ALL PLAGIARISED

**Linking an existing project with Git**

 let’s set up a situation where we have a local project that isn’t under version control. Go to File > New Project > New Directory > New Project and name your project. Since we are trying to emulate a time where you have a project not currently under version control, do **NOT** click “Create a git repository”. Click Create Project.

Graphical user interface, application

Description automatically generated

We’ve now created an R Project that is not currently under version control. Let’s fix that. First, let’s set it up to interact with Git. Open Git Bash or Terminal and navigate to the directory containing your project files. Move around directories by typing cd ~/dir/name/of/path/to/file

**Not plagiarised**: If that does not work try providing your folder files inside quotation marks: cd “dir”/”name”… Then type pwd to see which directory you are in.

When the command prompt in the line before the dollar sign says the correct directory location of your project, you are in the correct location. Once here, type git init followed by git add . (note the fullstop)- this initializes (*init*) this directory as a git repository and *adds* all of the files in the directory (.) to your local repository. Commit these changes to the git repository using:

git commit -m "Initial commit"

Graphical user interface, text

Description automatically generated

At this point, we have created an R Project and have now linked it to Git version control. The next step is to link this with GitHub.

Linking this project with GitHub

To do this, go to GitHub.com, and again, create a new repository:  
1) Make sure the name is the **exact same** as your R project;  
2) Do **NOT** initialize a README file, .gitignore, or license.

Graphical user interface, application

Description automatically generated

**Creating a repository on GitHub that is named the same as your R project**

Upon creating the repository, you should see a page like this:

Graphical user interface, text, application, email

Description automatically generated

**Your new repository on GitHub containing code to push from the command line**

You should see that there is an option to “Push an existing repository from the command line” with instructions below containing code on how to do so. In Git Bash or Terminal, copy and paste these lines of code to link your repository with GitHub. After doing so, refresh your GitHub page and it should now look something like the image below.

When you re-open your project in RStudio, you should now have access to the Git tab in the upper right quadrant and can push to GitHub from within RStudio any future changes.

Graphical user interface, text, application

Description automatically generated

**You’ve now pushed your R project repository to your GitHub repository of the same name**

Working on an existing GitHub repository

If there is an existing project that others are working on that you are asked to contribute to, you can link the existing project with your RStudio. It follows the exact same premise as that from the last lesson where you created a GitHub repository and then cloned it to your local computer using RStudio. In brief, in RStudio, go to File > New Project > Version Control. Select Git as your version control system, and like in the last lesson, provide the URL to the repository that you are attempting to clone and select a location on your computer to store the files locally. Create the project.

Graphical user interface, application

Description automatically generated

**Follow the same steps as previously done to clone your own repository to a new project in RStudio**

Graphical user interface, application, Teams

Description automatically generated

**Clone an existing project from GitHub from within RStudio**

All the existing files in the repository should now be stored locally on your computer and you have the ability to push edits from your RStudio interface. The only difference from the last lesson is that you did not create the original repository, instead you cloned somebody else’s.