
Jupyter at GHC Open Source Day 2017

Documentation

Release 0.1.1

Project Jupyter

Nov 27, 2017

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Important: Before the event

The Grace Hopper Celebration is a busy, vibrant event. We know you are busy. Since conference wifi can be spotty, please setup your laptop (if possible) before Open Source Day.

- Install [Anaconda for Python 3.6](#)
- Install a favorite code editor (see recommendations in set up if you don't have a favorite)
- Create a GitHub account
- Install git
- Optional (or if you have difficulty installing Anaconda):
 - Install [nteract](#) (a one-click install for notebooks on the desktop)
 - Sign up for the free [Microsoft Azure notebooks](#) (notebooks in the cloud)

For detailed instructions, see *[Set up and configuration](#)*.

Questions? File an issue on [our GitHub repo](#). We'll do our best to answer them. Thanks!

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- *Set up and configuration*
- *Jupyter Notebooks*
- *HFOSS Humanitarian Free Open Source Software*
- *History*
- *Next steps*

1.1 Open Source Day 2017 with Jupyter

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1.1.1 Welcome to Jupyter and Open Source Day

Thanks for joining us today.

Key things for a successful Open Source Day:

- Have fun.
- Learn.
- Ask questions. *Pro tip: Great developers ask lots of questions.*
- Build useful things for humanity.

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Links

- Repo: <https://github.com/willingc/ghc-jupyter-2017>
- Website for Participants and Mentors: https://ghc_jupyter.readthedocs.io
- Grace Hopper Celebration 2017 Open Source Day
- Open Source Day Wiki
- Open Source Day Wiki - OpenHatch

Key Info

- Location
- Schedule
- Lunch/Breaks
- Presentation

About the Organization

- [Project Jupyter](#)

Mentors

- Jamie Whitacre, Open Source Day Project Lead
- Carol Willing @willingc
- More mentors coming soon

Thanks

A big thank you to Open Source Day organizers, sponsors, mentors, guests, and attendees.

1.1.2 Set up

Conference wifi can be spotty at times. If you are able to install these items before Open Source Day, that would be great. If you are not able we'll have a way for you to do so at the event.

Editor

You will need to have a code editor installed on your system. There are many available that are open source. Two user friendly editors are:

- [Atom](#)
- [Visual Studio Code](#)

GitHub and git

[GitHub Help pages](#)

1. Create a [GitHub account](#) if you do not already have one.

[Bootcamp](#) / [Set Up Git](#)

Set Up Git

[MAC](#) | [WINDOWS](#) | [LINUX](#) | [ALL](#)

At the heart of GitHub is an open source version control system (VCS) called [Git](#). Git is responsible for everything GitHub-related that happens locally on your computer.

If you're not comfortable using the command line right now, GitHub lets you complete many Git-related actions *without* using the command line, including:

- › [Creating a repository](#)
- › [Forking a repository](#)
- › [Being social](#)

However, if you find that you need to use Git, we can help you set it up!

2. Make sure git is installed on your system.
3. From the command line (terminal), enter `git --version`. If git is installed on your system and its PATH, it will display git's version.

Command line (Terminal)

Know how to access a terminal on your system.

Jupyter Notebook

1. Download the [Anaconda installer](#) for your operating system. FYI...most modern computers are 64 bit.
2. Run the installer.
3. Download the [conda cheatsheet](#)

Documentation, help, and cheatsheets

- Command line basics
 - [\[cheatsheet\]](#)
 - [Advanced cheatsheet](#) Not needed for workshop but handy to have
 - [Django Girls tutorial section on command line and terminal](#) Highly recommended
 - [Learn Python the Hard Way - Command Line](#)
- GitHub and git

- [GitHub's git cheatsheet](#)
 - [git help](#)
 - [GitHub help](#)
 - [You can git!](#)
 - Python basics
 - [Django Girls tutorial section on Python](#)
 - [Quick reference to Python](#)
 - Conda
 - [conda cheatsheet](#)
 - [conda documentation](#)
-

Work in process:

Goals

- Learn
- Gallery of Humanitarian Notebooks
 - Education - teaching women; access to technical resources; open data
 - Mapping - safe routes, open data community resources
 - Curate existing notebooks on humanitarian causes
- Open Source Day 2017

