

User Manual

Project Title: Sonic
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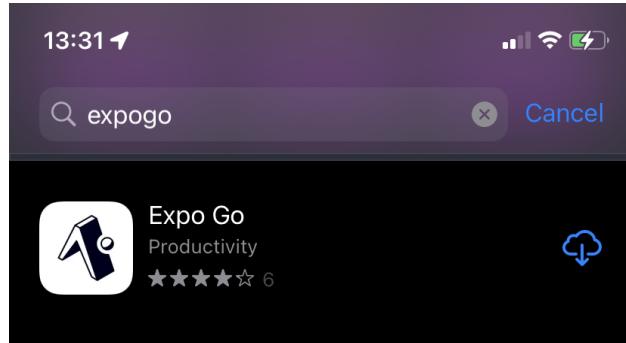
Table of Contents

1. The App	2
1.1 Installation and Setup	2
1.2 Getting Started	3
1.3 User Has Covid	5
1.4 User Forgot Password	6
2. The Scanner	7
2.1 For Users	7
2.2 For Admins (Scanner Installation)	8

1. The App

1.1 Installation and Setup

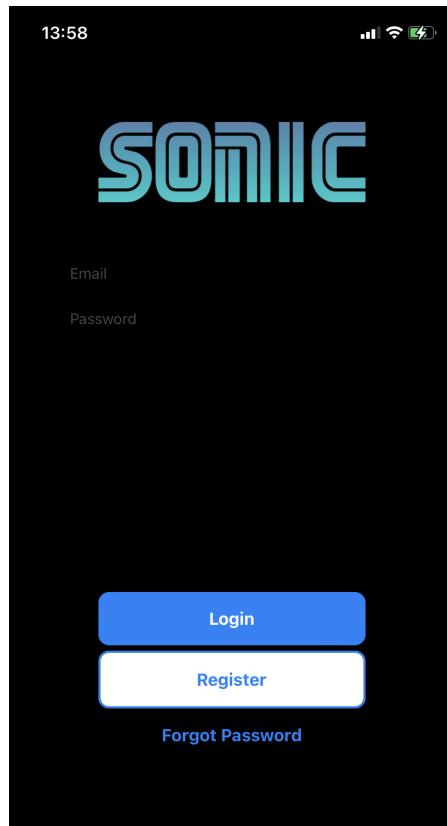
For users to be able to run our application on mobile devices, they need to install the “Expo Go” app from the app store. Expo is a framework for React Native applications and offers application developers the ability to publish an app so that it can be accessed on any device by anyone.



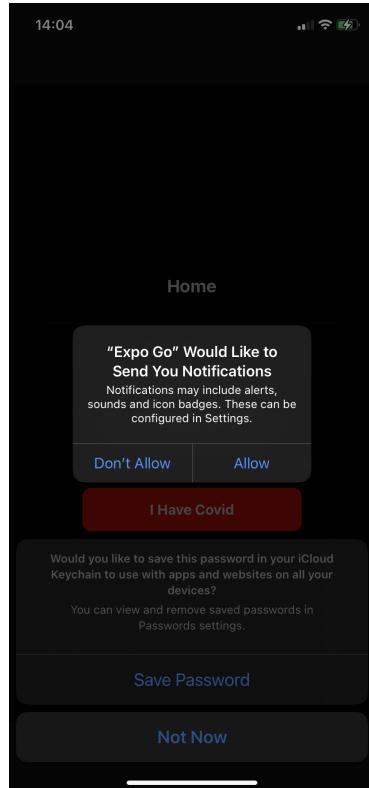
Firstly the user should create an account on Expo once installed and then after such a user can be invited to our project to view it and run it on their mobile device. Once signed in and invited to the project the user can then access our published app with the link “`exp://exp.host/<@cawnj>/sonic-app?release-channel=default`”, or scan the QR code found on [“https://expo.dev/@cawnj/sonic-app”](https://expo.dev/@cawnj/sonic-app).

