eyeLOGIC

Startup Guide

OpenSesame Setup

v 1.1.15

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Tutorial

This is a manual on how to use an EyeLogic eye tracking device together with OpenSesame, a program to create experiments for psychology, neuroscience, and experimental economics.

The EyeLogic SDK is included in the official release of OpenSesame. Just download and install OpenSesame from the official homepage: https://osdoc.cogsci.nl/

On that page, you will also find a manual and several tutorials for how to use OpenSesame. This guide explains the mechanism of using an EyeLogic eye tracker within an OpenSesame project.

Prerequisites

The following requirements are neccessary in order to use the EyeLogic integration into Open-Sesame:

1. A PC with Windows

2. An EyeLogic eye tracking device

3. The EyeLogic Server software must be installed.

4. OpenSesame must be installed.

After running the OpenSesame installer, the program can be started from the start menu. If the shortcut in the start menu is missing, you can directly start the program from its install directory (ususally C:\Program Files (x86)\OpenSesame) by double-clicking on the batch file "opensesame".

Setup an EyeTracking Sample Project

Follow these steps in order to setup an example project in OpenSesame:

1. Start the EyeLogic server software (from the Windows start menu, select EyeLogic Software -> EyeLogic Server). When the software is running, there is an icon in the windows tray bar (left of the clock).

