

Tree Inspection Kit App Software Manual

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1 Introduction

The Tree Inspection Kit application is designed to record and evaluate travel time measured by the TIK device on trees, so that the data is stored in the cloud through a user.

2 Login and User Registration Screen

Upon launching the application, you will be greeted with the login screen, which will display the application logo along with a welcoming animation.

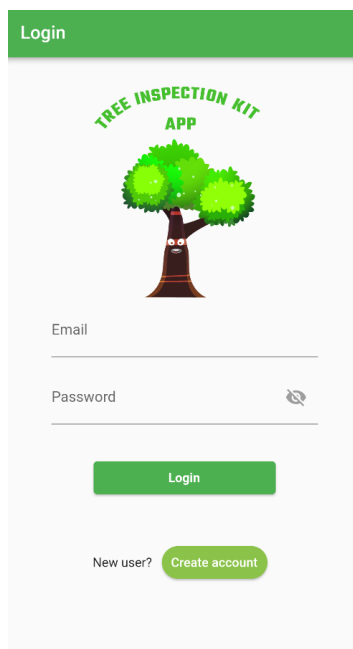


Figure 1: Login Screen - Tree Inspection Kit App

2.1 Login

This section consists of two input elements:

- **Email:** The email address associated with the user's registered account.
- **Password:** The password associated with the user's email for registration.

Once both fields are filled in, the user can log in. Both fields must be correct for the login to be processed.

2.2 Registration

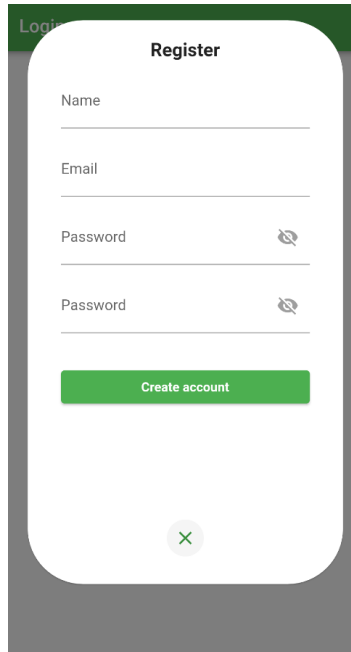
The image shows a mobile app registration form. At the top, there's a green header with the word 'Login' partially visible. The form itself is a white rounded rectangle with a green title bar that says 'Register'. Below the title bar, there are four input fields: 'Name', 'Email', 'Password', and 'Password'. Each input field has a green underline. To the right of each 'Password' field is a small eye icon. Below the input fields is a green button with the text 'Create account'. At the bottom right of the form is a small green circle with a white 'X' inside, likely a close button.

Figure 2: Registration Form - Tree Inspection Kit App

To access the registration form, you need to click on the "Create Account" section in 1 ([Login Screen - Tree Inspection Kit App](#)). This section consists of a floating dialogue that opens for the user, displaying the following input elements:

- **Name:** User's name.
- **Email:** Registration email to access the application later.
- **Password:** Password to be used by the user.
- **Confirm Password:** Password field used to verify if the passwords match.

3 Main Screen

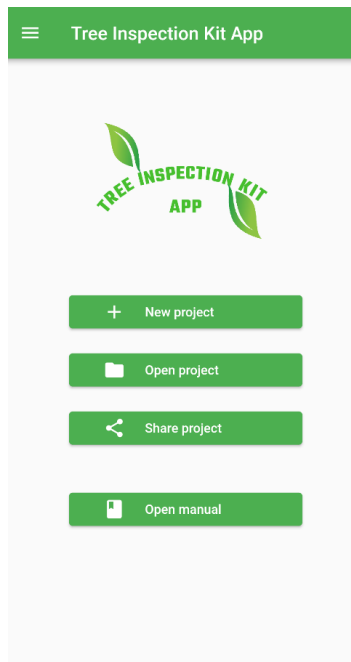


Figure 3: Main Screen - Tree Inspection Kit App

On the main screen, you will find the following elements:

- **Logo:** Application logo.
- **New Project:** Creates a new project by opening a floating dialogue to set the name. By default, the name will be the current date based on the user's time zone.
- **Open Project:** Opens an existing project, which the user must select from the provided list. The list includes all the projects that the user has previously created.
- **Share Project:** Option to share all the project information in Excel format through various platforms.
- **Open Manual:** Open a PDF viewer and display the manual version based on the language used by the user. Within the viewer, the PDF can be downloaded. [10 \(Manual Viewer Screen - Tree Inspection Kit App\)](#).