1.2 Getting Started

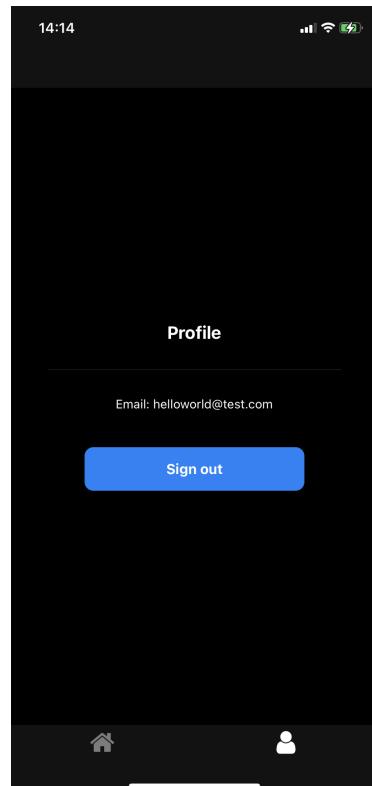
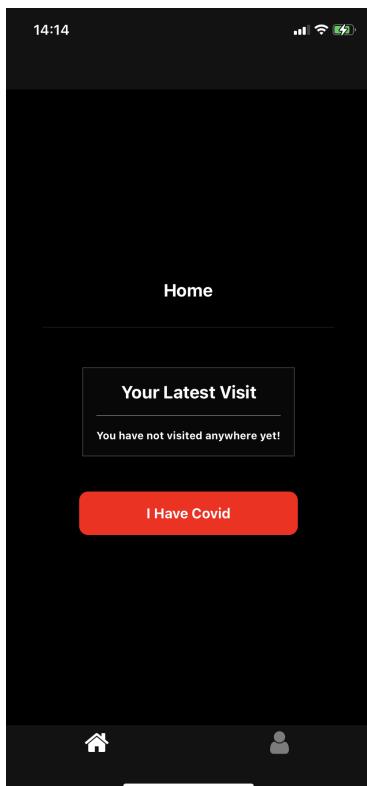
After completing the initial installation for Expo Go and following the steps for installation of the app, the user should be directed to Sonic's home screen.



The user is prompted with an email and password text box with options of registering, logging in or an option where the user has forgotten their password. As a new user, they can enter a valid email address that is not already in use, choose a password and click register.