2. Connect the eye tracker to the computer. The tray icon of the EyeLogic Server software will change its color from dark to light gray.
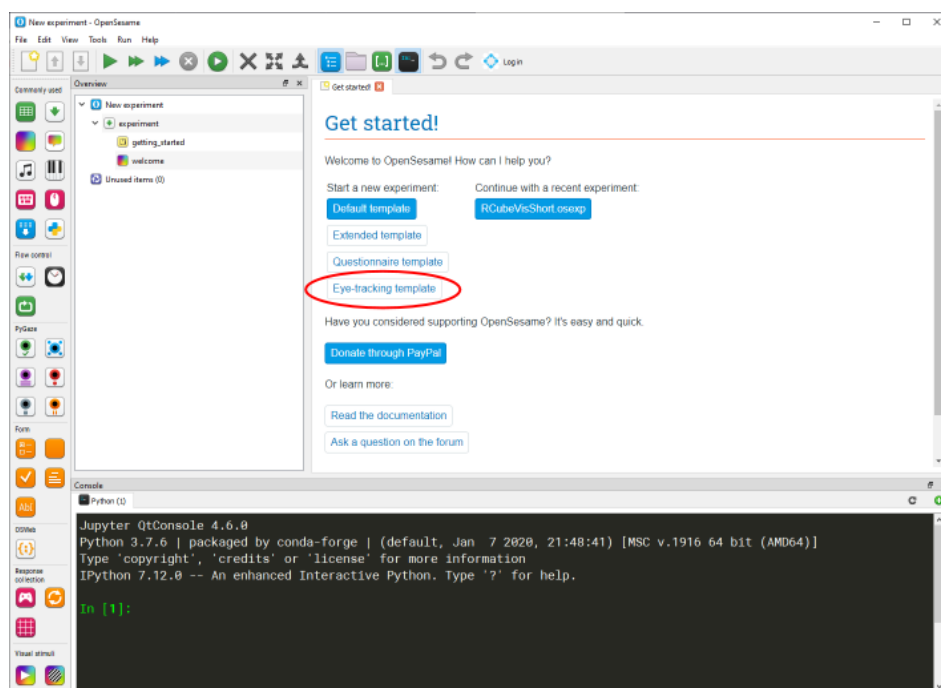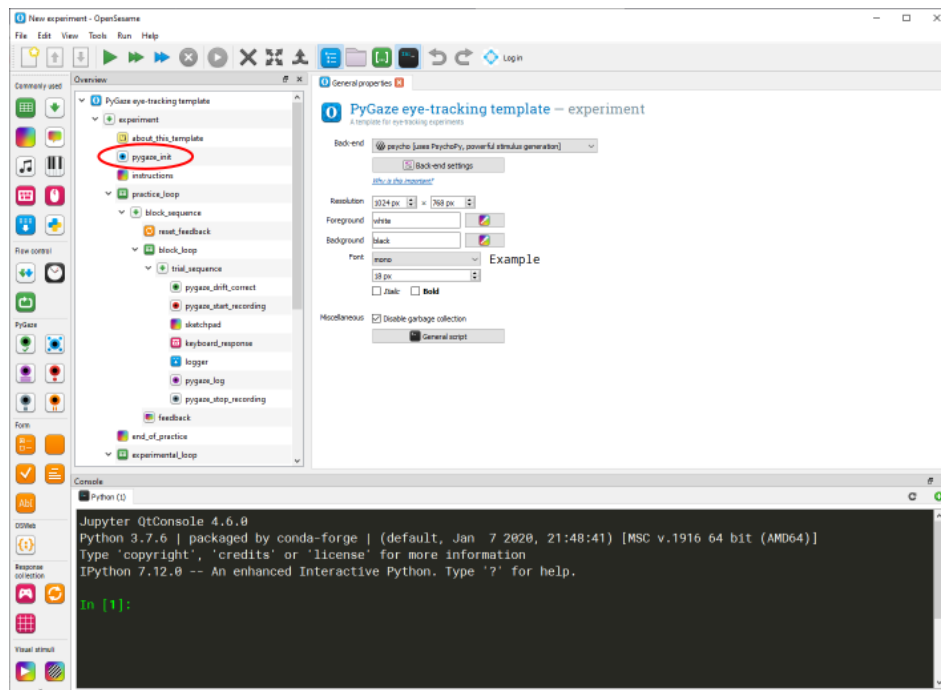
3. Start OpenSesame
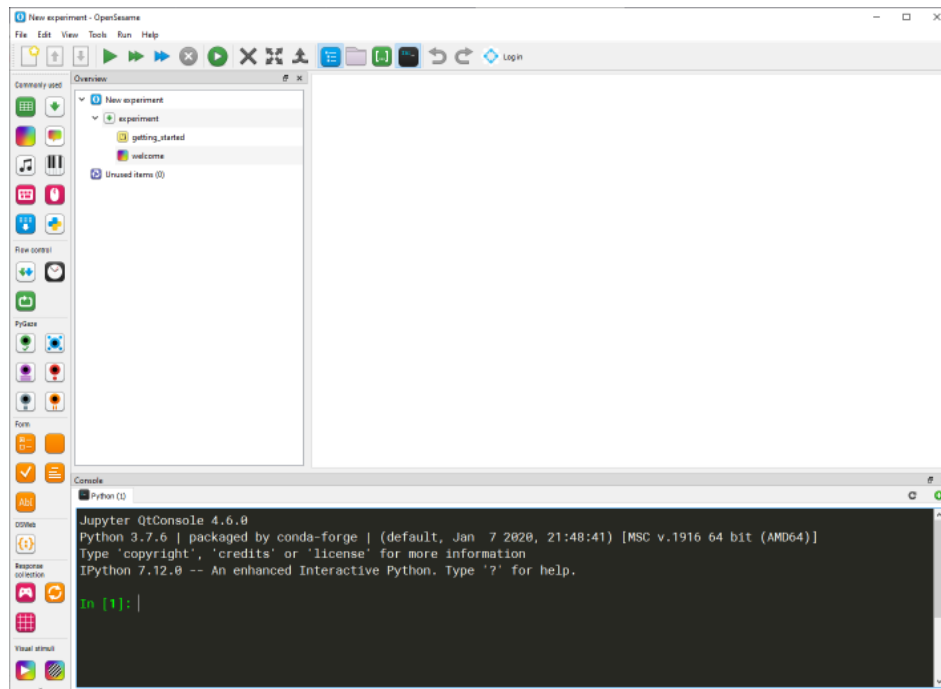
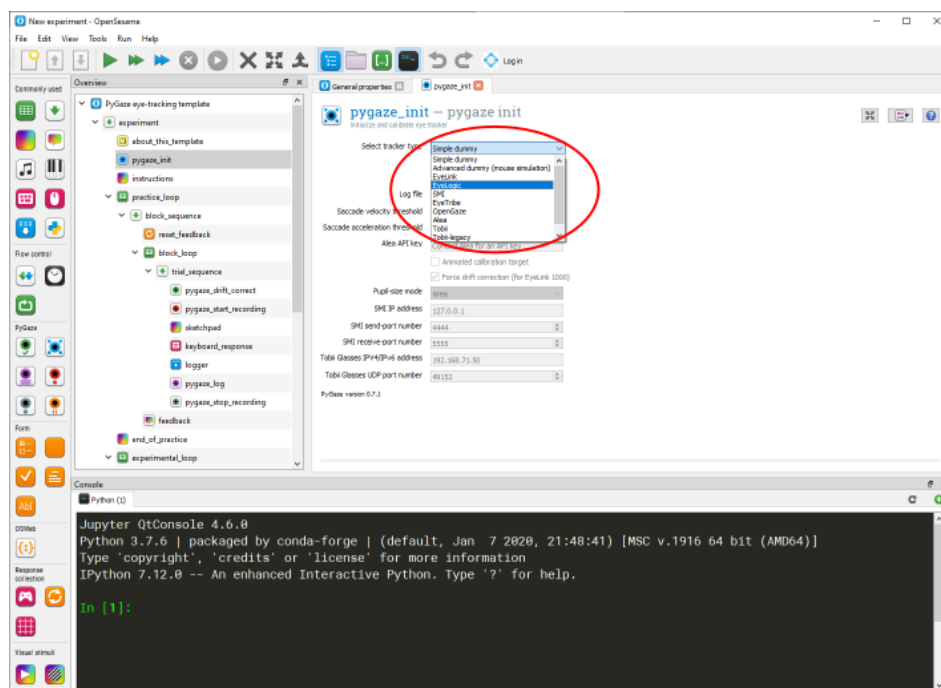

