Introduction to Python

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F I N A L A S S I G N M E N T

ASSIGNMENT DESCRIPTION AND OVERVIEW

GOALS

You've gotten a pretty detailed overview of python in the past six sessions. In this final assignment, we hope that you'll be able to "tie everything together" and to put all of the new things you've learned to use.

INSTRUCTIONS

You will **build your own experimental pipeline** from scratch – all the way from programming an experiment, to collecting participant data, to analyzing and visualizing the results.

We are deliberately keeping this open, because our hope is that you will be able to reuse chunks of the code that you'll write for this assignment during some of your future experiments. So ideally, you should choose to write code for an experiment that you'd actually like to run in the near future! :)

In case you cannot think of any design that you're desperate to write code for, here's a simple outline of what the assignment could look like:

- Create priming stimuli using Pillow or a sound editing module
- Create a PsychoPy experiment to collect response time data
- Store the RTs and accuracy in a csv file
- Plot the data using seaborn
- Analyze the data using PyMC3 or Statsmodels
- Commit all of your changes regularly to github ;)
- (But seriously, this is an important point. For the small homework assignments, it was acceptable to only create one single commit and push for the entire exercise. For a bigger project like this, you should make sure that you make a separate commit for each small substep that you do.)

FORMAT AND WORKLOAD

This assignment should take you approximately **six hours** to complete. How far you get with these six hours is pretty much up to you – you might want to spend a lot of time making really pretty figures with seaborn, or you might want to design a more complicated experiment, to begin with. We're happy as long as we can see that you've made an effort. :)

If you still have some unfinished work from previous assignments, we'd encourage you to try finishing that first.

Please **submit** your final assignment by **pushing it to your github branch**.

The final deadline is December 18th, 2018. Please don't hesitate to ask any questions along the way!