Context Experiment Participants Tracking Script Manual – Version 1.0.0

Written by Alina Ryabtsev, January 2021
For any questions, suggestions, issues or concerns, do not hesitate to contact me via email: alina.ryabtsev@mail.huji.ac.il

Purposes

This script was built in order to help the lab members in the process of tracking participants while the experiment while ensuring that all of the requirements of the experiment are executed by the subject each day.

The script outputs to external file a report that contains the following:

- If the subject had completed a mood report 3 times a day (at the related timing).
 - When the subject had executed them
- If the subject had completed a video recording.
- If the subject had filled when he woke up or fell asleep
- If the subject had completed two sessions of games at the morning and at the evening
 - When the subject had executed them
 - Executed them with what delay from the scheduled time

The script can be run at the end of the day or at the following day, as described later in the section *Running Script*. This provides the lab members some flexibility and convenience to work with the data.

The script is easy to use across different databases files. It also easy to maintain and update if any new features are required. It is currently a private project on my GitHub; however, I can share the code source anytime when needed.

Prerequisites

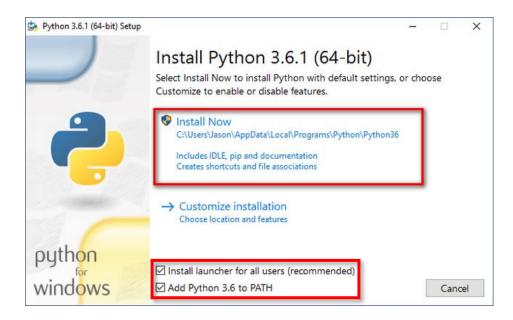
- python version 3.7 and above
- participant's DB file on the machine

Prerequisites Installation

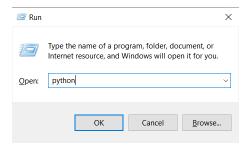
Python Installation

a. Download python from here: https://www.python.org/downloads/release/python-375/ the appropriate file according to your computer OS – checker whether your system is 64 bit or 32 bit. It does not matter if web-based installer or executable installer.

b. On windows machines, after opening the installation wizard, first make sure both *Add Python to Path* and *Install launcher for all users* are checked. Then, press on *Install now* option. Then press next until installation is completed.



- c. To make sure it has been successfully installed (on Windows):
 - i. Press Winkey + r buttons.
 - ii. In the "Run" box enter python like this:



and press enter. If Python window was opened than it means the installation has completed successfully (You might close it).

```
      C\Python37\python.exe
      −
      X

      Python 3.7.5 (tags/v3.7.5:5c02a39a0b, Oct 15 2019, 00:11:34) [MSC v.1916 64 bit (AMD64)] on win32
      ^

      Type "help", "copyright", "credits" or "license" for more information.
      >>>
```

Running Script

- 1. Put the script ParticipantsTracking.py and the DB file (i.e., schedule 1012.db) in the same folder.
- 2. Open the script for editing with any text editor that is installed on the computer, for example:
 - a. right click on ParticipantsTracking.py file
 - b. Edit with IDLE (a text editor that is installed when python is installed)
- 3. Editing the script the script has only three lines that might be edited while using it:
 - a. Data base file name. For example, if running subject 1012 and its associated database file is schedule_1012.db, then change in line 15

```
DB_FILE_NAME = "1005_schedule.db"
```

the database file name to schedule_1012.db

```
📝 *ParticipantsTracking.py - C:\Users\alina\PycharmProjects\Computitional lab tools\ParticipantsTracking.py (3.7.5)*
                                                                                                        П
                                                                                                               X
File Edit Format Run Options Window Help
This is a participant tracking script of the context reward experiment.
The only lines that should be changed in order to run this script are lines 15 and 16 and maybe 17.
author - Alina Ryabtsev
email - alina.ryabtsev@mail.huji.ac.il
version - 1.0.3"
import sys
from datetime import datetime
from datetime import timedelta
import time
import sqlite3
import os
DB_FILE_NAME = "2007_schedule.db" # Put the database file name within the quotation marks
DATA_FROM_TODAY = False # Put True if today's data, False if data is from yesterday
DAYS_DELTA = 1 # number of prior days to take data from
```

- b. The script has two modes that it can run:
 - Run on collected data from the current day
 - Run on collected data from any previous day

