Warm-up

1. Make a new R script
   a. Save it to your computer and name it "week2_warmup"
   b. Add a comment with the title of the script, the date, and your name

2. Create three different vectors, each with 5 items
   a. Vector called "pid" with 5 participant id numbers
   b. Vector called "ages" with 5 ages of participants
   c. Vector called "condition" with the condition of each participant, either cond1, cond2, or control.

3. Make the condition vector into a factor
4. Run length(pid). What does it tell you?

Extra time? Download this week's materials from the course site!

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Week 2: Directories and Data

Sierra & Maria
9/5/2023

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Today's agenda

- Warm-up

- Check-in + any questions about the program?

- Go over warm-up + data frames (!)

- Working directories & setting up your project folder

- Reading in data

- Viewing and summarizing data

Week 2: Record!

Let's review the warm-up

What is a "working directory"?

- The current file path that R is using and where it will "look" for files

  - R will assume you want to read in or write out files using this folder

- You can think of file paths as addresses

  - Each file has one!

- Our files are in a **nested structure**

For more info see YaRR: A Pirate's Guide to R chapter

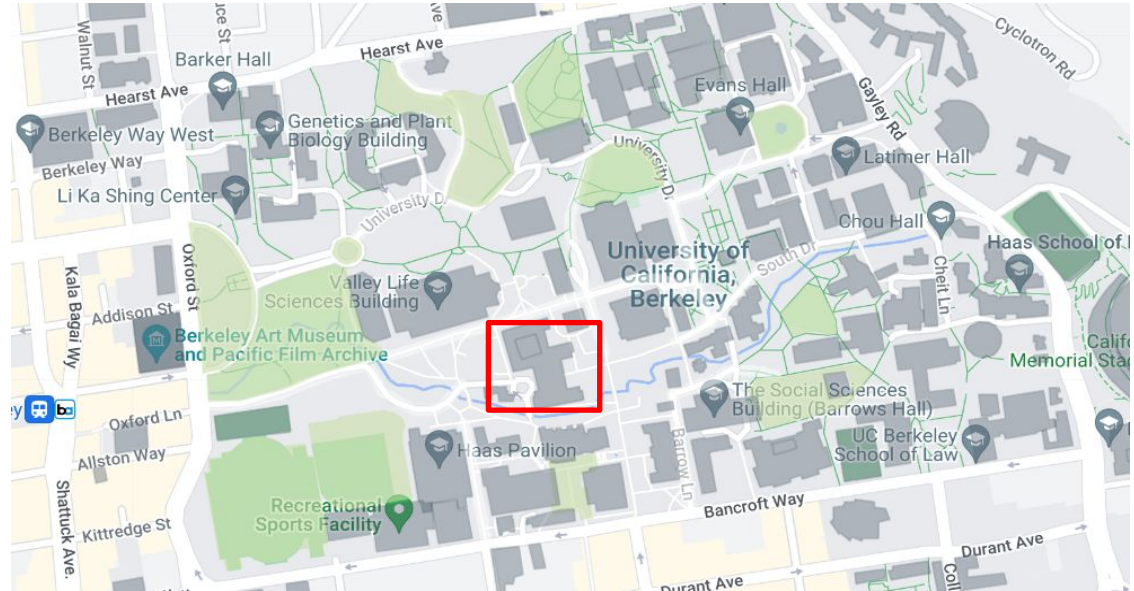# For instance....

- Let's say you have a class! But where are you going? Where is it being held?
- File path: "Berkeley/..."

Thank you Emily Rosenthal for these slides!
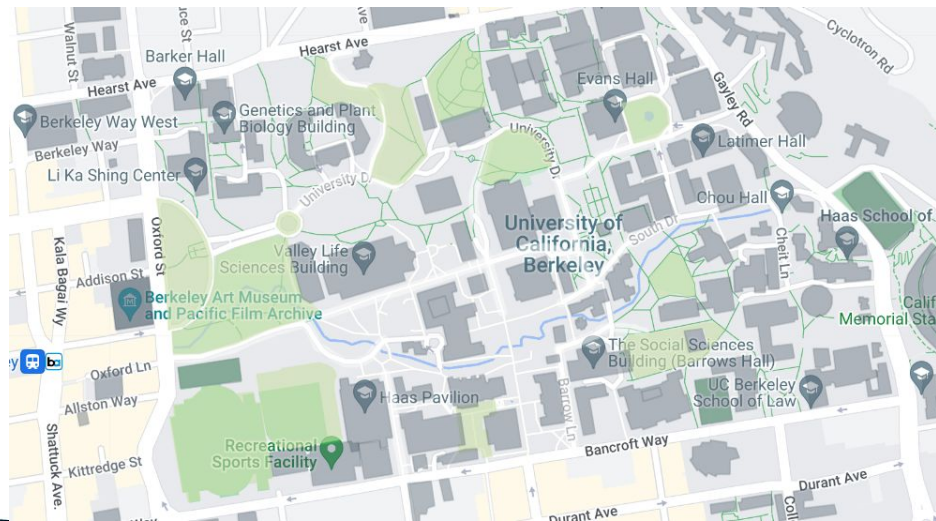
It's in Dwinelle Hall

- File path: "Berkeley/Dwinelle/..."

