R Projects

One of the ways people organize their work in R is through the use of R Projects, a built in functionality of RStudio that helps to keep all your related files together. RStudio provides a [great guide](https://support.rstudio.com/hc/en-us/articles/200526207-Using-Projects) on how to use Projects so definitely check that out!

What is an R Project?

When you make a Project, it creates a folder where all files will be kept, which is helpful for organizing yourself and keeping multiple projects separate from each other. When you re-open a project, RStudio remembers what files were open and will restore the work environment as if you had never left - which is very helpful when you are starting back up on a project after some time off! Functionally, creating a Project in R will create a new folder and assign that as the working directory so that all files generated will be assigned to the same directory.

What are the benefits to using Projects?

The main benefit of using Projects is that it starts the organization process off right! It creates a folder for you and now you have a place to store all of your input data, your code, and the output of your code. Everything you are working on within a Project is self-contained; which often means finding things is much easier - there’s only one place to look!

Also, since everything related to one project is all in the same place, it is much easier to share your work with others - either by directly sharing the folder/files, or by associating it with version control software. We’ll talk more about linking Projects in R with version control systems in a future lesson entirely dedicated to the topic!

Finally, since RStudio remembers what documents you had open when you closed the session, it is easier to pick a project up after a break - everything is set-up just as you left it!

Creating a Project

There are three ways to make a Project:  
1) From scratch - this will create a new directory for all your files to go in  
2) From an existing folder - this will link an existing directory with RStudio  
3) From version control - this will “clone” an existing project onto your computer (Don’t worry too much about this one, you’ll get more familiar with it in the next few lessons)

Let’s create a Project from scratch, which is often what you will be doing!

Open RStudio, and under File, select “New Project”. You can also create a new Project by using the Projects toolbar and selecting “New Project” in the drop down menu, or there is a “New Project” shortcut in the toolbar.