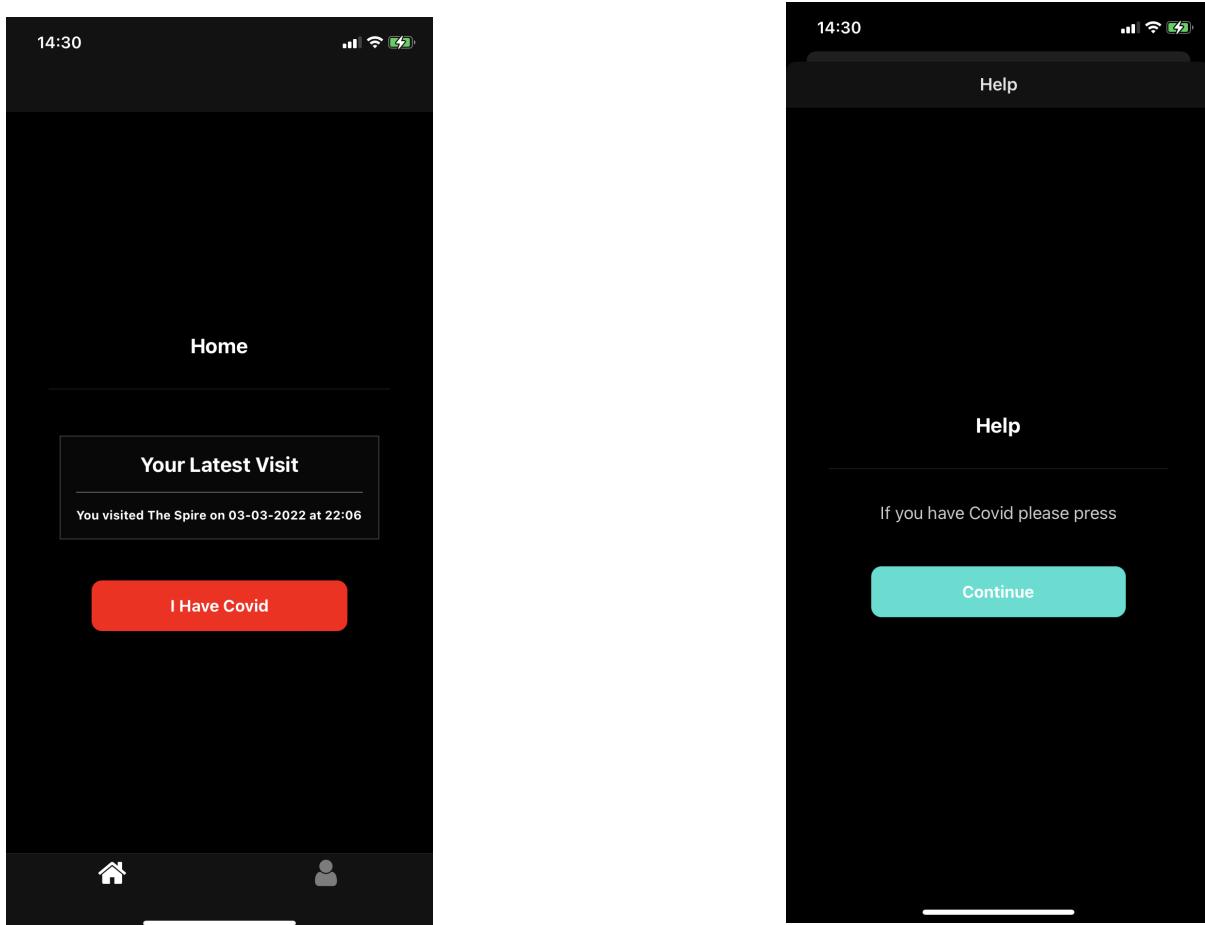


Once the user has signed in they will be asked if they would like to allow notifications, this is to allow for contact tracing purposes and notification of close contacts. As a new user who hasn't visited anywhere yet or scanned their card at any of our scanner locations, the latest location card on their home screen will state that they have no recent visits. The app is structured with a home tab and profile tab like such. The user can choose to sign out and navigate back to the login screen by pressing the signout button on the profile tab

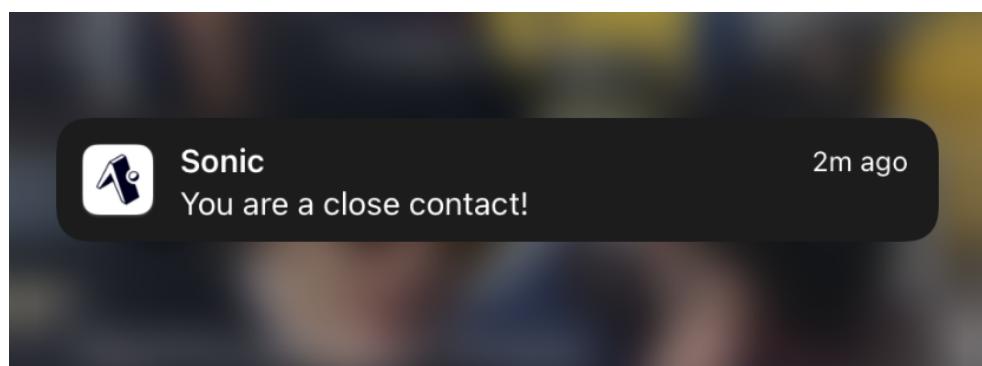


1.3 User Has Covid

In the scenario that a pre-existing user has logged in to the app and has already made visits to one of our scanner locations, and has tested positive for Covid, the first thing they should do is navigate to the Home tab and press the “I Have Covid” button. Once the button has been pressed they will be brought to a confirmation screen to confirm this option like so.

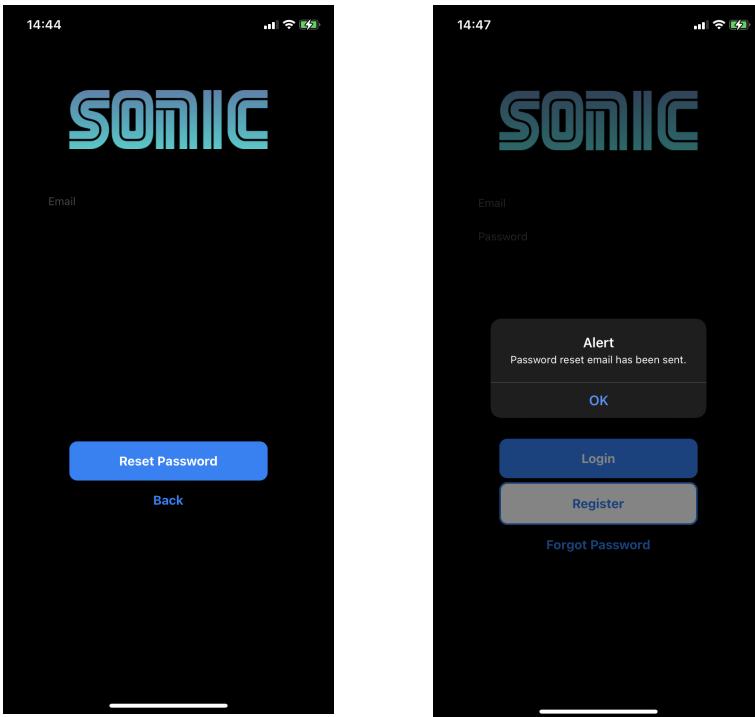


The user can then go ahead and press continue which will notify any close contacts of the logged-in user within their visited locations and times for the past 3 days. A notification on the receiving end of a close contact user will be like such.

