Elisas Strange Case - Processing sketch

By f.Lüscher / fluescher.ch 2023 for Next Level Escape AG.

"AS IS" pi pa po etc.

Run this with processing.org or standalone when compiled on mac/win/linux/raspberry pi.

When not on Raspberry Pi with GPIO pins and 4 connected rotary encoders,
set `GPIO_AVAILABLE` to `false` and `DEBUG` to `true`.

Press number keys `0`-`6` or left/right `arrow keys` to change stages manually.
Press `ESC` or `right mouse button` to go to desktop.

STAGES

Stage#	Action	At end of stage..
0	Blackout	..wait for UDP signal
1	Message "AWAITING INPUT"	..wait for UDP signal
2	Startup sequence of computer	..**auto-jump** to stage **3**
3	Elisas curves, without connected brainalizer on players head	..wait for UDP signal
4	Elisas curves, with connected brainalizer. Adjust with dials to sync brainwaves.	..**auto-jump** to next stage when synched
5	Message "SUCCESS"	..wait for UDP signal
6	Elisas thoughts as sequence in DE & EN	..wait for UDP signal

IP & USER

The IP address is *currently* fixed to `192.168.1.60`.

- username raspberry pi: `esc`
- password raspberry pi: `synchron`

UDP

Messages received by this script @ port `53545`:

- `sync_stage0`, `sync_stage1` etc: Jump to a specific stage (`0`...`6`).
- `sync_skipLoading` can be used to skip the initial loading process if it takes forever. (Stage `3`+`4` will not be as fast at first)

Messages sent by this script to port @ `53544`:

- `sync_ready` is sent when initially "loaded" stage `3`+`4` (only on startup)
- `sync_success` is sent when both curves where properly aligned by the player
- `sync_end_of_thoughts` is sent after the last thought of elisa
- `sync_died` is sent when program closed or died

EXIT APPLICATION TO DESKTOP

Press `ESC` or `right mouse button`.

ADJUSTMENTS

To see the whole screen on one monitor, press the "SPLITTER" button on the "video wall hdmi" remote.

If adjustments to the scripts are needed, open the file `~/Applications/sketchbook/elisas_synchronotron/elisas_synchronotron.pde` with processing.
Or double click the file `editor.sh` on the desktop and click "*file* > *open recent*.. > *elisas_synchronotron*".
Press the **play** button on the GUI to preview the changes. `ESC` or `right mouse button` to exit. Save and quit.

Double click the file `play.sh` on the desktop to verify changes.

Double click the file `update_and_play.sh` on the desktop to pull latest changes made by f.Lüscher - be sure to deliver an internet connection.

To reset the screens, press the "2x2" button on the "video wall hdmi" remote.

NOTE: If you update, you loose all local changes made by you to `~/Applications/sketchbook/elisas_synchronotron/elisas_synchronotron.pde`.

LUCKY NUMBERS

Amplitude	+**345**
Frequency	+**307**
Scale	+**12**
De-noise	+**424**

NERD STUFF

deployment

1. ***move*** *the file* `libprocessing-io.so` *from* `/linux-arm/lib` *out of the ways before deployment*
2. Build with processing 4 on mac. forget java. Build empties the folder `/linux-arm`first.
3. ***move*** *the file* `libprocessing-io.so` *to* `/linux-arm/lib` *again*

4. git add, git push on mac
5. git pull on raspi

logging of boot:

```
tail -f /home/esc/.cache/lxsession/LXDE-pi/run.log
```

start elisas_synchronotron:

```
sudo /home/esc/Applications/sketchbook/elisas_synchronotron/linux-
arm/elisas_synchronotron
```

change startup things:

```
nano /home/esc/.config/lxsession/LXDE-pi/autostart
```

If java is not found or java says "this application was build with a newer version of java":

EITHER: Update / install newest java

```
sudo apt install openjdk-17-jdk -y
```

OR: Use & make symlink to java that is used by processing editor (not needed if openjdk 17 is isntalled):

```
sudo ln -s /home/esc/Applications/processing-4.1.2/java/bin/java
/usr/bin
```

If something with "libprocessing-io not found":

Use & make symlink to missing native io library (if)

```
ln -s ~/Applications/processing-
4.1.2/modes/java/libraries/io/library/linux-armv6hf/libprocessing-io.so
```

```
lib/
```