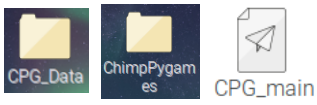
User Manual: ChimpPygames v0.3.0

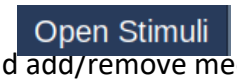
Start Program / Pre-Tasks Setup:

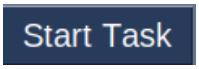
1. Open the 'CPG_Data' folder and move or delete all data files. (If not moved, files will be overwritten by newly exported data)
2. Open 'ChimpPygames' folder.
3. Find 'CPG_main' and 'execute' it to start program.
4. Select 'Global Parameters'.
5. Set parameters to desired values.
6. Select 'Confirm Parameters'. (Even if no values were changed)
7. Check that either the touchscreen or joystick is working properly for desired input mode.
8. Select 'Back to Main Menu'
9. Unless current data is supposed to be kept loaded, either:
    a. 'Delete Data'
    b. OR 'Export Data' then 'Delete Data' to clear loaded data.



Run a Task:

1. Select the button in the left column with '<task name>'.
2. Set parameters to desired values.
3. Select 'Confirm Parameters'. (Even if no values were changed)
4. If running 'Social Stimuli as Rewards' task, select 'Open Stimuli' and add/remove media (.png, .jpeg, .mov, .mp4 files) for desired stimuli.
5. Select 'Start Task'.
6. To stop task (or if trials have finished), hit 'esc' or 'q' keys on keyboard.
7. Select 'ok' from popup.





Data Management:

- Each Task has its own csv file which stores its data.
- Data is added to these files while tasks are running (so data will still be saved even if a task is exited before finishing)
- Data is added to the bottom of these files (so a task that has been run multiple times will have data from each run stored in the same file)
- 'Exporting Data' will move all non-empty csv files to the 'CPG_Data' folder and overwrite any data files in the folder with the same name.
- 'Deleting Data' will clear all non-exported csv files (so every task's csv file will be empty)

Task and Parameter Info:

- General Param Info:

Parameter has <___> in the name.	Parameter variable type <___> as input.	Input is measured by <___>.
"name"	String (Ex: bob)	N/A
"length", "height", or "radius"	Integer (Ex: 5)	Size in Pixels (Ex: 5 -> 5px)
"interval"	Integer (Ex: 3000)	Time in Milliseconds (Ex: 3000 -> 3 sec)
"retention"	Comma separated Integers (Ex: 300,5000,200)	Randomly Chosen Time in Milliseconds (Ex: 300,5000,200 -> 5 sec)
<Any other parameter>	Integer (Ex: 15)	Amount

- Training 1: Subject selects increasingly smaller green stimulus over a number of trials

- Training 2: Subject selects a green stimulus that appear in random places over a number of trials

- Two Choice Discrimination: Subject selects a positive stimulus while avoiding a negative stimulus for a set amount of trials in a row (number_of_correct_in_a_row) before being presented with a new pair of positive/negative stimuli where they must repeat their selections a certain number of times (number_of_stimulus_pairs)

- Social Stimuli as Rewards: Subject selects a large green circle stimulus and then either a randomly selected picture is displayed for a set amount of time (stimulus_duration), or a randomly selected video is shown for a set amount of trials.

- Match to Sample: Subject selects a randomized sample stimulus that then disappears and a set number of new stimuli (2-4) appear where the subject should select the stimulus that matches the previously selected sample stimuli while avoiding the others. This procedure continues for a set amount of trials. Sample stimuli can also be set to stay visible after being selected.

- Delayed Match to Sample: Same procedure as 'Match to Sample' except there is a time period between the sample stimulus disappearing and the new stimuli appearing. This time interval is randomly chosen every trial from the (retention_interval_lengths) parameter.

- Oddity Testing: A set number of stimuli appear (3-9) and the subject selects the outlier stimulus while avoiding the stimuli which appear to be the same for a set number of trials.

- Delayed Response: A set number of identical stimuli appear (3-9), but one of them is the spatially cued stimulus (SCS) which “blinks” rapidly and the subject selects this one. Then after a randomly chosen set amount of time from (retention_interval_lengths), The same identical stimuli appear while the (SCS) is not blinking. The subject then selects the (SCS) stimuli while avoiding the others. The location of the (SCS) is randomly chosen from a set number of locations defined by (number_of_possible_loca) every trial for a set number of trials.