

Growth Meter Prototype

Application User Guide

21 NOV 2022

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Connecting the measuring device

Connect the input cable from the measuring device to the USB port on your laptop.

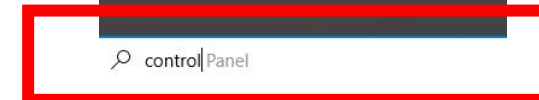
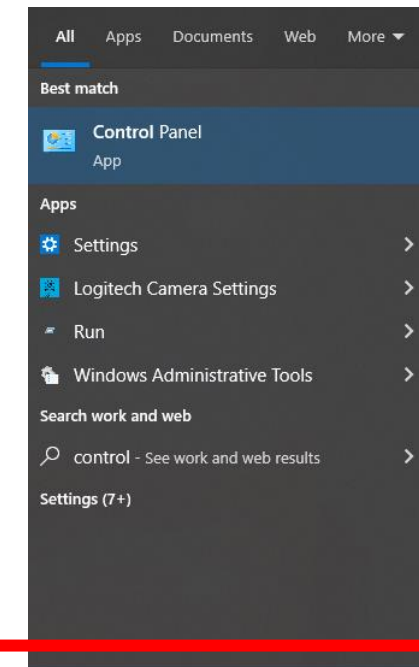
The yellow light on the measuring device will turn on, indicating it is connected.



Configuring the Application

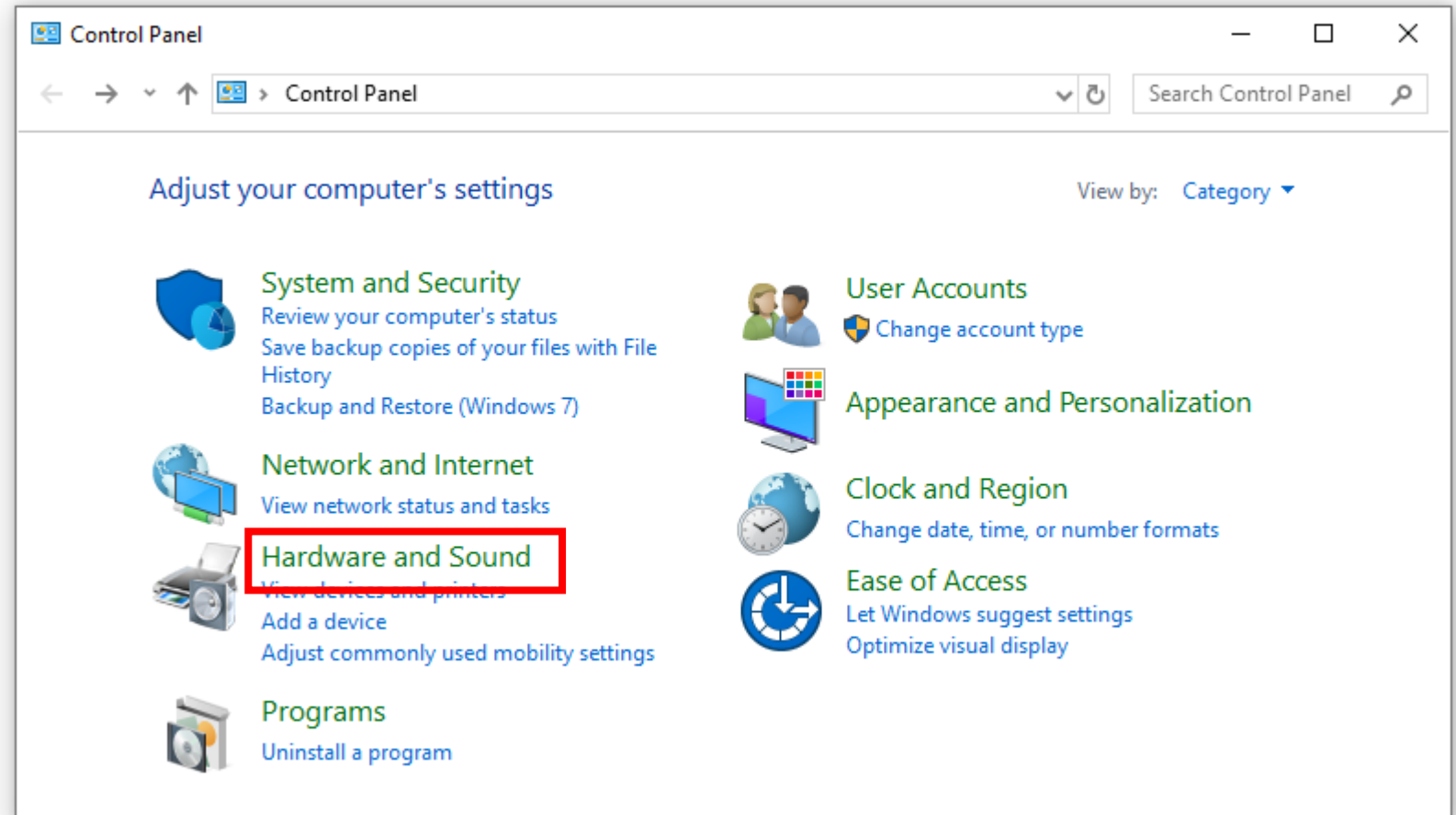
To determine which port the measuring device is connected on, open your computer's Control Panel with these two steps:

1. Click the Windows icon in the lower left corner of the screen
2. Type "Control Panel" in the Search bar



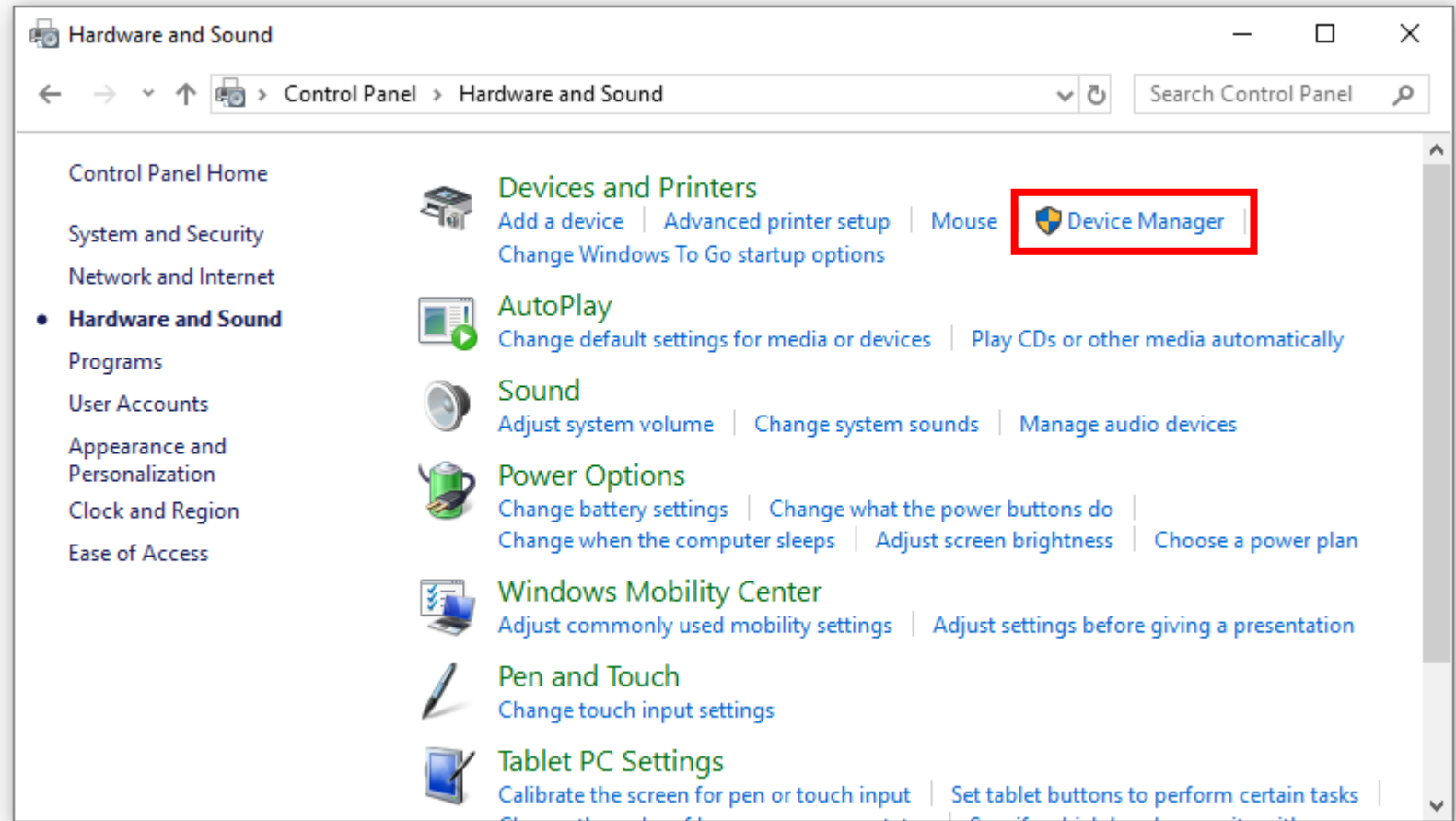
Configuring the Application

In the Control Panel,
click on Hardware and
Sound



Configuring the Application

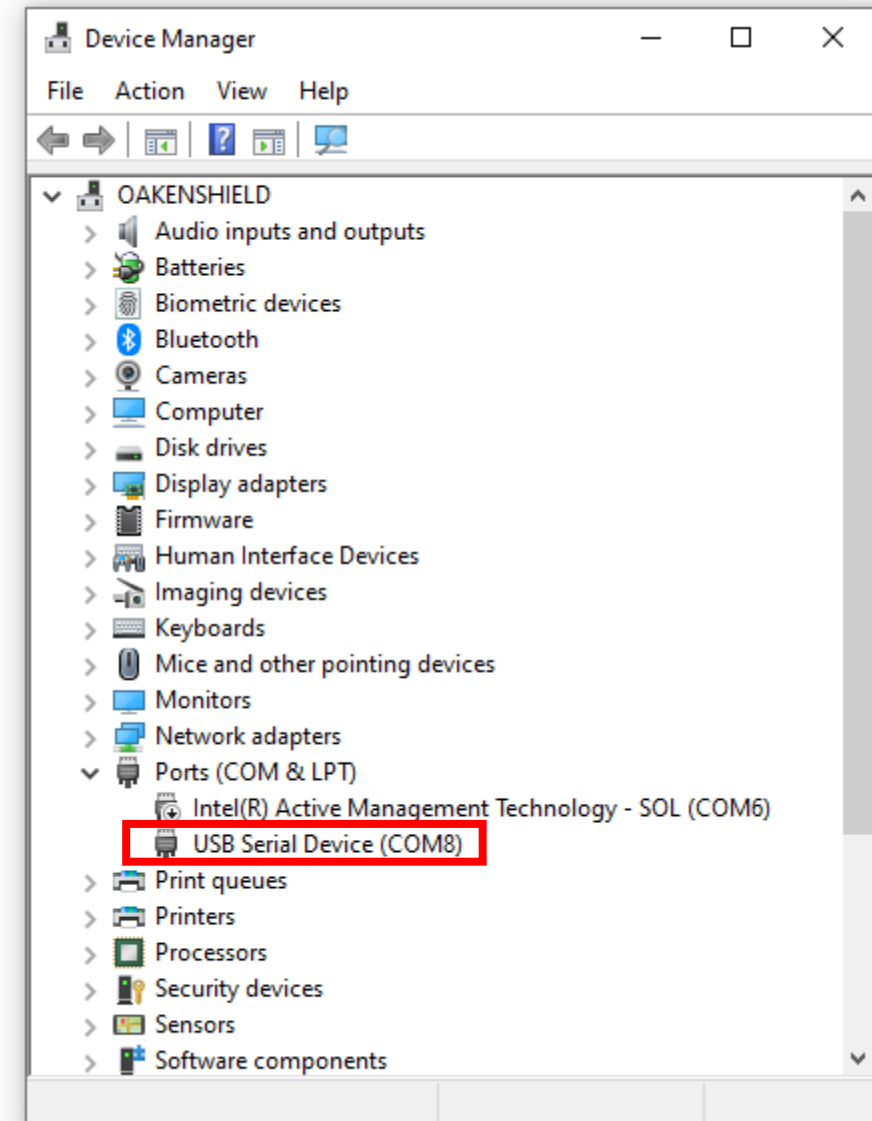