It's in the basement!

In room 75!

- File path: "Berkeley/Dwinelle/Basement/Room75"

These have a **NESTED STRUCTURE**

UC Berkeley

Campus

These have a **NESTED STRUCTURE**

UC Berkeley — Campus

Building 1 (e.g., Dwinelle) — Building

Building 2 (e.g., BWW)

These have a **NESTED STRUCTURE**

UC Berkeley — Campus

Building 1 (e.g., Dwinelle) — Building 2 (e.g., BWW) — Building

Basement — Floor 1 — Floor 2 — Floor 1 — Floor 2 — Floor 3 — Floor
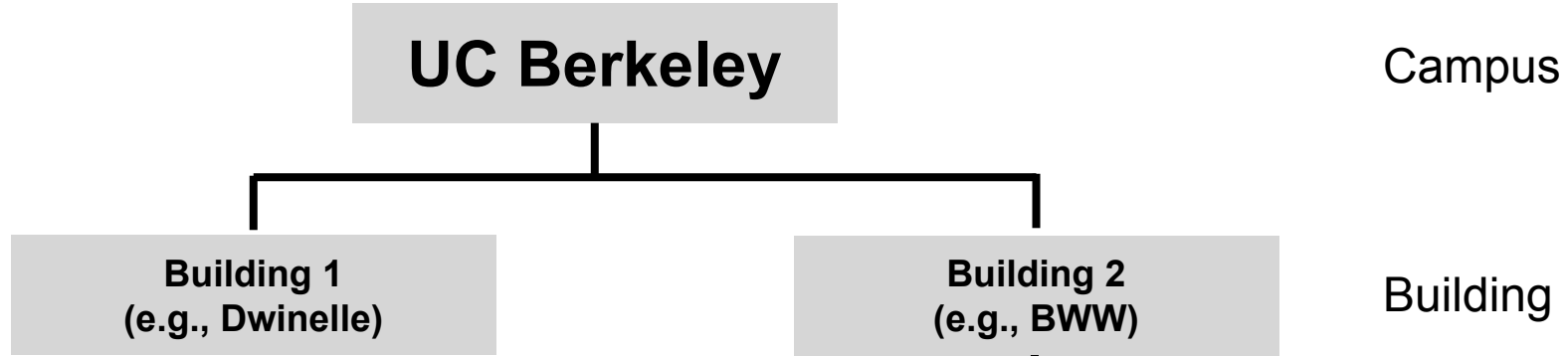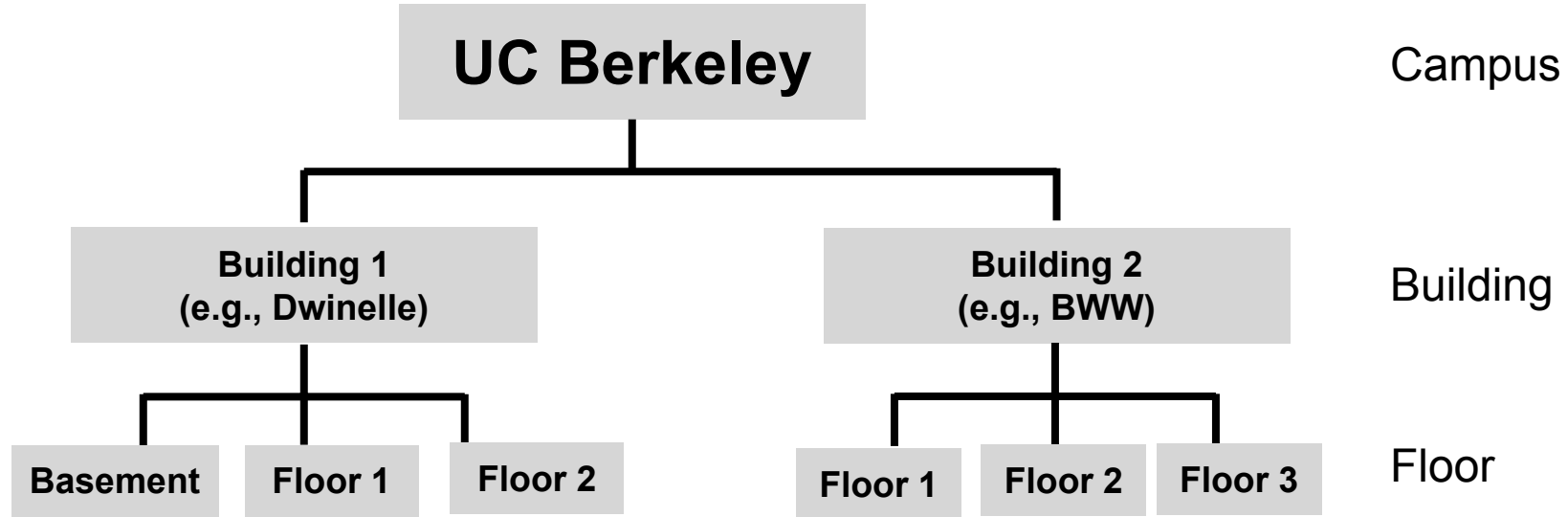
These have a **NESTED STRUCTURE**
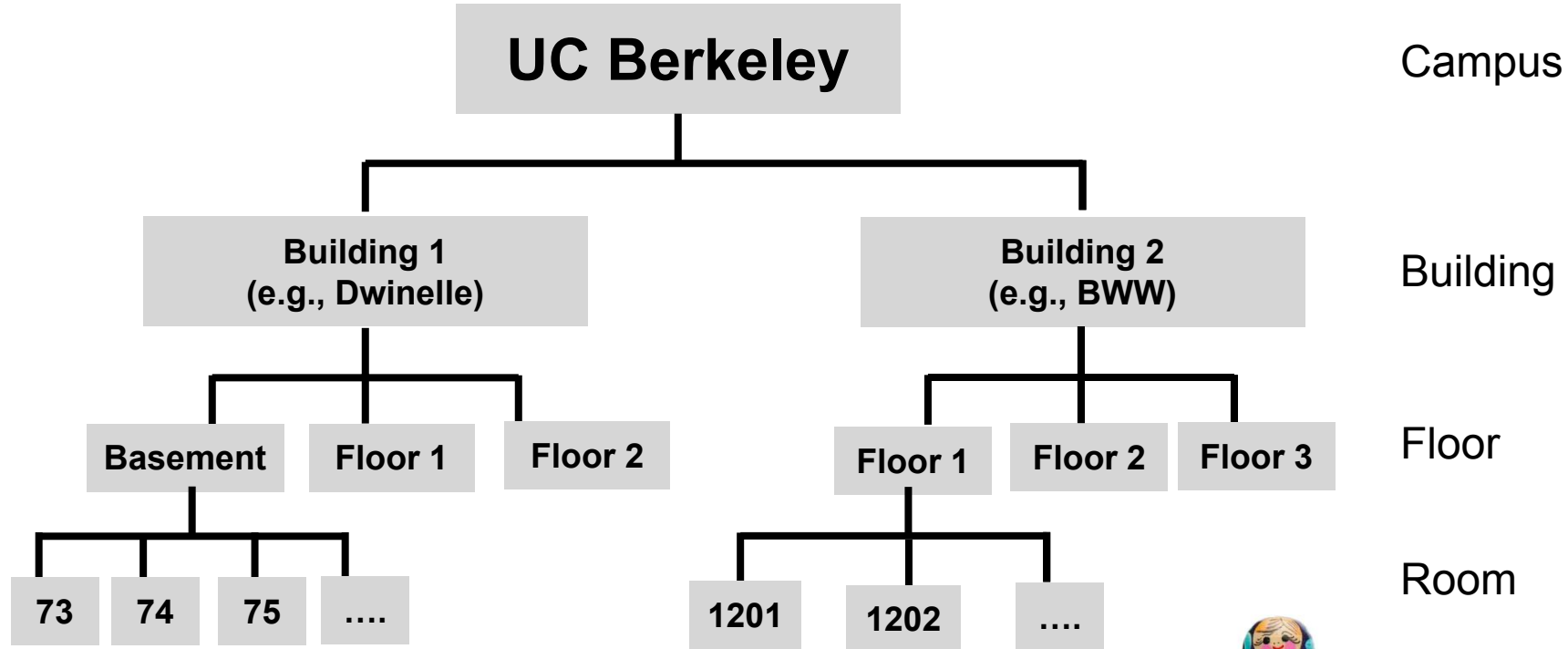
Working directory and loading data