4. In OpenSesame, from the menu choose File -> New…

5. In OpenSesame, in the "Get started!" tab, click "Eye-tracking template"

6. In OpenSesame, in the left "Overview" tree, click on "pygaze_init"

7. In OpenSesame, in the "pygaze_init" tab in the center, select "EyeLogic" as "tracker type".

8. In OpenSesame, from the menu, choose Run -> Run fullscreen...

9. You are asked to enter a subject number. Leave it at 0 and press Ok.

10. You are asked to choose a location for the logfile. Choose a directory and a filename (a .csv file). Within this tutorial we refer to this file as <output_path>\logfile.csv. OpenSesame will log events to this file. The eye tracking data will be saved to another file called <output_path>\logfile.eyelogic.csv.

11. Wait for the experiment to start. In case of an error, the experiment stops and prints the error message to the main area at the center, e.g.
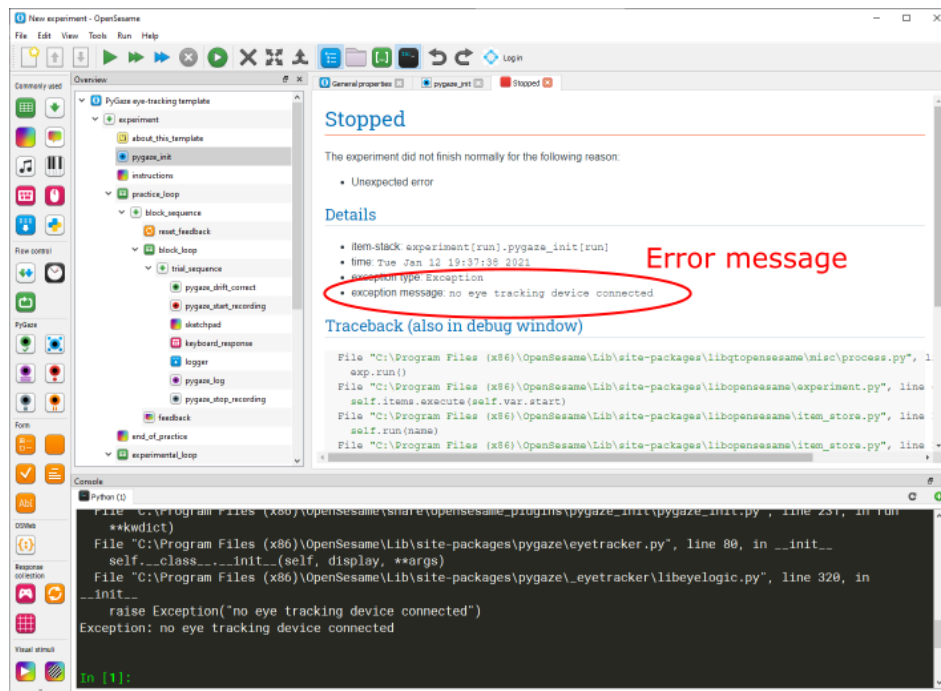
12. The experiment will first calibrate the device to the user and then show some stimulus points to look at.

Now, you know how to use the EyeLogic eye tracker in an OpenSesame template project. In order to include it in your own project, just choose the EyeLogic eye tracker in the project's **pygaze_init** node.

You may also use the other eye tracking nodes from the PyGaze section of the nodes bar at the left of the OpenSesame window. With the **pygaze_start_recording** and **pygaze_stop_recording** nodes, you can trigger storage of all acquired eye samples to the output file logfile.eyelogic.csv. Use the **pygaze_log** node within the program in order to add additional log messages which are written to the same eyelogic output file. You can use them to synchronize the eye data with your program.

About

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