BALLOON ANALOG RISK TASK ONLINE VERSION DOCUMENT

September 11, 2024

1 files

there are 7 files.

1.1 demo.html

in html file I include all the plug-ins from jspsych folder and also I include style.css and script.js.

1.2 style.css

all the appearances are edited here.

1.3 script.js

this is the main part of the code, all the js files are run here. I need to import the functions I've written in the js files here.

there is a function calle **runAllTasks** in this file that would run all the task in an order. first description, then task then questionnauire.

1.4 task_description.js

all the task description, consent form, demographic questions are included here. they are just html scripts. the demographic data is downloaded after when this is finished.

1.5 task.js

1.6 task_questionnaire.js

impulsivity measure questionnaire is included here and it will get downloaded after when the participant clicks on continue. the questionnaire is taken from this paper.

1.7 task_balloon.js

this is not complete and **not used** in the current task. I wanted to use real balloon images for balloon task, now I'm using circles which looks like the Matlab task. **You can ignore this.**

2   folders

there are 4 different folders.

2.1   favicon_io

this is the little icon showing up on the browser tab.

2.2   img

these are the images used in the task. the balloon images are not used in the main task. but there is a file called **task_balloon.js** that I wanted to have real balloons instead of circles but I changed my mind.

2.3   jspsych

these are all the plug-ins and packages that is used in JSpsych.

2.4   sound

these are the different sounds used in the task. I am not using the inflate sound cause I don't like the constant sounds during the task. :D

2.5   data

this folder consists of a **jupyter notebok** and another folder with task 3 datasets in it:

2.5.1   1_analysis.ipynb

sample data analysis. In this file, I am taking a look at task_data, demographic_data, and questionnaire_data.

- **demographic_data.csv:** is only a couple of demographic info:
  - gender
  - age
  - range
  - ethnicity
  - race
- **task_data.csv:** the task has 250 trials with the same 750ms intertrial interval. the columns are:
  - balloonType: yellow, orange, red, yellow special[1], orange special, red special, gray[2].
  - outcome: pop or bank (gray balloons are saved as pop and special balloons are saved as banked).
  - reaction Time (ms): the time between balloon onset and pushing inflate button.
  - inflation Time (ms): the time between pushing inflate button and outcome.
  - reward (this is cumulative reward)

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[1]special: the learning balloons where the participant only inflates the balloon and watched the balloon mean size and gets the reward.

[2]these are gray balloons with no reward, just passive trials

2.5.2   1_nill folder

this folder consists of 3 csv files that had been downloaded during the time when Nill was doing the task. There are task_data, demographic_data, and questionnaire_data. I briefly looked at all these files in the 1_analysis.ipynb file.

3   How to run the task?

here are the steps.

1. install visual studio code
2. open your terminal in the project folder and write: **code .** (code space dot)
3. open terminal on the vs code and pull up a python server by writing the code: python -m http.server 8000 (or any number)
4. open your browser and write: http://localhost:8000/.
5. then go to task folder
6. then open demo.html
7. now you can run the task
8. each time that you update task in the vscode, you need to close the previous server by pressing **command+c** open a new server using the code: python -m http.server 8080 (or any number instead of 8080) to see the changes you've made.

4   Task sections

1. consent form
2. demographic form (demographic form gets downloaded in csv format)
3. task instruction
4. BART task (task data gets downloaded in csv format)
5. questionnaire (questionnaire gets downloaded in csv format)
6. 3 files get downloaded at the end of each section with the same names as their section and adding date-time at the end format.