To change the mode of the script, just change line 16 to *True* or *False*:

```
×
🕵 *ParticipantsTracking.py - C:\Users\alina\PycharmProjects\Computitional lab tools\ParticipantsTracking.py (3.7.5)*
                                                                                                        П
File Edit Format Run Options Window Help
This is a participant tracking script of the context reward experiment.
The only lines that should be changed in order to run this script are lines 15 and 16 and maybe 17.
author - Alina Rvabtsev
email - alina.ryabtsev@mail.huji.ac.il
version - 1.0.3"
import sys
from datetime import datetime
from datetime import timedelta
import time
import sqlite3
import os
DB_FILE_NAME = "2007 schedule.db" # Put the database file name within the quotation marks
DATA_FROM_TODAY = False # Put True if today's data, False if data is from yesterday
DAYS_DELTA = 1 # number of prior days to take data from
```

For example, if

```
DATA_FROM_TODAY = True
```

then it means that script's mode is to check if the subject has executed all stages of the experiment today, otherwise, if

```
DATA\_FROM\_TODAY = False
```

then it means that script's mode is to check if the subject has executed all stages of the experiment <u>from any prior day</u>, as <u>configured in TIME_DELTA</u> (described next).

c. If data is taken from any previous day, then it might be taken from any previous day since the beginning of the experiment. To configure from what day the report should be generated, insert the number of days before today:

```
🗽 *ParticipantsTracking.py - C:\Users\alina\PycharmProjects\Computitional lab tools\ParticipantsTracking.py (3.7.5)*
                                                                                                        File Edit Format Run Options Window Help
This is a participant tracking script of the context reward experiment.
The only lines that should be changed in order to run this script are lines 15 and 16 and maybe 17.
author - Alina Ryabtsev
email - alina.ryabtsev@mail.huji.ac.il
version - 1.0.3"
import svs
from datetime import datetime
from datetime import timedelta
import time
import sqlite3
import os
DB_FILE_NAME = "2007_schedule.db" # Put the database file name within the quotation marks
DATA_FROM_TODAY = False # Put True if today's data, False if data is from yesterday
DAYS_DELTA = 1 # number of prior days to take data from
```

For example, if

DAYS DELTA =
$$2$$

It means that the report would be generated on the data from two days ago.

- d. Do not forget to save the script after changing it.
- 4. Running the script double click on *ParticipantsTracking.py* file. An output file should appear named as followed:

```
"database filename". "date of the analysis".txt
```

while date of the analysis corresponds to the mode of the script, if ran on yesterday's data than it will be yesterday's date, else today's date. For example:

```
1012_schedule.db_analysis_2021-01-05.txt
```

Output Product

The output file is a txt file which describes the analysis of the tracking. Here is an example to a "good" report file where the participant completed all tasks of the experiment:

```
DAILY TRACKING ANALYSIS - 2021-04-29
MOOD REPORTS:
 Completed morning session mood report at 29-04-2021 09:48:20.
 Completed afternoon session mood report at 29-04-2021 15:29:39.
 Completed evening session mood report at 29-04-2021 20:38:40.
SLEEP DIARY:
  fell asleep at 22/4/2021-20:14.
 woke up at 22/4/2021-7:40.
VIDEO RECORDINGS:
 Has completed a video recording.
GAMES PERFORMANCE:
 Blocks played: 52, 51, 50, 49.
  Has completed morning session game at 29-04-2021 10:08:00 with delay of 1:08:00.
 Has completed another morning session game at 29-04-2021 10:00:31 with delay of 1:00:31.
  * Time difference between first and second morning session session is 0:07:29.
 Has completed evening session game at 29-04-2021 20:53:32 with delay of 1:53:32.
 Has completed another evening session game at 29-04-2021 20:46:13 with delay of 1:46:13.
  * Time difference between first and second evening session session is 0:07:19.
```

And here is an example for a "bad" report file where the participant has completed none of the stages of the experiment that day:

```
DAILY TRACKING ANALYSIS - 2021-04-30

MOOD REPORTS:

Has not completed morning session mood report.

Has not completed afternoon session mood report.

Has not completed evening session mood report.

SLEEP DIARY:

No sleeping data added.

VIDEO RECORDINGS:

Has not completed a video recording.

GAMES PERFORMANCE:

No games of the morning session have been completed.

No games of the evening session have been completed.
```