university of groningen / faculty of behavioural and social sciences

SR Research EyeLink

Using Python in OpenSesame

Session 5

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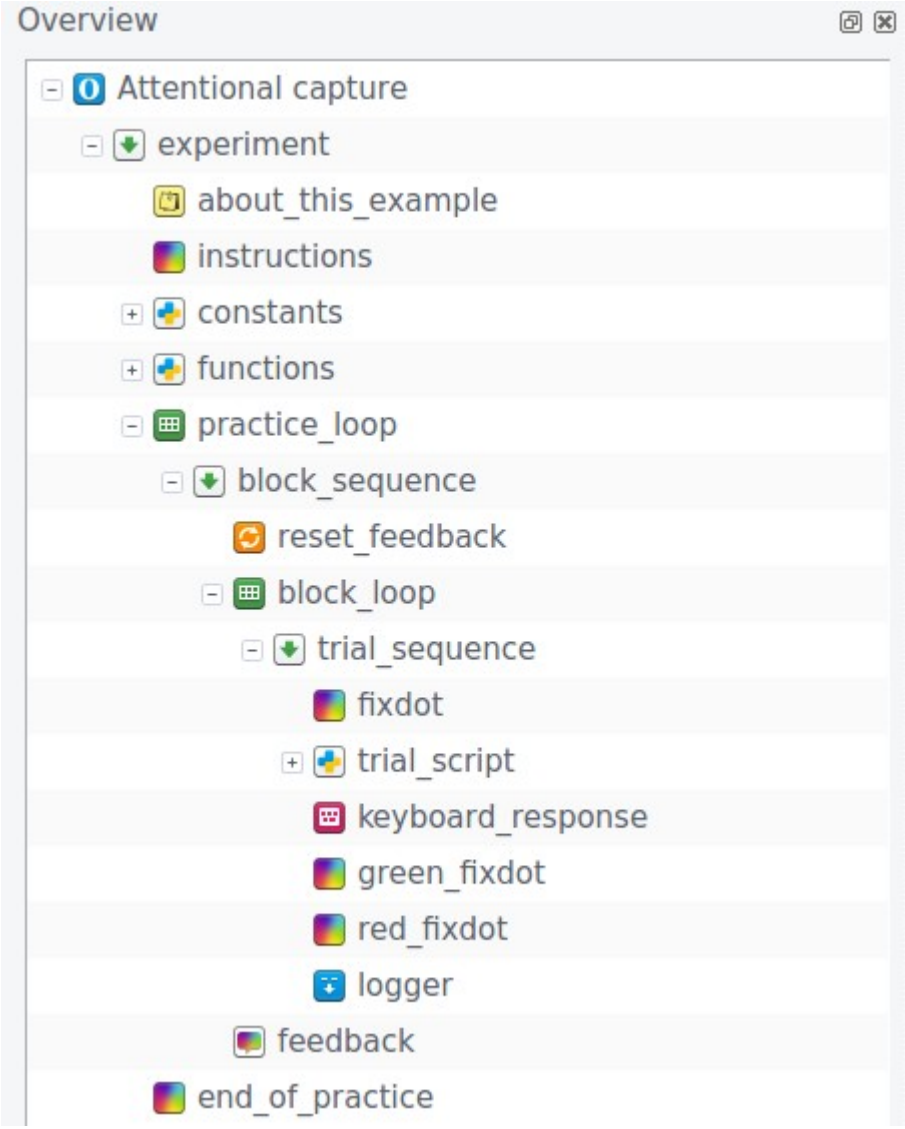
Items

- Yesterday, you saw that **items** are building blocks
- One item does one thing
  - Visual stimuli
  - Response collection
  - Etc.
- The **inline_script** item embeds Python script



The inline_script item

- You can include arbitrary Python code
- Scripts share a single **workspace**
  - Variables declared in one script are available in another script
  - The same goes for module imports

