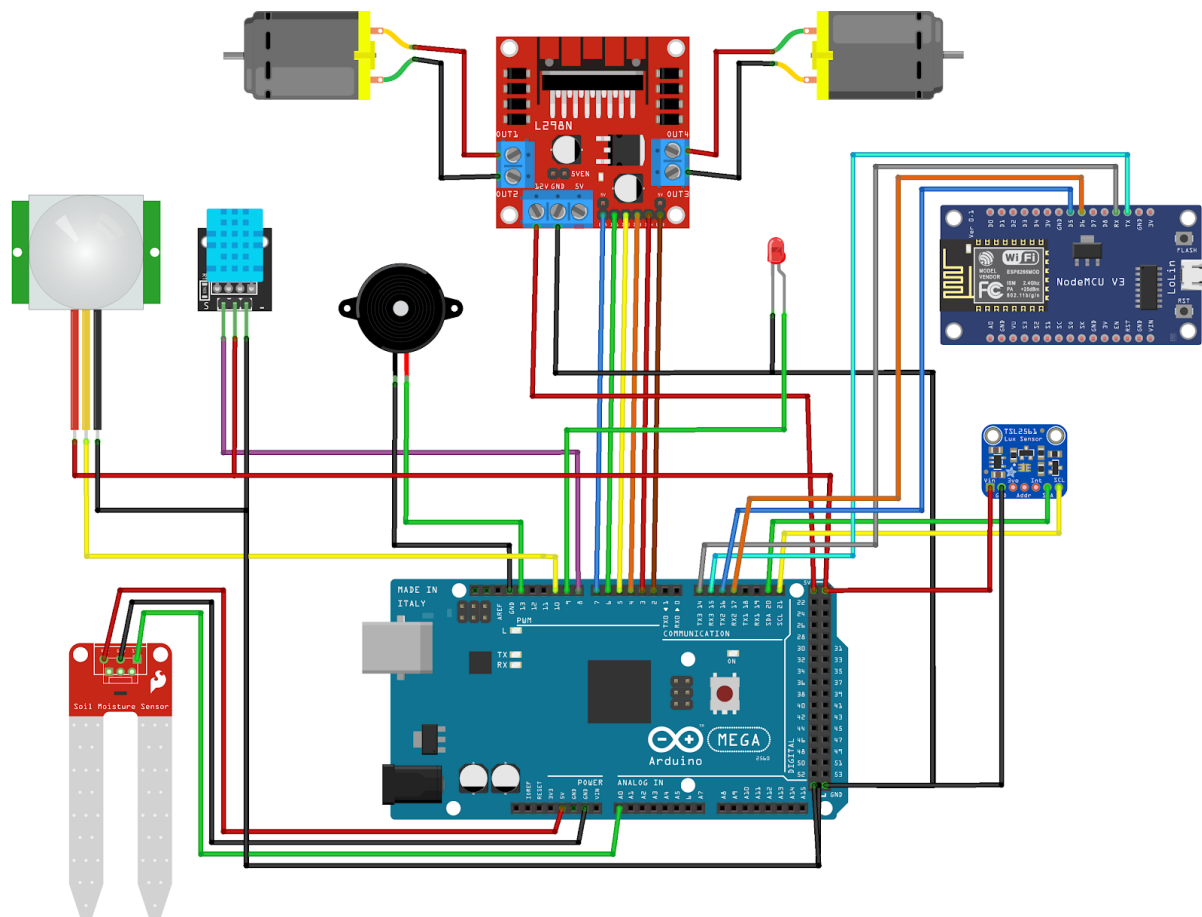
New Messages	
From	Date
Kavishka	5 days ago
Kavishka	1 days ago

User can select 'YES' to delete the plant tip. User can select 'NO' to stop deleting plant tip.(IN case of user select delete button by mistake.

## IoT device Manual

User Manual

Schematic Diagram

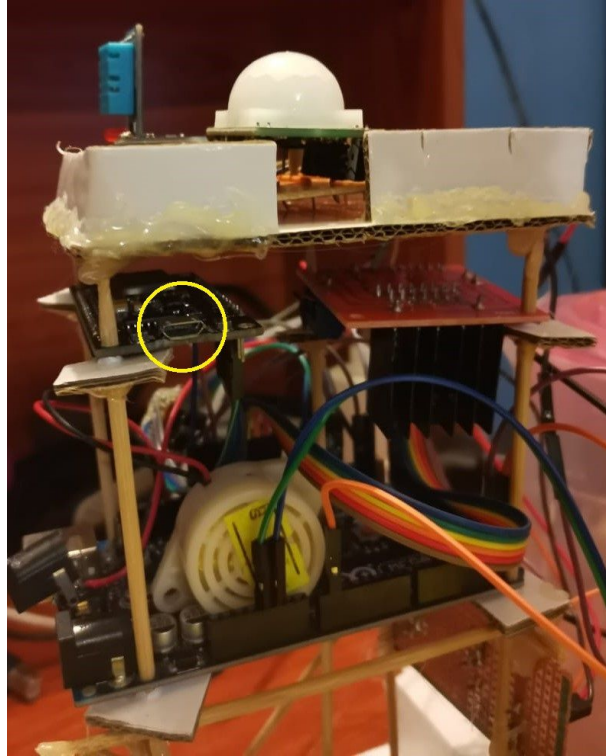
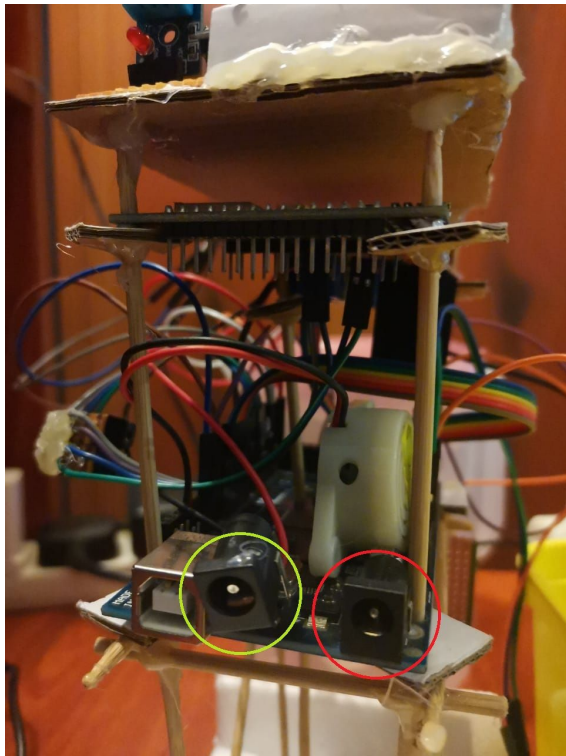


fritzing

User will be provided with an IoT device which contains the following items,

- Device - 1
- 12v AC-DC Adapters - 2
- USB Type-A Connector - 1

Steps to connect the device



Step 1 - Connect one 12v AC-DC Adapter to the port circled in red in the first image

Step 2 - Connect the other 12v AC-DC Adapter to the port circled in green in the first image

Step 3 - Connect the USB Type-A Connector to the port circled in yellow in second image

Step 4 - Switch on the two adapters and the USB Connector.

Step 5 - Complete the steps of the mobile app to connect the device to the mobile app.