(a) Expand the sidebar with the hamburger button (b) Then enter the device name and click the connect button.

Figure 14: Figure showing the steps to connect to a device from the web dashboard

Appendix G   User guide

G.1   Using the web app

G.1.1   Opening the web app

If you're running the web app locally, you can navigate to http://localhost:3000. If this doesn't work, consult the console for the port the web app is running under. This shouldn't be a problem, unless you have something else already running on port 3000.

This will present you with a login screen for the web app.

G.1.2   Logging in

To log in, press the login button. You'll be prompted for credentials that you can find in Appendix H.3.4, as account creation requires an admin to make the account.

G.1.3   Connecting a device

Before proceeding with this step, complete the steps outlined in G.2, specifically the device registration.

When you have your device name, open the sidebar and enter the device name as illustrated in Figure 14. That's it; the web app will now receive data as soon as the start button in the app is pressed, if it hasn't already been pressed, and appear in the web app.

G.1.4   Configuring sensors

When sensor data is being received, you may want to enable or disable specific sensors. To do this, open the sidebar, then click the checkbox for a sensor to enable or disable it. When a sensor is disabled, it doesn't appear on the dashboard anymore.

This process is illustrated in Figure 16.

G.1.5   Pausing sensors

If you want to take a closer look at the sensor data, you can pause any of the sensor charts by pressing the "Pause" button under the chart.
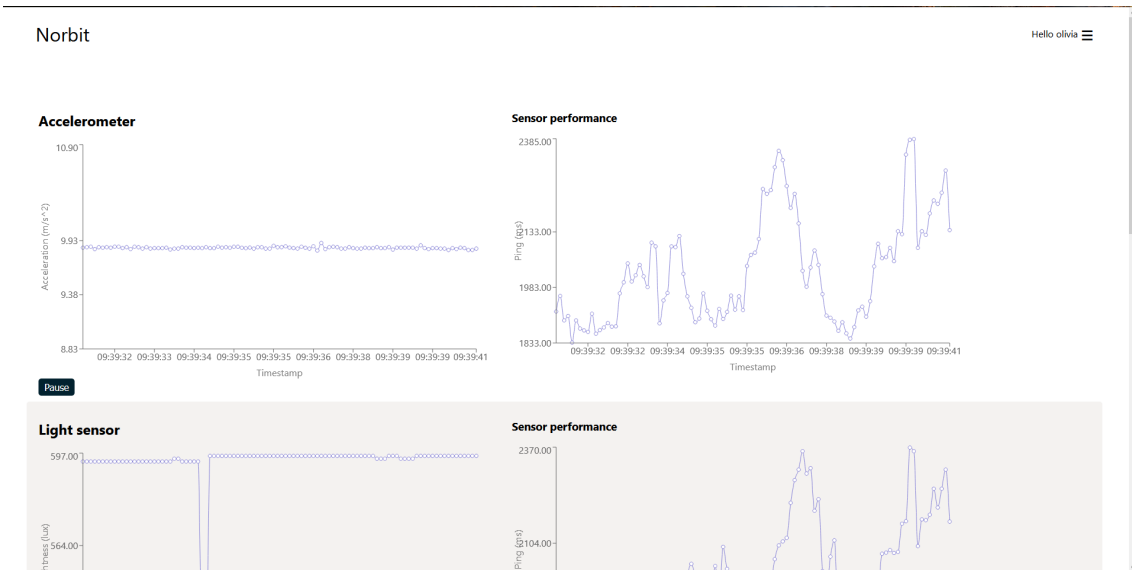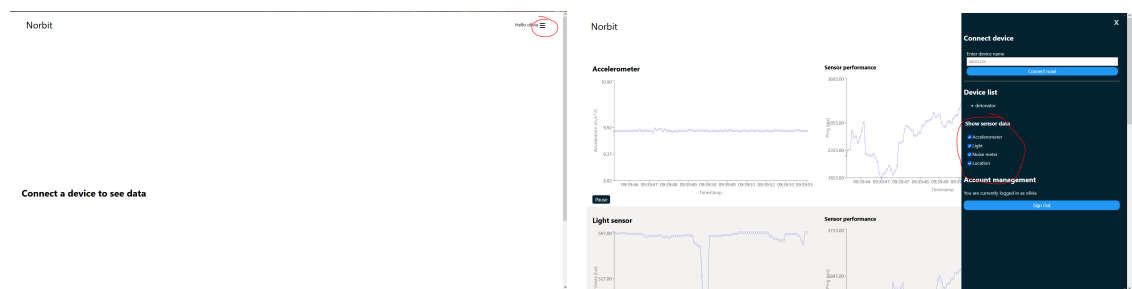
Figure 15: Image showing the functional dashboard. Note that the performance stats are wrong due to the previously mentioned clock problems

(a) Expand the sidebar with the hamburger button

(b) Locate sensor config in the sidebar. Here, you can switch sensors on and off.