4 Project Screen

Once a new project has been created or an existing project has been opened, the project screen will be displayed.

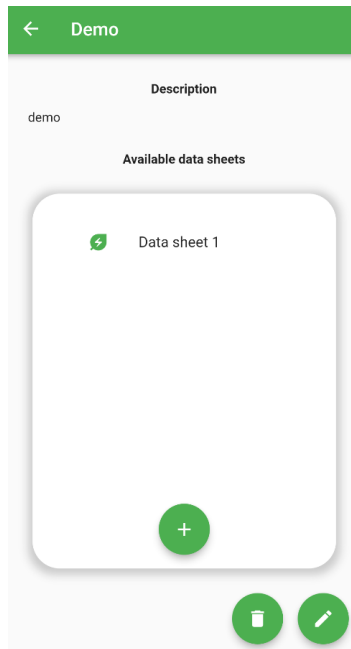


Figure 4: Project Screen - Tree Inspection Kit App

It consists of the following elements:

- **Project Name:** Name of the project, which can be modified.
- **Description:** Field for making any annotations about the project. It can be modified.
- **Available data sheets:** A list where the user's data data sheets associated with the project will appear. You can access any of them by clicking on them.
- **New Data Sheet Button:** Button to add a new data data sheets associated with the project.
- **Delete Project Button:** Button that, when pressed, will prompt for confirmation to delete the project along with all the data data sheets associated with it.
- **Edit Project Button:** Button that allows editing the elements of "Project Name" and "Description".

5 Data Sheet Screen

Once the "New Data Sheet" button is clicked 4 ([Project Screen - Tree Inspection Kit App](#)), the following screen will open to fill in all the required information.

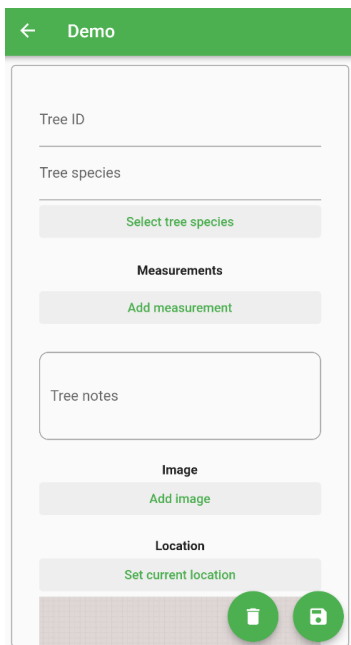


Figure 5: Data sheet Screen - Tree Inspection Kit App

- **Tree ID:** Identifier of the tree to distinguish it from other data sheets in the project. This will be the name of the data sheet. It can be edited. **Mandatory field to create the data sheet.**
- **Tree Species:** Tree species to which the current tree being studied belongs. A list of available species appears when the "Select Tree Species" button is clicked 8 ([Tree Species Selection Dialog - Tree Inspection Kit App](#)). It can be edited. **Mandatory field to create the data sheet.**
- **Measurements:** Table where all the recorded measurements of the tree will appear. When "Add Measurement" is clicked, a dialog opens to enter the measurements manually. It can be edited.
- **Tree Notes:** Annotations made to highlight any relevant or non-relevant information about the tree. It can be edited.
- **Image:** Taken from the device's camera. The camera opens when the "Add Image" button is clicked. It can be edited.
- **Location:** Map indicating the coordinates of the tree being studied. It calculates the position of the mobile device when the "Set Current Position" button is clicked. It can be edited.
- **Delete data sheet Button:** Button that, when pressed, prompts for confirmation to delete the data sheet.
- **Edit data sheet Button:** Button that allows editing all the fields of the tree data sheet.

6 Settings Screen

To access the settings screen, click on the three diagonal lines at the top left of the [3 \(Main Screen - Tree Inspection Kit App\)](#).

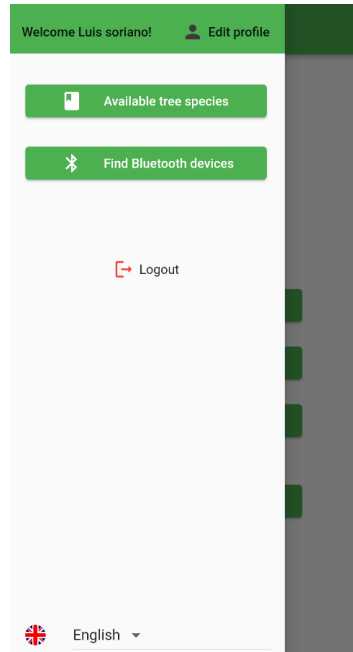
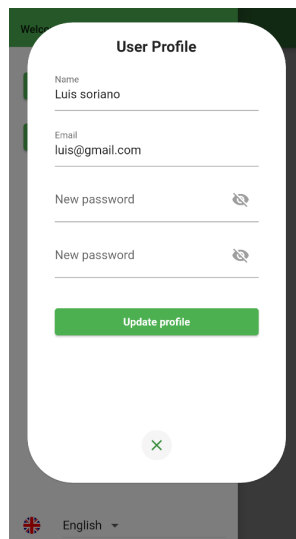