Click on Device
Manager



Configuring the Application

Under the “Ports” section, note the port with “USB Serial Device” connected.

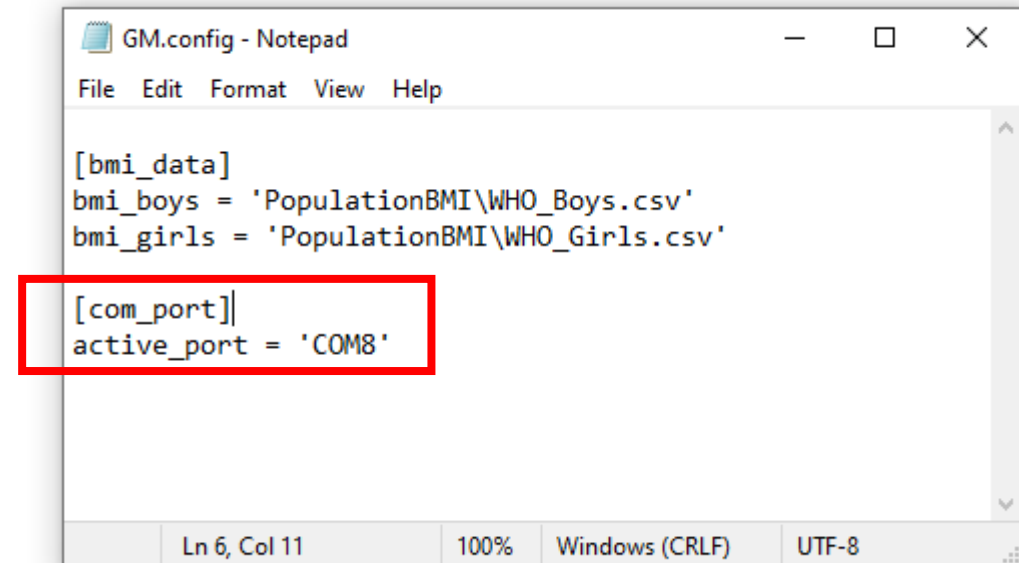
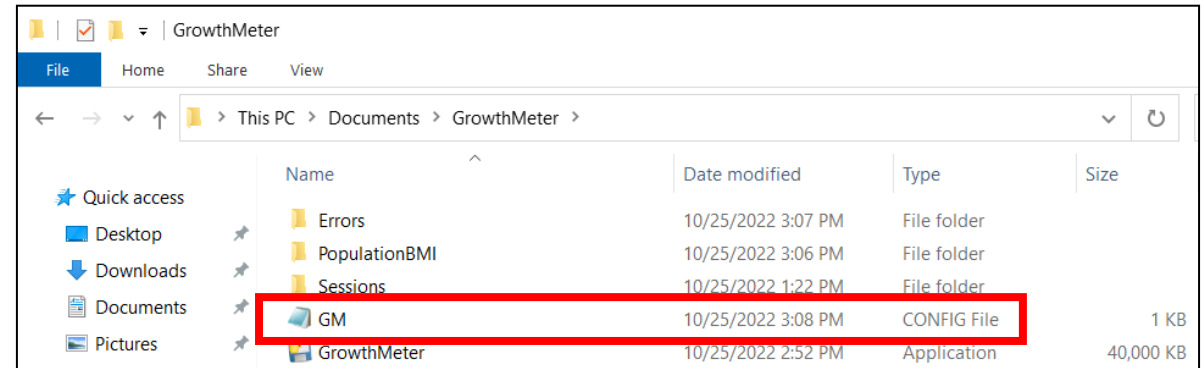
In the example to the right, the port is **COM8**.