The inline_script item

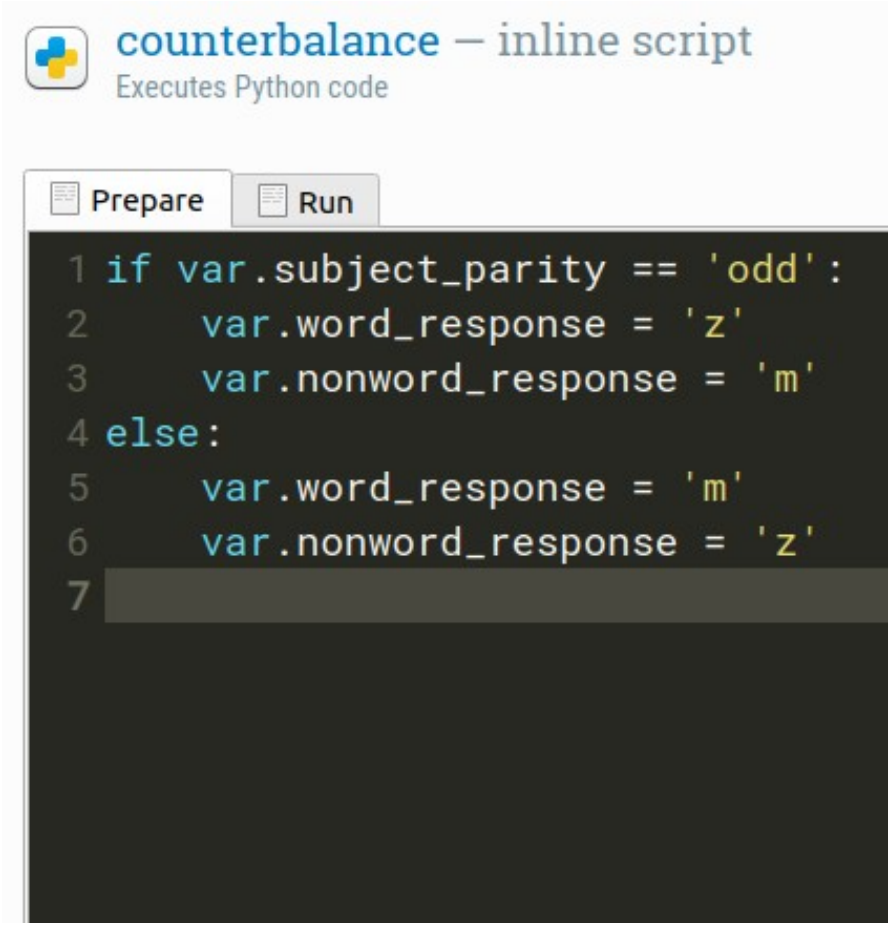
- There are two phases
- The **prepare** phase
  - All items in a sequence are first prepared
  - Create Canvas objects, and do other time-consuming things here
- The **run** phase
  - Next all items are run
  - Keep as short as possible!

The inline_script item

- OpenSesame provides functions for interacting with the experiment
- These are described on the documentation site
- Let's take a look at the most common ones

The var object

- The `var` object contains experimental variables
  - Variables defined in a loop table
  - Response variables
  - Etc.
- `var.my_variable` is the Python equivalent of [my_variable] in the user interface

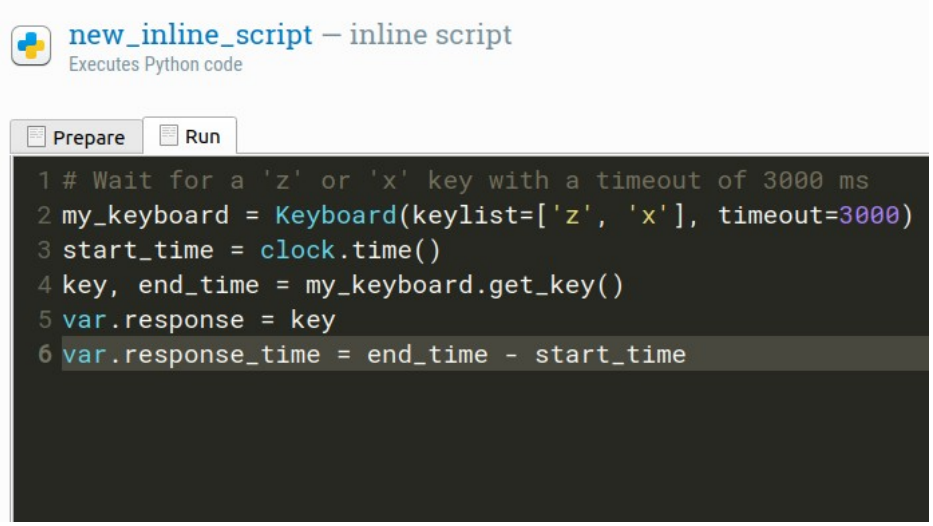


The Canvas class

- The `Canvas` class is for presenting visual stimuli
  - Canvas elements can have names
  - And you can modify their properties later

The Keyboard class

- The `Keyboard` class is for collecting key press responses



And much more …

- The **pool** object: accessing the file pool
- The **items** object: accessing items
- The **responses** object: response history
- The **clock** object: time functions
- The **Canvas** class: visual stimuli
- The **Keyboard** class: key presses
- The **log** object: writing to the log file
- The **Mouse** class: mouse responses
- The **Sampler** class: sound playback

Hands-on sessions

- First I'll show some basic Python in OpenSesame
- Then you'll work by yourself on the Extra Assignments at https://osdoc.cogsci.nl/3.3/tutorials/wcst-python/