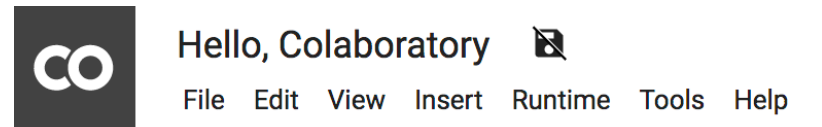# Collaborative Coding

03/07/18

Before we begin:
Go to teletype.atom.io and install both Atom and the Teletype package*
*In Atom go to Settings (⌘,) + Install, search for Teletype

What can you use?

- An old notebook with a tattered cover you pass around between you and your coworkers

- Lines of code delivered by carrier parrots

- Or, in the modern era, virtual options such as:

    - Google Colaboratory
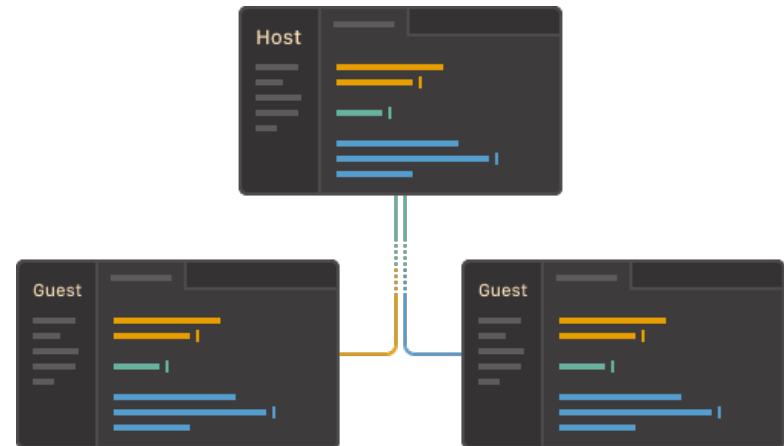
    - Atom's Teletype Package

Google's Colaboratory

- Stored in Google Drive and shared like Docs and Sheets
  - More information: https://colab.research.google.com/notebooks/welcome.ipynb
- Jupyter notebook environment (think Overleaf for Jupyter notebooks)
  - Supports both Python 2 and 3
  - Runs many standard packages, supports Tensorflow
    - https://colab.research.google.com/notebooks/gpu.ipynb
  - Installing new packages is easy
    - https://colab.research.google.com/notebooks/snippets/importing_libraries.ipynb
- We already used this in Kirsten's tutorial notebook (see Slack link)

Atom

- Hackable text editor

  - https://atom.io/

  - https://github.com/atom

- Offers real-time collaborations with package Teletype

How to share or collaborate?

Share a portal

- Click this icon in the Atom status bar

- Allow access to your GitHub and get a token to enter into Atom (if haven't linked yet)

- Click the share button/switch to generate a portal ID

- Invite people to join your portal by sending them your portal ID

Join a portal

- Get a portal ID from someone

- Click this icon in the status bar

- Click to join a portal, and enter the portal ID

Let's try it!

- First, we will all join in on my portal (find key code in Slack)

- Find the file with your name, open it

- Add your snippet of code to the collaborative Atom document demo.py under the comment containing your name

- Now let's run the code (**atom-runner** package to run Python within Atom)

Portal Generation & Invite

- If there's time, let's have everyone try out generating a portal through Atom

  - Click this icon

  - Connect your Github with an authentication key (if not connected already)

  - Grab a document, or open a new one and write a message

  - Toggle the share button to generate a link

  - Send the key to someone (or a channel) on Slack

  - Copy someone else's key and enter it, leave a message on their document