psychopy keyboard answer breaks down

I am trying to write an Go_nogo Task in Psychopy. Even though I managed to write a script which is working, there are still a few things that make troubles. First, I present pictures of emotional stimuli (im_n, neural; im_a, emotional) and people should only answer by pressing "space" if neutral emotional pictures are presented. When I run the code below everything works well until I don't press any key or the wrong key. So my question is, how do I have to write the code that I don't get kicked out of the run while not answering...? Thanks everybody!

```python
for im in imlist: # Loop for each Image in the List
    picShown = bitmap.setImage(im)
    bitmap.draw()
    win.flip()
    rt_clock.reset()
    resp = False

    while rt_clock.getTime() < timelimit: # timelimit is defined 2 s
        if not resp:
            resp = event.getKeys(keyList=['space'])
            rt = rt_clock.getTime()

    if im in im_n: # im_n is an extra list of one kind of images
        correctResp = 'space'
        if resp[0]==correctResp:
            corrFb.draw() # is defined as a "green O"
        else:
            incorrFb.draw() # is defined as a "red X"

    win.flip()
    core.wait(ISI)
```

I get the error message:

```python
if resp[0]==correctResp:
IndexError: list index out of range
```

python   keyboard   psychopy

edited May 9 '14 at 10:05   asked May 8 '14 at 12:18

Jakob
15   5

> Generally, it is always good to include error messages in the question, so for the future reader searching google and coming here to solve a similar problem, you might want to update your question with that and other info that I have failed to take into consideration. – Jonas Lindeløv May 8 '14 at 22:12

> Yes you are right. I added the error message which you assumed correctly – Jakob May 9 '14 at 10:06

1 Answer

My guess is that you get this error message at the `if resp[0]==correctResp:` line:

```python
IndexError: list index out of range
```

Is that true? If yes, it is simply because event.getKeys() returns an empty list `[]` if no responses were collected. And doing `[][0]` will give you the above error because there's no first element (index zero) just like `[1,2,3,4][1000]` will give you the same error. Note that even if you press a lot of keys and none of them are in the keyList, getKeys will return an empty list because it ignores everything but the contents of the keyList (unless you set keyList=None, in which case it accepts all keys).

There's a few simple ways out of this. Firstly, you can simply check whether `resp` is empty and give a "fail" score if it is and only check for correctness if it is not. A more general solution, which would work with many response keys and scoring criteria, is to do `if correctResp in resp` and then score as a success if yes. This comparison will work with an empty list as well, in which case it always returns `False` as empty lists per definition can't contain anything.

But in your particular case, you only have one response option so it is even simpler! Since you've "filtered" responses sing the keyList, you KNOW that if resp is [], the subject answered "no-go" and conversely if resp is not [], he/she answered "go". So:

```python
if im in im_n:  # im_n is an extra list of one kind of images
    if resp:  # if subject answered 'go'
        corrFb.draw() # is defined as a "green O"
    else:
        incorrFb.draw() # is defined as a "red X"
```

Actually, I suspect that you also want to give feedback in trials without neutral images. In that case, define correct as `bool(resp) is (im in im_n)` :

```python
if bool(resp) is (im in im_n):  # if answer correspond to trial type
    corrFb.draw() # is defined as a "green O"
else:
    incorrFb.draw() # is defined as a "red X"
```

edited May 9 '14 at 12:01   answered May 8 '14 at 22:11

Jonas Lindeløv
1,949   1   11   28

Thanks that's great. Its working perfectly, even though I have to read and learn more about the "bool"-function... :) – Jakob May 9 '14 at 10:08

`bool` can be useful sometimes. In general, emptiness and 0 is False. Anything else is True. –
Jonas Lindeløv May 9 '14 at 11:56