Configuring the Application

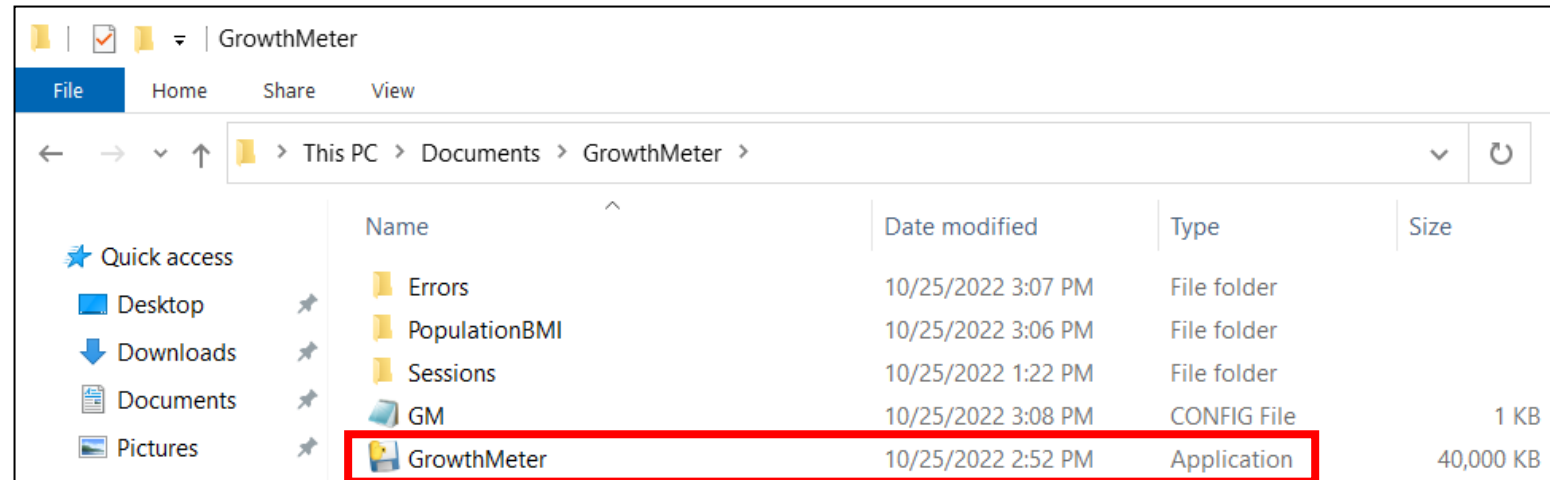
Open the “GM.config” file in Notepad and change the “active_port” setting to the port the device is connected to, in single quotes.

In the example to the right, the active port is configured to ‘COM8’.



