

About the repositories

Big picture planning

1. Choose a **short name** suitable for use in a URL

- **Don't** use spaces or most punctuation marks
- **Don't** use PAI or the course number: should describe **project, not class**
- **Do** use dashes, underscores, hyphens or CamelCase

Examples: sym, USBuildingFootprints

2. Make it **public** (required)

3. Uncomfortable about early commits being public?

- A. Make a **second, private** repository by adding **-dev** to name: sym-dev
- B. Make early commits to it;
- C. When you're ready, **copy the files** to the public version and **commit**;
- D. Make subsequent commits to public version.

4. Plan subdirectory layout

- A. Top directory **must** have a **readme.md** file
- B. Top directory **should not** have a large number of files
 - Aim for a small number of files and put the rest in **subdirectories**
 - Subdirectories can be **stages of analysis** or **types of files** (images)

5. Pro tip

Avoid spaces and non-URL punctuation in **all file names**:

Good

this-and-that.py

some_nifty_image.png

AnotherScript.py

Bad	Problem
this and this.py	spaces
income&race.py	punctuation
figure(1).png	punctuation

Why is this important?

⚠️ Non-URL friendly file names will be hard to link into your readme.

Creating a repository

1. **Create it on GitHub**
2. Choose a short **name**
3. Give it a longer **description**
4. Set it to **public** (unless using a temporary development version)
5. Put in a blank **readme**
6. Don't put in a gitignore (add later if necessary)
7. **Clone** it to your computer
8. Drop in the current version of your files
9. **Push** the initial version
10. **Revise** and **push** repeatedly until you're happy with it
11. If using a development version, copy it to the public repository and push

What should be in it

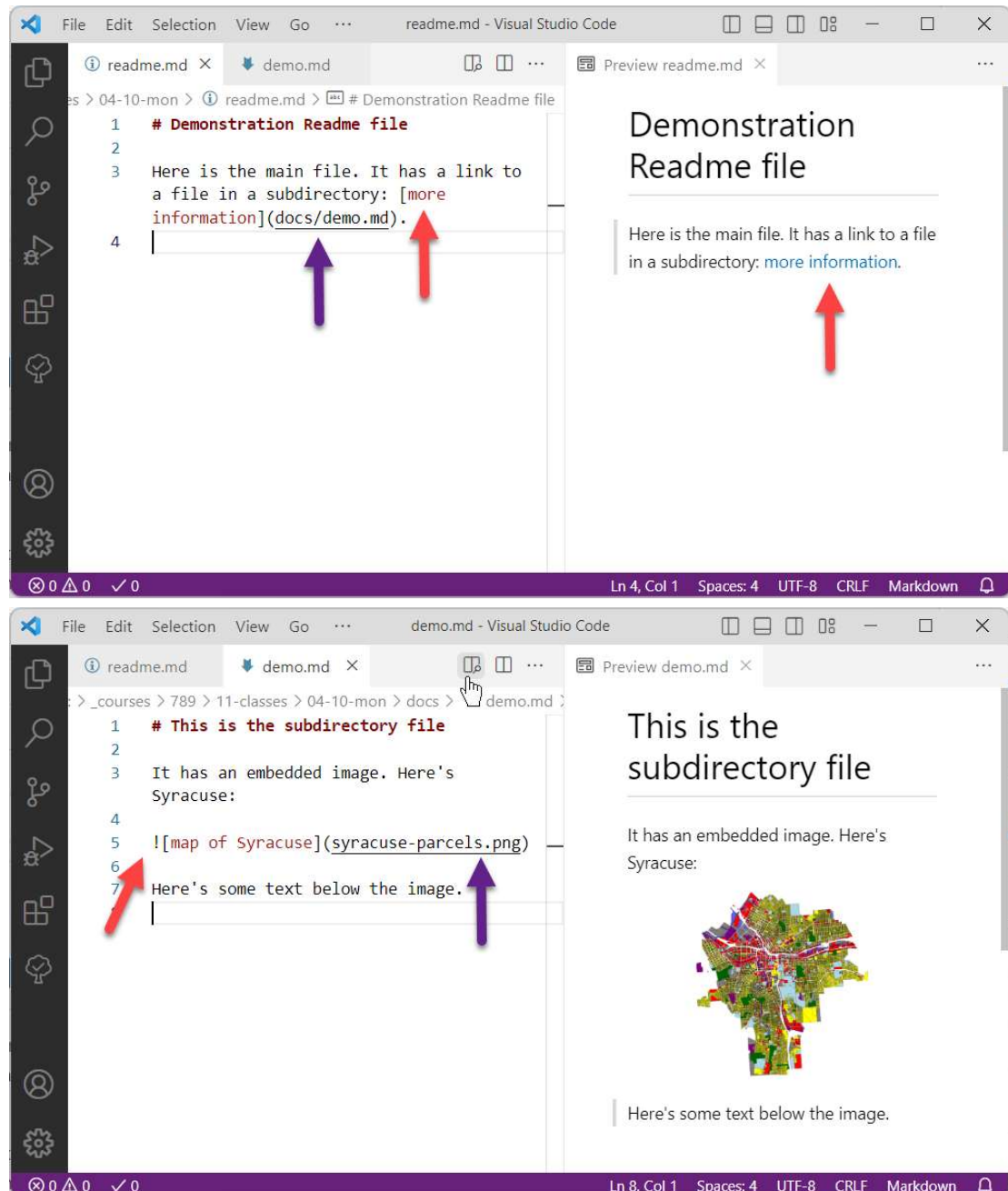
1. A **readme.md** file

⚠️ **MUST NOT** be structured like assignment readme files ⚠️

=> Yours should explain what the repository **is**, not how to code it.

Should explain what the repository is about (introduction)
Should clearly indicate **inputs** and **outputs**
Main **finding** should be clear

Should include Markdown links to key figures and other files:



2. Detailed instructions on where to get the input data
Can put in separate Markdown files linked to `readme.md`

3. All scripts and ancillary files needed to build output

Markdown files should:

- Describe broad purpose of scripts

- Indicate order they should be run

- Be linked (directly or indirectly) to the main `readme.md` file

Scripts themselves **must** include **comments**

- Focus on why, not how steps are done

4. Image files for interesting figures (link in as noted above)

5. Descriptions of **output data files**, if relevant

- Include definitions of **variables** including **units**

6. **Can** contain one or more PDFs when that's easier or clearer

- However, **must** have a main **`readme.md`**