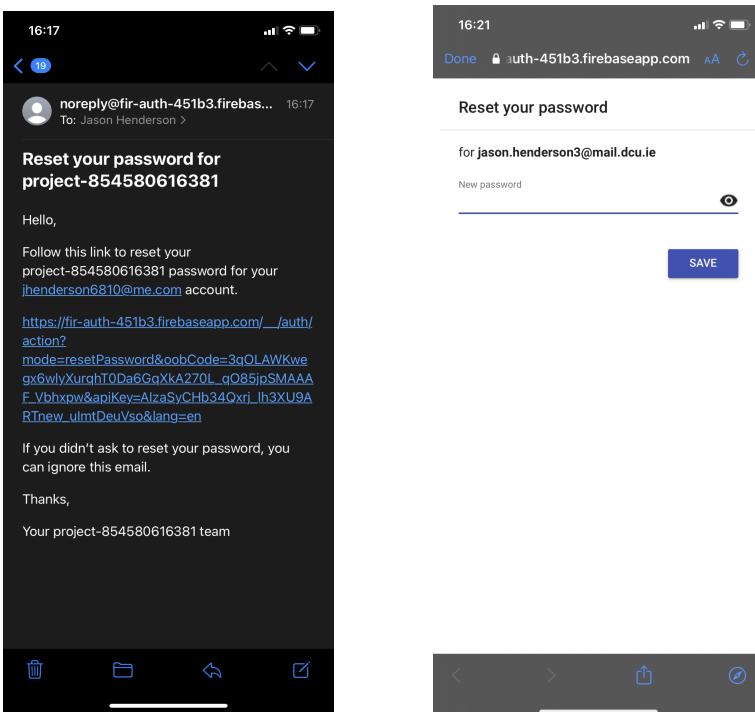


1.4 User Forgot Password

If the user has a pre-existing account but seems to have forgotten their password, they can click the forgot password button on the home login screen which will navigate them to this page. This will then send a password reset email to their email address and return to the login page.



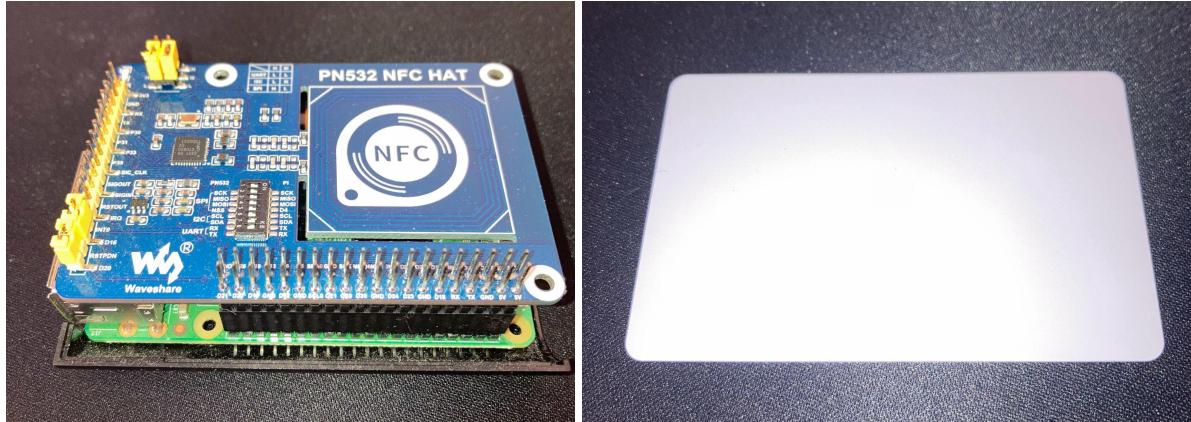
When the user clicks the link in the email, they will be brought to a page like so, where they can change their password.



2. The Scanner

2.1 For Users

Users will be issued an NFC card on which their user id is pre-written. Users can then use this card to tap in or tap out of any building that has a Sonic scanner device. The scanner device and NFC card look like so:



Upon entry or exit of a building, the user simply just holds their card on their scanner for approx 1-2 seconds, upon which the scanner will send a request to the Sonic backend containing the user id that is stored on the card and the current time and location id.



2.2 For Admins (Scanner Installation)

The scanner device in the current implementation is a Raspberry Pi with a NFC module attached. An internet connection is required for the scanner to operate.

An administrator can set up the scanner to send log requests to the Sonic backend by accessing the console on the device and running the command:

```
LOCATION_ID=1 python3 <path to src>/client/scanner.py
```

Where LOCATION_ID=1 can be replaced with the relevant location id for the location in which the scanner is installed.

The scanner will then run continuously as long as power and internet connection are maintained and the Sonic system backend is in operation.