README.md

Hi! 👋 Welcome to my Python tutorial for UX researchers.

I believe that the core functions of a user researcher are to design research studies, interact with users, intepret those interactions, and communicate insights to stakeholders. However, many parts of the user research process are hands-on, time consuming, and not reproducible. These day-to-day issues are exacerbated as research scales; when researchers want to ask more people more questions, the execution of the research quickly gets unwieldy. This means that on some projects, researchers may spend the more time cleaning and managing data by hand than anything else.

This is where Python and Jupyter Notebooks comes in. Python and Jupyter Notebooks are incredibly powerful tools that have the ability to drastically improve your research processes and day-to-day life. **My goal here is to help user researchers get started working with data in Python and Jupyter Notebooks.**

Learning Python, or learning how to program in any language, can seem overwhelming. I learned how to program myself, and it took me a long time to figure out what was going on. This was made worse by the fact that a lot of tutorials and documentation out there are designed for software developers and data scientists. **But this tutorial is designed for researchers**. Here, you'll learn the tiny slice of Python that is going to make the biggest difference for your research.

In this tutorial, I do my best to keep the language, examples, and documentation accessible; I assume that you have zero experience with programmming or quantitative data analysis. I expect that, currently, if you wanted to clean, manipulate, describe, or visualize data that you would use Excel, Google Sheets, or other similar tools.

As a researcher, I also actively research my own materials! If you have suggestions, questions, concerns, or sticking points, please let me know @ alexdsbreslav@gmail.com.

Does any of this cost any money?

No! All of the tools that I will introduce to you in this tutorial are free and (mostly) open source.

How long will this take?

This tutorial is a work in progress. I am developing new material and testing existing material with friends and colleagues. Below I outline the tutorial, as it currently stands, and roughly how long each step will take:

1. Download the tools you'll need to program and familiarize yourself with how they work **~30 minutes-1 hour**
2. Learn and practice Python basics @ codeacademy.com **~10-20 hours**
3. Learn how to navigate essential tools and resources that you'll need as you learn how to code (Jupyter Notebooks, packages, documentation of packages, error messages etc.) **~30 minutes-1 hour**
4. Learn how to take your data from a messy raw output to a shiny, clean, data table ready for interpretation and analysis. **~1-4 hours**

Coming Soon...

5. Once your data are clean, you'll want to examine basic descriptive statistics. Learn how to manipulate your data to describe its features (e.g. how many users are in your study? What was the average rating for your product?).
6. Learn how to visualize your data. Visualization is a key step to understanding the features of your data, as well as communicating your findings in a compelling way to stakeholders.

To get started...

Click here to go to the step 1 instructions.