- Organization is up to you -- ask around for how people organize their data and files
  - We have some suggestions, too!

- Keep this structure in mind when loading your data!

- R has to know *specifically* where to look for the data file (its address), or it won't be able to read it in

Most common errors when loading data

- Wrong file path (i.e., wrong working directory so R is looking in the wrong place and cannot find the file)

- Forgot to put quotes around the name of the file and/or file path! read.csv("penguins.csv")

Other tips:
- Don't use spaces in your file names or folder names!

Our file organization for QuACK

[folder] quack2023

- [sub-folder] data
- [sub-folder] week1
- [sub-folder] week2
- [sub-folder] week3
- [sub-folder(s)] …

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Our file organization for QuACK

quack2023

- data
- week1
- week2
- week3
- …

Both of the data files that we are using for the semester will go in here!

Our file organization for QuACK

quack2023

- data
- week1
- week2
- week3
- ...

Each week has its own folder

Our file organization for QuACK

quack2023

- data
- week1
- week2
  - week2_warmup.R
  - week2_starter.R
  - week2_practice.pdf
  - week2_key.R
- week3
- …

Our file organization for QuACK

quack2023

- data
- week1
- week2
  - week2_warmup.R
  - week2_starter.R
  - week2_practice.pdf
  - week2_key.R
- week3
- ...

Download the materials for this week from the course site and put all your files for QuACK in this structure!

Remember to unzip the folders each week

Be sure to store the penguins.csv and covid_attitudes.csv in the data folder

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