Figure 6: Settings Screen - Tree Inspection Kit App

It contains the following elements:

- **Edit Profile:** Takes us to a new form where we can edit the information of the logged-in user. [7 \(User Profile Editing Screen - Tree Inspection Kit App\)](#).
- **Available Tree Species:** Opens a dialog where we can check the available tree species in the application. [8 \(Tree Species Selection Dialog - Tree Inspection Kit App\)](#).
- **Search Bluetooth Devices:** Opens a dialog where we can check the available Bluetooth devices around our mobile device. [9 \(Bluetooth Devices Screen - Tree Inspection Kit App\)](#).
- **Log Out Button:** Button that logs out the current user and redirects us to the [1 \(Login Screen - Tree Inspection Kit App\)](#).
- **Language Selector:** Option to change the language used by the application. Available languages are **English** and **Spanish**. By default, the language used is based on the current language of the mobile device.

6.1 User Profile Editing Screen

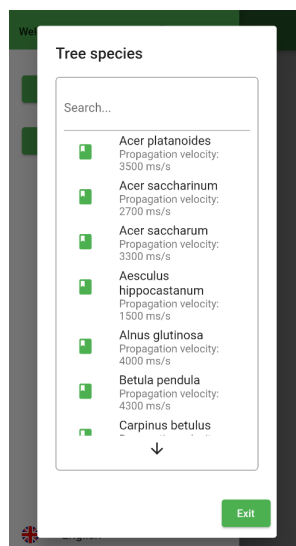


The screenshot shows a mobile app interface for editing a user profile. At the top, there's a title bar with a green background and the text "User Profile". Below this, there are three input fields: "Name" with the value "Luis soriano", "Email" with the value "luis@gmail.com", and two "New password" fields, each with a toggle icon to the right. A green button labeled "Update profile" is positioned below the password fields. At the bottom of the form, there is a small green circle with a white 'X' icon. The background of the app shows a dark green header with a "Welcome" label and a language selector at the bottom left showing a flag and the text "English".

Figure 7: User Profile Editing Screen - Tree Inspection Kit App

It provides a form where we can update our name, email, and/or password.

6.2 Tree Species Dialog



The screenshot shows a mobile app interface for selecting a tree species. The dialog has a title bar with a green background and the text "Tree species". Below this, there is a search bar with the placeholder text "Search...". A list of tree species is displayed, each with a green square icon to its left. The species listed are: "Acer platanoides" (Propagation velocity: 3500 ms/s), "Acer saccharinum" (Propagation velocity: 2700 ms/s), "Acer saccharum" (Propagation velocity: 3300 ms/s), "Aesculus hippocastanum" (Propagation velocity: 1500 ms/s), "Alnus glutinosa" (Propagation velocity: 4000 ms/s), "Betula pendula" (Propagation velocity: 4300 ms/s), and "Carpinus betulus". A green button labeled "Exit" is located at the bottom right of the dialog. The background of the app shows a dark green header with a "Welcome" label and a language selector at the bottom left showing a flag and the text "English".

Figure 8: Tree Species Selection Dialog - Tree Inspection Kit App

It includes a search bar to filter by species name.

6.3 Bluetooth Devices Dialog

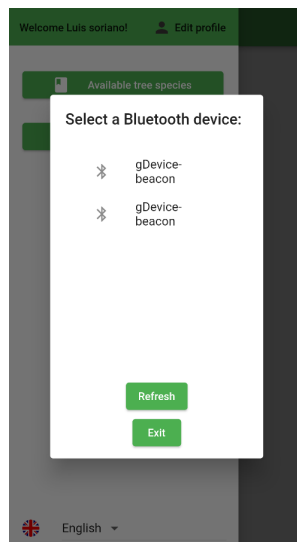


Figure 9: Bluetooth Devices Screen - Tree Inspection Kit App

6.4 Manual Viewer Screen



Figure 10: Manual Viewer Screen - Tree Inspection Kit App