Materials

- [Anaconda](#)
- GitHub account
- Git installed on your system
- Basic command line
- Basic git commands

Resources for mentors

- [You can git!](#)

1.1.3 Humanitarian Open Source Notebooks

Health

- [Data analysis of Ebola outbreaks before 2014](#)

Education

Human rights

- [Humanitarian Security and Aid Worker Protection](#)

Disaster recovery

1.1.4 Humanitarian Free and Open Source Software (HFOSS)

Articles

- [11 ways to get involved with Humanitarian FOSS](#)
- <https://opensource.com/life/15/3/micromappers-next-generation-humanitarian-technology>
- <https://opensource.com/life/15/4/5-more-humanitarian-foss-projects>

Books

- [Digital Humanitarians](#)

Resources

- [A Gallery of Interesting Notebooks](#)
- [Humanitarian Data Scientist | Repo - Using R for Humanitarian Data Science | Presentation](#)
- [Harvard Humanitarian Initiative | Research themes | Humanitarian Data and Technologies - Real world examples](#)
- [United Nations article on Data Challenges in Humanitarian Projects | Original source | Data Science Projects of the UN](#)
- [Data for Good Exchange - Bloomberg](#)
- [DataKind projects](#)
- [Data for Democracy](#)

Examples

- [Humanitarian Day LA 2017](#)
- [Aid worker security](#)
- [Machine learning for Humanitarian Crisis Classification](#)
- [NYU Visualize Change | Repo](#)
- [Intro to Data Driven Policy Making - lecture note](#) A nice example of a lecture in a notebook.

Datasets

- [The Humanitarian Data Exchange](#) - excellent search for datasets.
- [Datasets curated by Hong Kong General Assembly](#)

1.1.5 Jupyter and OpenHatch History at Open Source Day

2016 Houston, TX

- [Repo](#)
- [Website](#)

2015 Houston, TX

- [Repo](#)
- [Website](#)

2014 Phoenix, AZ

- [opensource.com article on Open Source Day 2014](#)
- Workshop by Shauna Gordon-McKeon

2013 Minneapolis, MN

- [opensource.com article on Open Source Day 2013](#)
- OpenHatch Open Source Comes to Campus workshop
 - [Photos from the event](#)
 - [Practicing git activity](#)
 - [Wiki article on OpenHatch](#)
- [Carol's first public open source pull request](#) and it happened during the Open Source Day workshop.

OpenHatch's very first Open Source Comes to Campus event

[opensource.com article from 2010](#)

1.1.6 Next steps

We're so glad that you joined us today. We hope you will continue to contribute to open source.

Here are some suggestions to keep you connected to open source:

- Tell a friend about today's event and share what you learned.
- Use an open source program or tool.
- Contribute to an open source project. Feel free to contact us for suggestions of friendly projects. Syssters has projects too.
- Run an Open Source Day at your campus, workplace, or user group.
- Sign up as an Open Source Day mentor for GHC 2017

Tips to run your own Open Source Day

An In Person Event Handbook

- [Handbook](#)
- [Event checklists](#)

Open Source Comes to Campus in a Box

- [opensource.com](#) article "Open source comes to campus in a box by OpenHatch"
- [Overview](#)
- [Curriculum](#)
 - [Open Source Communications Tools](#) [YouTube](#) [Wiki](#) [page](#)
 - [Git practice](#) [Wiki](#)
 - [Career panel](#)
 - [History and Ethics of Free Software](#) [Lecture](#)
 - [Hands on workshop](#)

1.1.7 Project on Guardianship and Elderabuse

With advances in healthcare, people are living longer.

The recent article on Guardianship and Elderabuse by *The New Yorker* titled *How the Elderly Lose Their Rights*, highlights the individual rights violations of the elderly. After reading the article, think of ways that data can be used to help others to understand the problem and take action.

Some things that can be done

- cull available state data and curate a list of resources by state
- look at the places written about in the article and see if there are open data sets related to the problem
- create a dataset of publicly available resources for the elderly and their families related to guardianship
- create a dataset of academic research on eldercare and guardianship

Add your notebook or dataset here

CHAPTER 2

Indices and tables

- `genindex`
- `modindex`
- `search`