

Lab 5. Recreate Visualization from Public Source

(No Class)

Xindi (Cindy) Hu, ScD

2025-06-19



No Class Today

Reading assignment:

- Mapping water insecurities in R with tidycensus
- Basic usage of {tidycensus}
- R for Data Science (2e), Chapter 11 – Visualize

Lab:

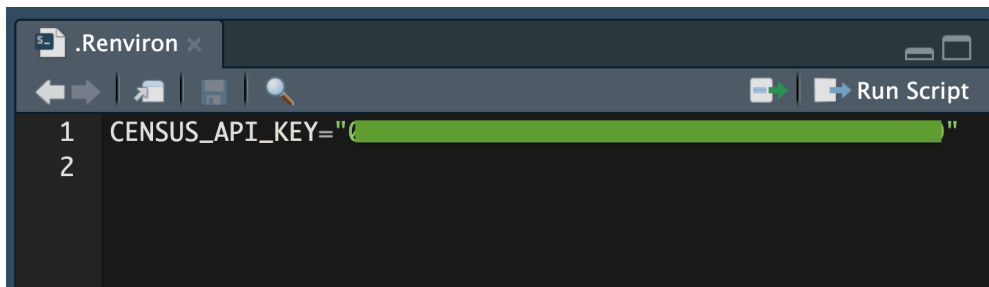
Please accept the Lab 5 assignment on GitHub Classroom and follow the tutorial on your own time. See the [#announcement](#) channel in Slack for the link. As always, labs are due next Monday June 23, 2025, at 11:59 PM.



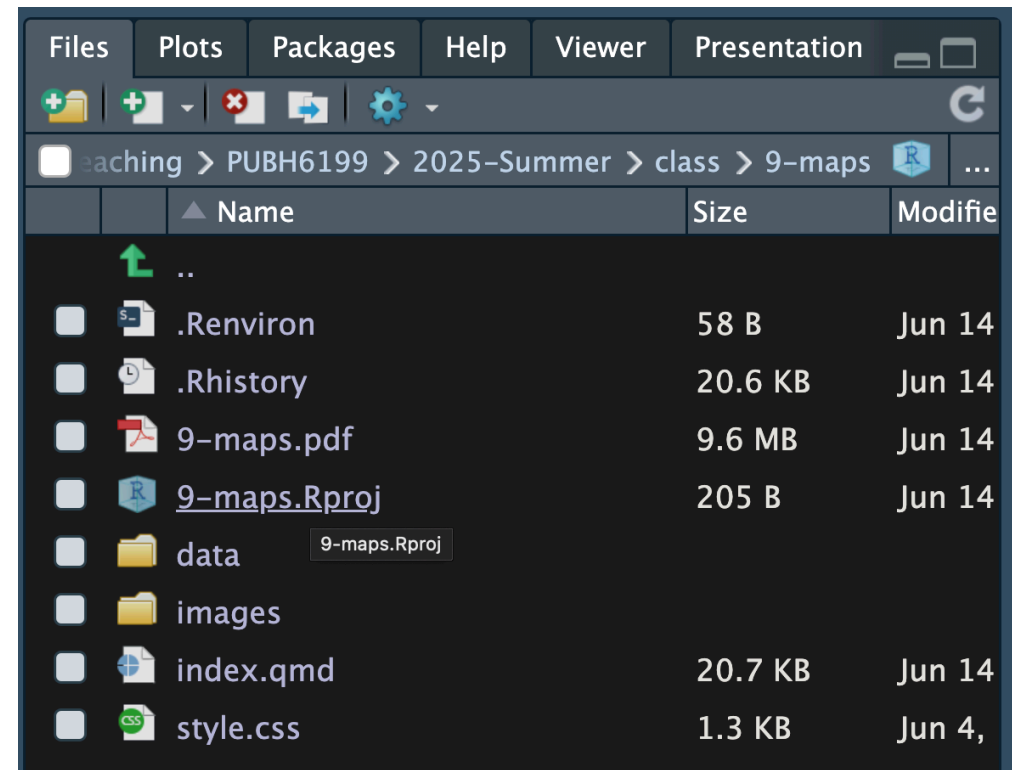
How to store API key without committing it to GitHub

To use the `{tidycensus}` package, you need to set up a Census API key. You can obtain one from the [Census Bureau's website](#).

You can store your API key in a `.Renviron` file in your repository's root directory (same directory as your `.Rproj`). Add `.Renviron` to `.gitignore` so that this file is not committed to GitHub.



A screenshot of an R script editor window. The title bar shows ".Renviron". The editor contains two lines of code: line 1 is `CENSUS_API_KEY=""` and line 2 is empty. A green highlight is under the first line. A "Run Script" button is visible in the top right corner of the editor.



A screenshot of the RStudio file explorer. The breadcrumb path is `teaching > PUBH6199 > 2025-Summer > class > 9-maps`. The file list shows the following files and folders:

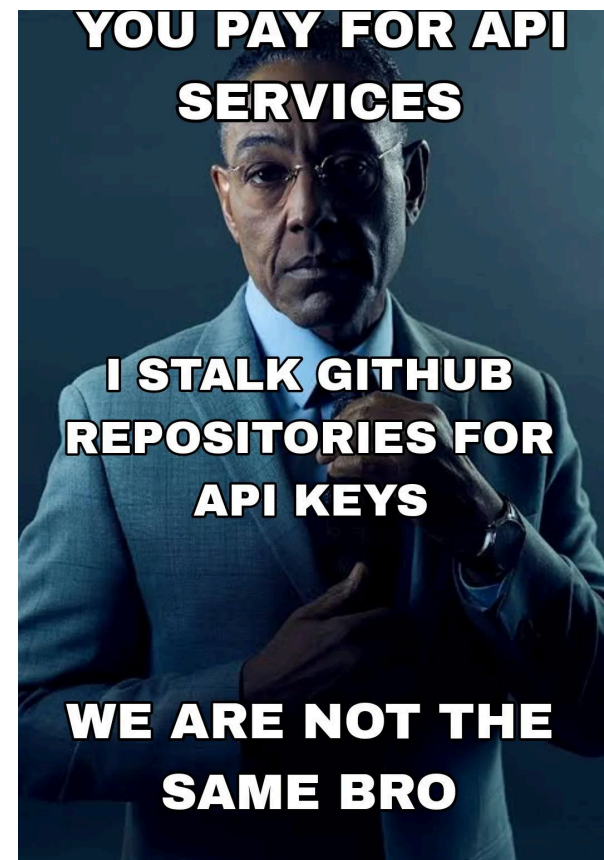
| Name | Size | Modified |
|--------------|---------|----------|
| .. | | |
| .Renviron | 58 B | Jun 14 |
| .Rhistory | 20.6 KB | Jun 14 |
| 9-maps.pdf | 9.6 MB | Jun 14 |
| 9-maps.Rproj | 205 B | Jun 14 |
| data | | |
| images | | |
| index.qmd | 20.7 KB | Jun 14 |
| style.css | 1.3 KB | Jun 4, |

How to store API key without committing it to GitHub

Then in your R scripts, you can access the API key using `Sys.getenv("CENSUS_API_KEY")`. This way, you can use the API key without hardcoding it into your scripts.

```
1 library(tidycensus)
2 invisible(
3   census_api_key(Sys.getenv("CENSUS_API_KEY"), install = TRUE,
4 )
5 options(tigris_use_cache = TRUE)
```

Protect yourself against this!



Source: [Reddit](#)