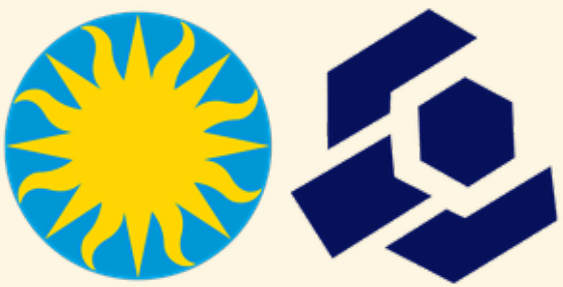
SPRING 2021

QUARTERLY DATA CARPENTRY WORKSHOP



Before we start...

CODE OF CONDUCT

We are dedicated to providing a welcoming and supportive environment for all people, regardless of background or identity.

CODE OF CONDUCT

https://docs.carpentries.org/topic_folders/policies/code-of-conduct.html

- Go to Instructors or Helpers if you feel the Code of Conduct is being violated.
- There is also a big blue "Report a Code of Conduct Incident" on the course website if you feel the Instructors are not handling appropriately.

WHAT IS THE CARPENTRIES?

https://carpentries.org/

The Carpentries is a global volunteer-driven organization dedicated to teaching computational skills to researchers and anyone who works with data.

CARPENTRIES AT THE SMITHSONIAN

https://datascience.si.edu/carpentries

The Smithsonian Carpentries Team is made up of Smithsonian staff and fellows from around the Institution.

INTRODUCTIONS

INSTRUCTORS AND HELPERS

INTRODUCTIONS

LEARNERS

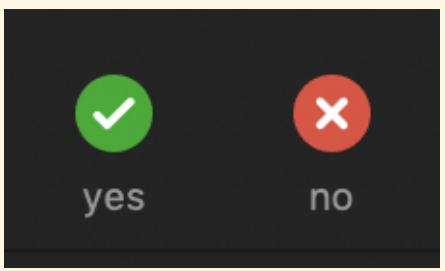
CARPENTRIES WAY OF TEACHING

Code along, rather than lecturing from PowerPoint, or just demonstrating

Odds of running into an error are high, but don’t panic – this is a great opportunity to learn

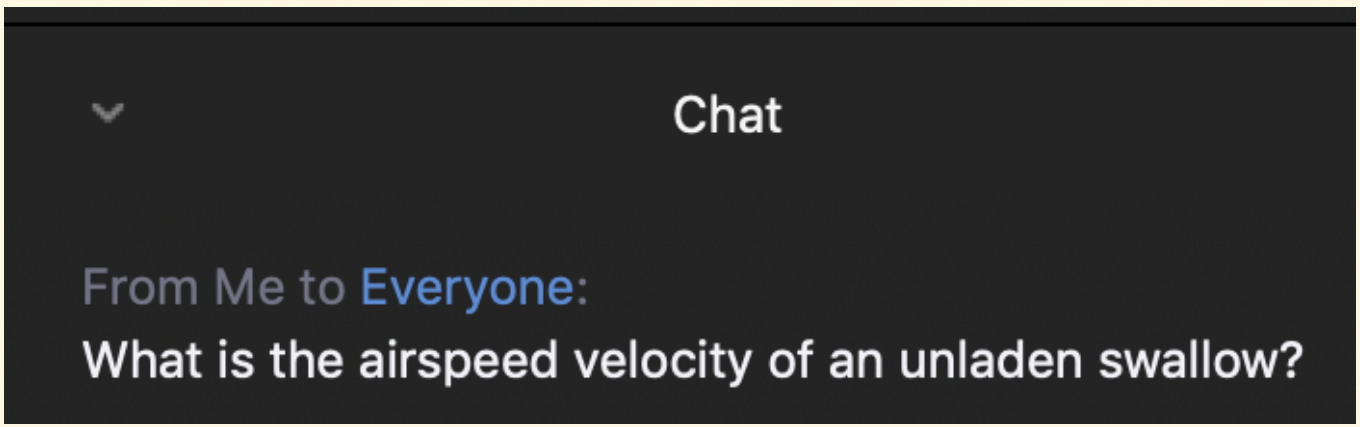
WE WON'T LEAVE YOU BEHIND

We'll use the "yes" / "no" buttons in the Zoom Reactions or Participants panel.



HOW TO ASK QUESTIONS

The Instructors will try to build in time between lessons to ask questions, but use the Zoom chat for questions that come up during a lesson.



COURSE WEBSITE AND ETHERPAD

https://smithsonianworkshops.github.io/2021-05-19-smithsonian-online

https://pad.carpentries.org/2021-05-19-smithsonian-online

A collaborative document – think of it as a stripped-down version of Google Docs

ZOOM PROBLEMS?

If you are unable to join the Zoom, please put a message on the EtherPad chat

YOUR FIRST CHALLENGE

- Go to the EtherPad
- Add your name, unit, and your favorite dessert under Attendance Day 1
- Set the "yes" checkbox reaction in Zoom

WHAT WE WILL BE TEACHING IN THIS WORKSHOP

We will be teaching you data organization, cleaning, and visualization skills, so that your analyses can be easily understood and reproduced by your colleagues ... and *your future self*.

DAY ONE (TODAY)

TIDY DATA PRINCIPLES IN SPREADSHEETS

OPENREFINE

DAY TWO (TOMORROW)

SQL DATABASE LANGUAGE

DAYS THREE AND FOUR (NEXT WED AND THUR)

R AND RSTUDIO

WORKING WITH DATA FILES

VISUALIZING DATA WITH GGPLOT2

We will be teaching you skills on a demo dataset, but to really add them to your toolbag you need to work through them on your own data.

How to actually learn any new programming concept

Essential

Changing Stuff and Seeing What Happens

O RLY?
@ThePracticalDev