Figure 16: Figure showing the location for the sensor config

Unlike disabling sensors (which also removes the charts entirely), the sensors will still be transmitting data, so when you un-pause, the data entries are automatically updated to the latest entries.

G.2 Using the mobile app

G.2.1 A note on default browsers

For reasons we were unable to determine, using Firefox as the default browser can result in problems with the login. Specifically, it can result in login looking like it's fine, but after entering credentials and being returned to the app, the app does not receive the necessary data to validate the login.

If you use Firefox, you need to switch to Chrome while testing the app. You can do this by going to system settings -> apps -> default apps -> browser app. However, as with everything else on Android, the exact location may vary from vendor to vendor, and version to version. Failing to do this step will result in login failing.

G.2.2 Logging in

Similarly to the web app, the first step is opening it. Locate flutter_application_1 on your device, and start it.

After starting up, you'll be prompted to log in. Clicking the button gives you the same signing menu style as the web app. See H.3.4 for the credentials to use.

After this, you'll be prompted for a device name. Make sure to give it a unique name, and note that deleting the app does not un-register the device name. Logging out is not sufficient to un-register the device. If you forget your device name, it can be found in the sidebar by clicking "Device data". This is the name you input into the web app to connect to it.
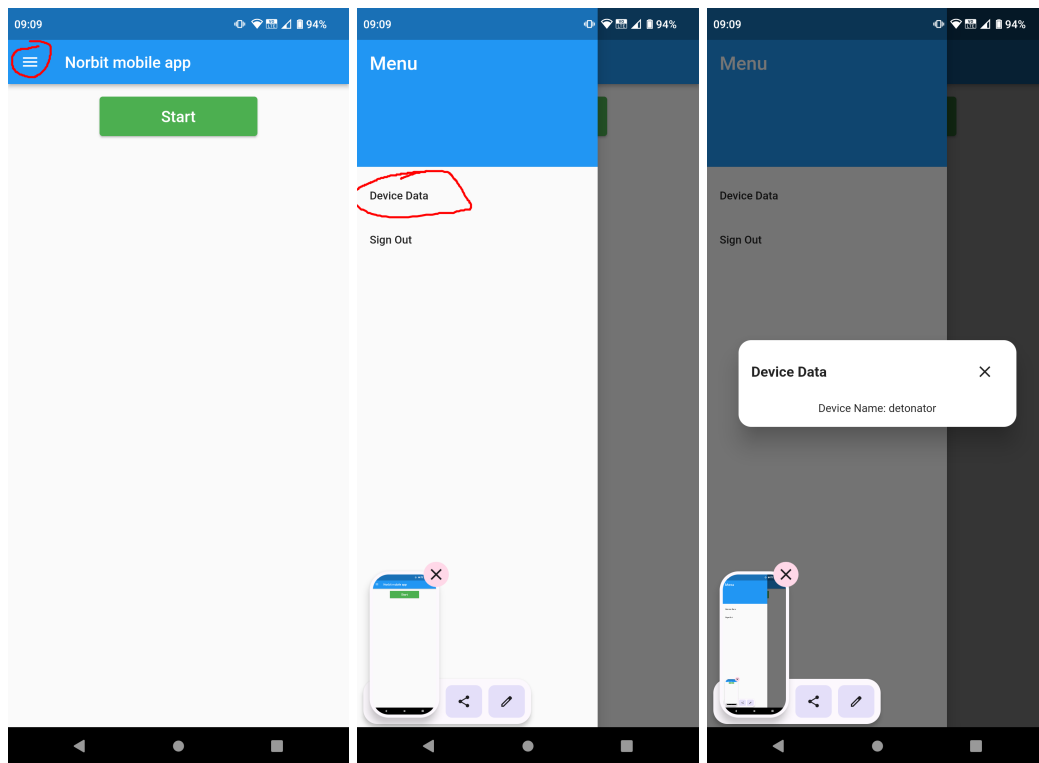
G.2.3 Retrieving your device name

If you forget your device name, you can access it from the sidebar, as illustrated in Figure 17.

G.2.4 Sending sensor data

After registering the device, while logged in, click the "Start" button to start sending data. If you've correctly set up the web app, you should now start seeing sensor data being received on the web.

To stop the data, press the "Stop" button.

The Flutter app is intentionally minimalist, so there's fairly little to do aside logging in, and starting/stopping the data transmission. Configuring which sensors send data is done via the web app.

(a) Press the hamburger button to open the sidebar. Note that you can also swipe from the left as an alternative to pushing the button

(b) Press the Device Data button in the sidebar

(c) The device name is then accessible from the popup

Figure 17: Steps for retrieving a device name