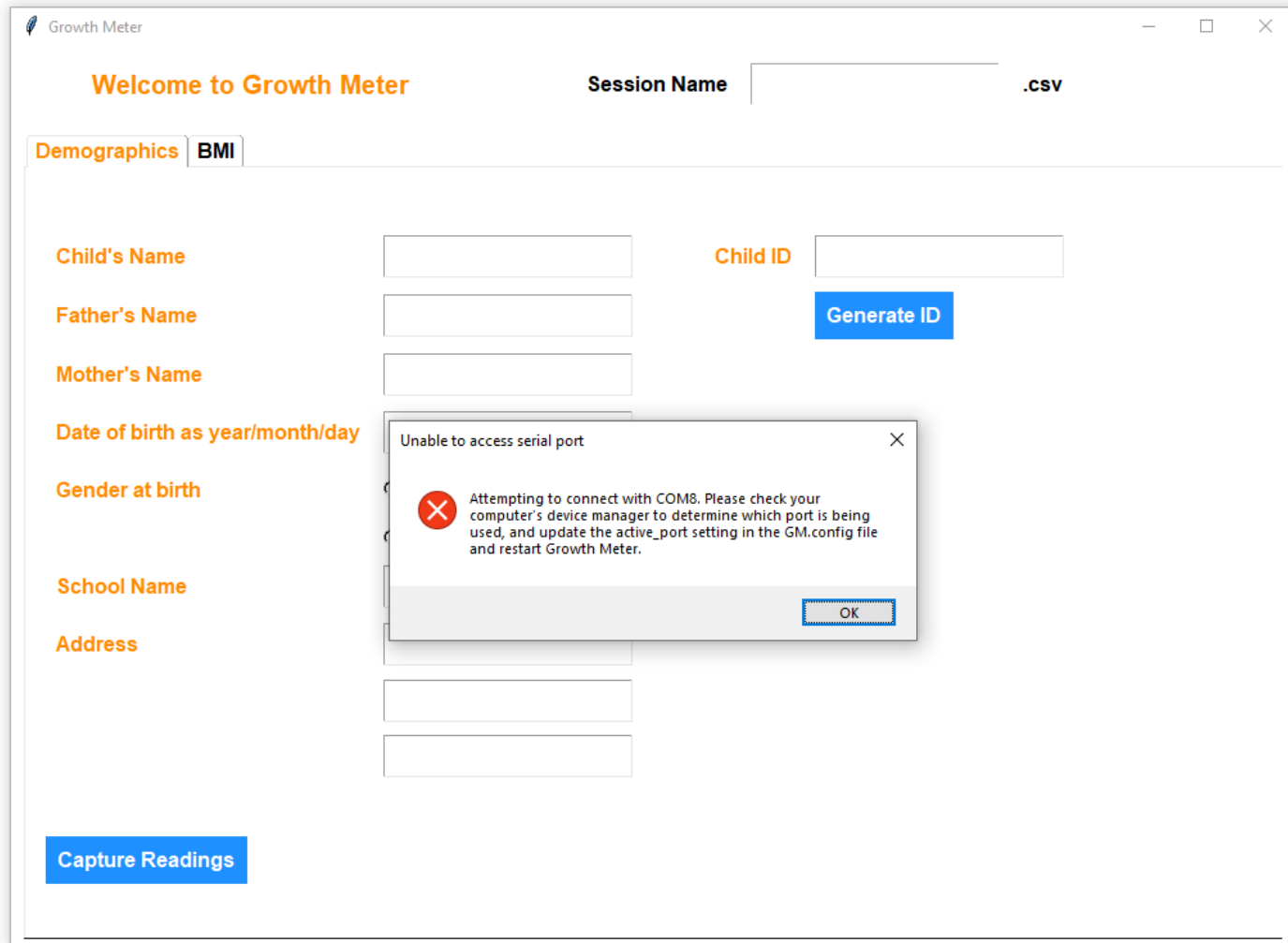
Starting the Application

To start the application, double-click on the GrowthMeter application file.



Starting the Application

If the measuring device is not connected when the application is started, or the device is connecting on an unexpected port, you will receive this message. Connect the measuring device or see the “Configuring the Application” section.



Growth Meter

Welcome to Growth Meter

Session Name .csv

Demographics BMI

Child's Name Child ID

Father's Name Generate ID

Mother's Name

Date of birth as year/month/day

Gender at birth

School Name

Address

Capture Readings

Unable to access serial port

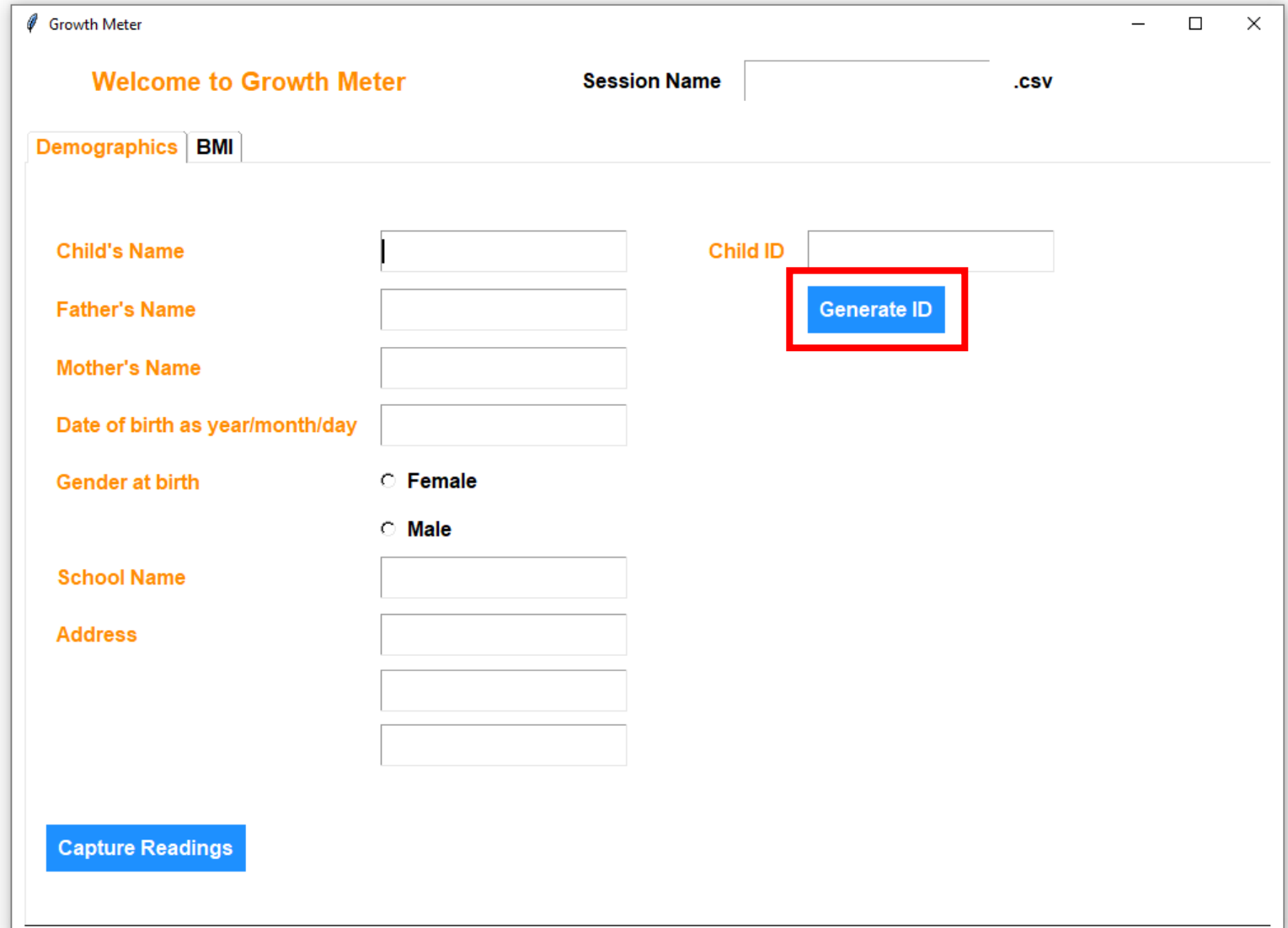
Attempting to connect with COM8. Please check your computer's device manager to determine which port is being used, and update the active_port setting in the GM.config file and restart Growth Meter.

