Dream Study Design Doc

Python : EEG checking of brainwaves

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Stage: wake , 1,2,3, REM sleep (0,1, 2, 3, 4)

-Reliable company that automatically detects stage

If stage ==2:

Timer counts down:60s

-still checks if still in n2

Play sound1 x 15

(Sounds are randomised so play interchangeably, timing between sounds are also randomised)

Play sound2 x 15

If s=! 2 break loop and start again

Working python code: checks sleep stage every 3 seconds

What still needs to be done: above pseudo code and mark data when s2 starts, when stops, how many sounds are played so to check with brainwave data.

-> get all this data into JSON file

Different classes for sound system:

Sound Sequency(String, JSON, Soundtype [] sounds ): - creates array of sound objects with two random sounds (so creates order of sounds)(starts experiment)

-function that starts experiment (starts counting/ starts playing sounds from array if n==2) (trigger code to mark into brain wave sequence?)

- saves data into sound object

-returns the array; convert into JSON

Sound (sound type;sound)

-contains the sound played and the time it is played

Main

-creates sound sequence object

-creates JSON object

- “chooses” (interactive input from experimenter) the two sounds used in the experiment

-starts the experiment