This is a brief introduction to setting up GitHub for use with RStudio.

GitHub is a site that allows you to upload code and data into a repository that is either private or public and accessible to others. The best thing about GitHub is if you are an academic it is free to have private repositories if you request it. The second best thing is it provides a backup for your code and data (within a reasonable size) and any changes you or other make to the code or data is recorded in history.

So to get started – set up an account at <https://github.com/>

When you log in you can click your profile in the upper right to see your repositories

A screenshot of a social media post

Description automatically generated

This is where each project in RStudio is stored and synched.

To create a repository – click NEW

**The image is on the next page…..**

Then type in the name of your repository. This will be the name of the folder on your computer and I tend to prefer no spaces in the name.

If you have paid for an account or set up the free academic profile you can click Public or Private.

Then click Initialize this repository with a README  
 This will let you immediately clone the repository to your computer.

Then click Create repository

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The repository will look like the following

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The README.md file is what shows up at the bottom and can be edited here or in RStudio and uses HTML code to fomat it.  
  
To get this to synch with RStudio you can click the green button

Clone or download

This will provide an dialog box as below

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You can click the icon to the right of the link to copy to your clipboard

In RStudio click File and new project

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Select Version Control

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We are using Git

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Then you will see this dialog

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Here is where you paste in the GitHub repository url you just copied

You can change the name of the directory here if you want

Then you can browse to a directory under which this project will be created

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As above it will create a project called eddie\_water\_quality within the directory of R Projects and then within a subdirectory of Eddie\_project

Note that this directory cannot exist on your computer already and I am not good enough to figure this out… yet.

In RStudio will now look like this with a Git tab

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You can edit the .gitignore file to exclude directories not synched

Now add in some directories and click the Git tab and it will look like this

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Description automatically generated

It is easier to click the commit button and it will allow you what to synch

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Description automatically generated

Note that you can select one and then all and click Stage.

Type in a comment about what you changed so you can tell others or your future self

Click the Commit button

Then click the Push button to push your changes to the site.

If others are working on the system you may need to pull in their changes first and then push yours.

Then every time you make changes you will see what has been added or removed.

Word and excelfiles are not that good but text in code or csv files is coded green for added and red for remove.

As you add things to the other folders it will add the folder and the files.