OK

Entering Data

The demographics tab is where data is entered on the student, and the session filename is entered.

Click “Generate ID” have the application generate an ID. Or enter a unique ID, such as a student ID.

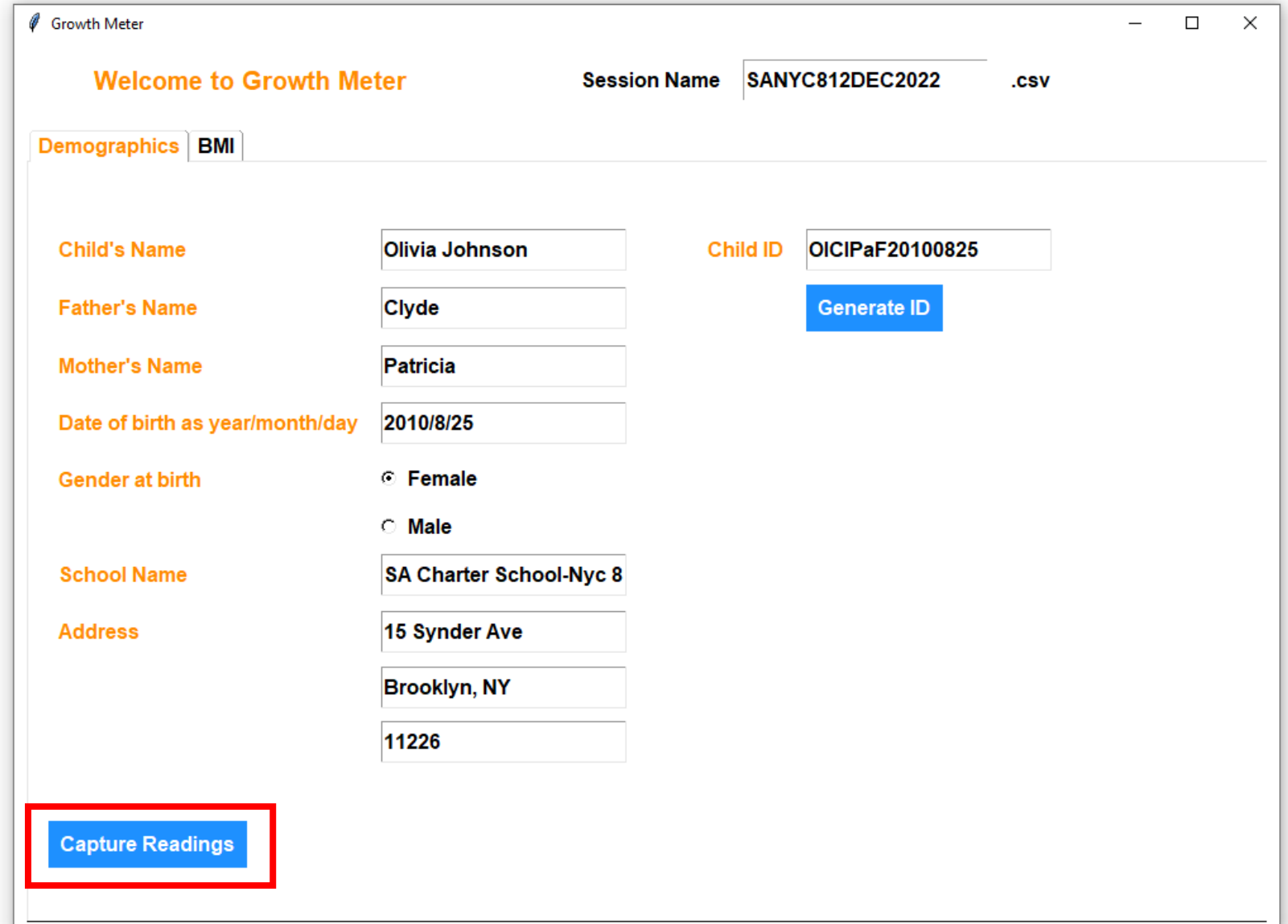


The screenshot shows the 'Growth Meter' application window. At the top, it says 'Welcome to Growth Meter' and 'Session Name' followed by a text input field and '.csv'. Below this, there are two tabs: 'Demographics' (selected) and 'BMI'. The 'Demographics' tab contains several input fields: 'Child's Name', 'Father's Name', 'Mother's Name', 'Date of birth as year/month/day', 'Gender at birth' (with radio buttons for 'Female' and 'Male'), 'School Name', and 'Address' (with three stacked input fields). To the right of these fields is a 'Child ID' input field and a blue button labeled 'Generate ID' which is highlighted with a red rectangle. At the bottom left of the form area is a blue button labeled 'Capture Readings'.

Entering Data

Here is an example of a completed Demographics tab.

Click “Capture Readings” after completing the Demographics tab to capture the weight and height from the measuring device.



The screenshot shows the 'Growth Meter' application window. At the top, it says 'Welcome to Growth Meter' and 'Session Name' is 'SANYC812DEC2022.csv'. Below this are two tabs: 'Demographics' (selected) and 'BMI'. The 'Demographics' tab contains several input fields: 'Child's Name' (Olivia Johnson), 'Father's Name' (Clyde), 'Mother's Name' (Patricia), 'Date of birth as year/month/day' (2010/8/25), 'Gender at birth' (Female selected), 'School Name' (SA Charter School-Nyc 8), and 'Address' (15 Synder Ave, Brooklyn, NY, 11226). To the right of these fields is a 'Child ID' field (OICIPaF20100825) and a blue 'Generate ID' button. At the bottom left, a blue 'Capture Readings' button is highlighted with a red rectangle.

Field	Value
Child's Name	Olivia Johnson
Father's Name	Clyde
Mother's Name	Patricia
Date of birth as year/month/day	2010/8/25
Gender at birth	Female
School Name	SA Charter School-Nyc 8
Address	15 Synder Ave Brooklyn, NY 11226
Child ID	OICIPaF20100825

Capturing Readings

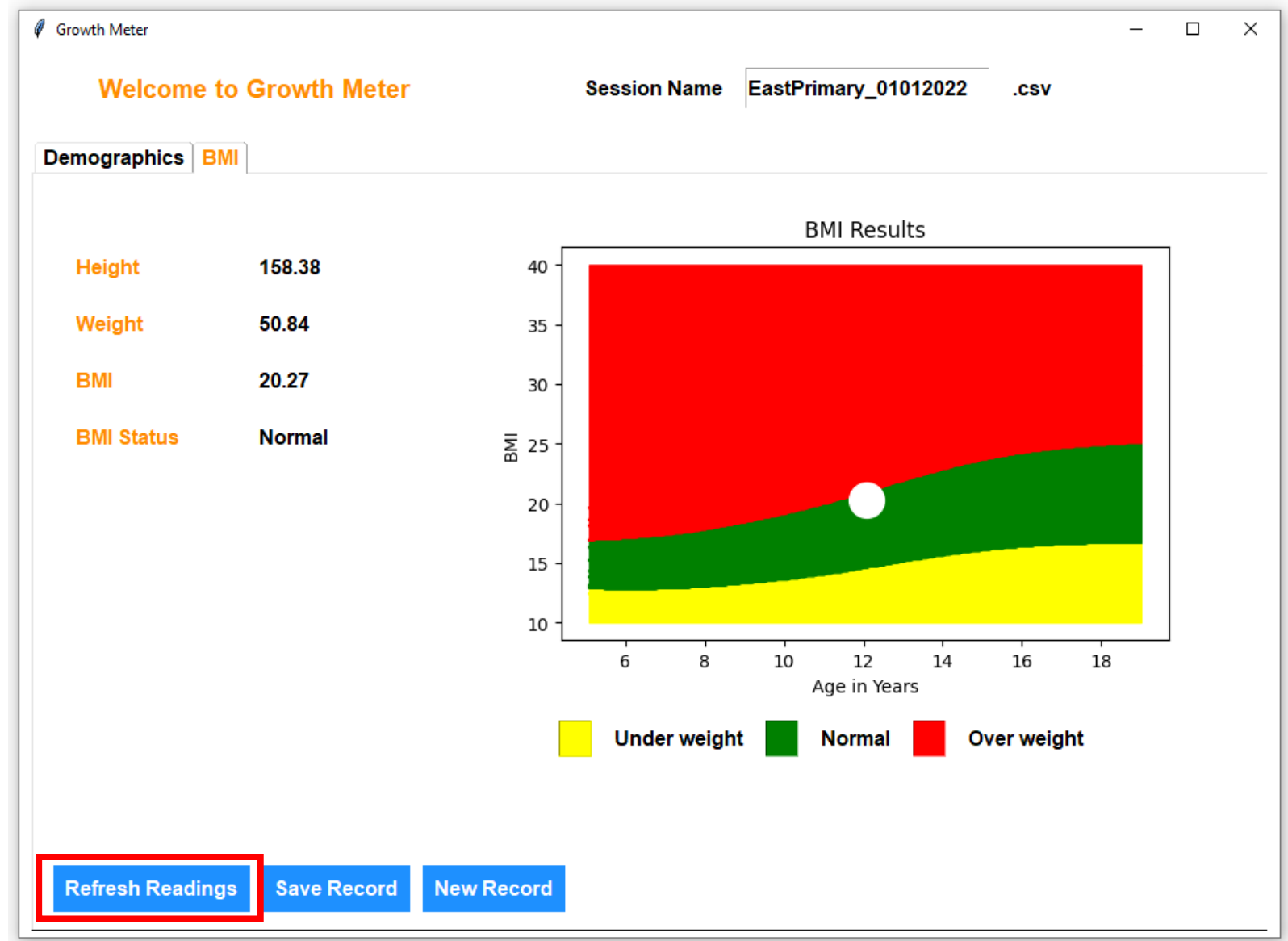
After clicking “Capture Readings”, the BMI tab will be displayed, showing the results of the device readings along with the calculated BMI and status. The calculated BMI is shown on a plot of WHO population data.



Capturing Readings

Click “Refresh Readings” to obtain new readings from the measuring device.

This is usually needed until the scale settles on a consistent range.



Capturing Readings

Click “Save Record” to save the Demographics and BMI to the session file.

After the record is saved, you will be prompted to create a new record, which clears all fields and returns to the Demographics tab.

Growth Meter

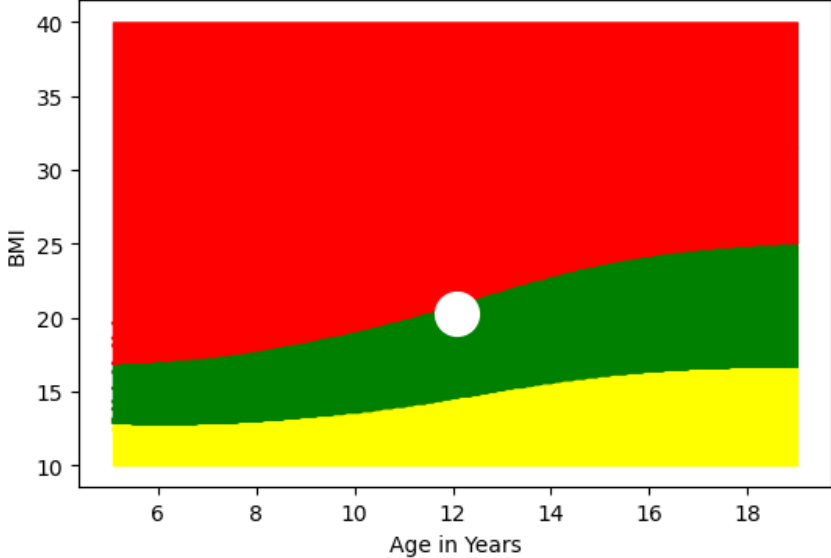
Welcome to Growth Meter

Session Name EastPrimary_01012022 .csv

Demographics BMI

Height	158.38
Weight	50.84
BMI	20.27
BMI Status	Normal

BMI Results



Under weight Normal Over weight

Refresh Readings Save Record New Record

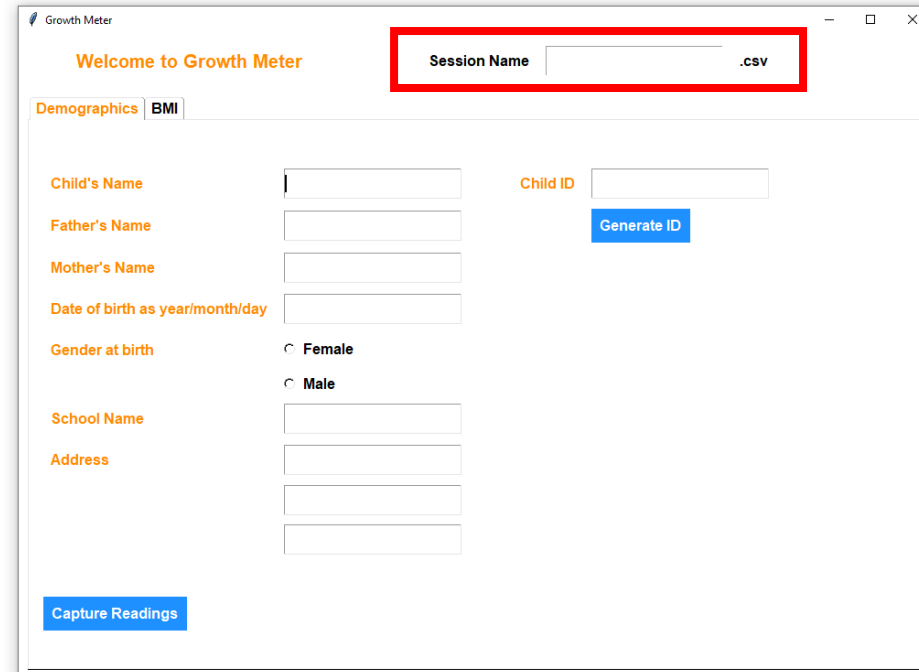
Capturing Readings

Click “New Record”
to clear all fields and
return to the
Demographics tab.



Saving Readings

Readings are saved to the session file specified at the top of the screen.



Growth Meter

Welcome to Growth Meter

Session Name .csv

Demographics BMI

Child's Name Child ID

Father's Name

Mother's Name

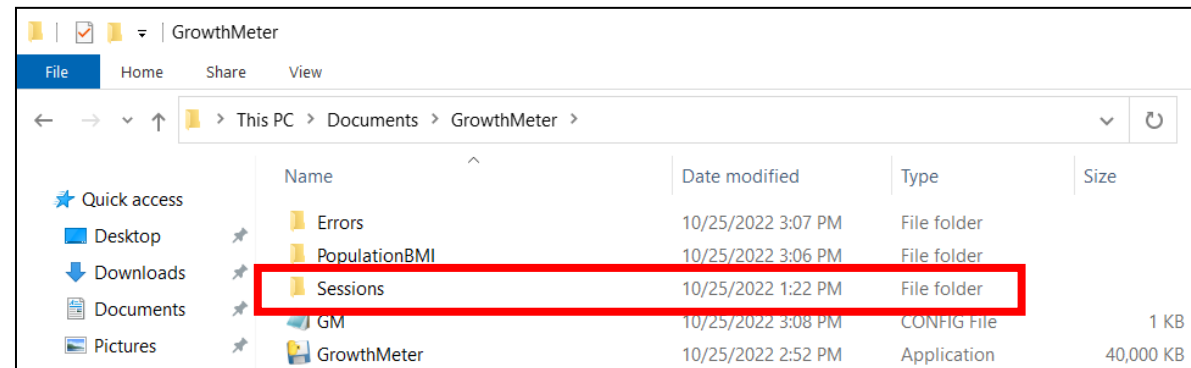
Date of birth as year/month/day

Gender at birth ☐ Female ☐ Male

School Name

Address

Session files are saved in the Sessions folder.



Troubleshooting

The description of any errors encountered by the system is saved in a text file in the Errors subfolder. Please check the text file for the cause of the error.

