

# Git and GitHub inside RStudio

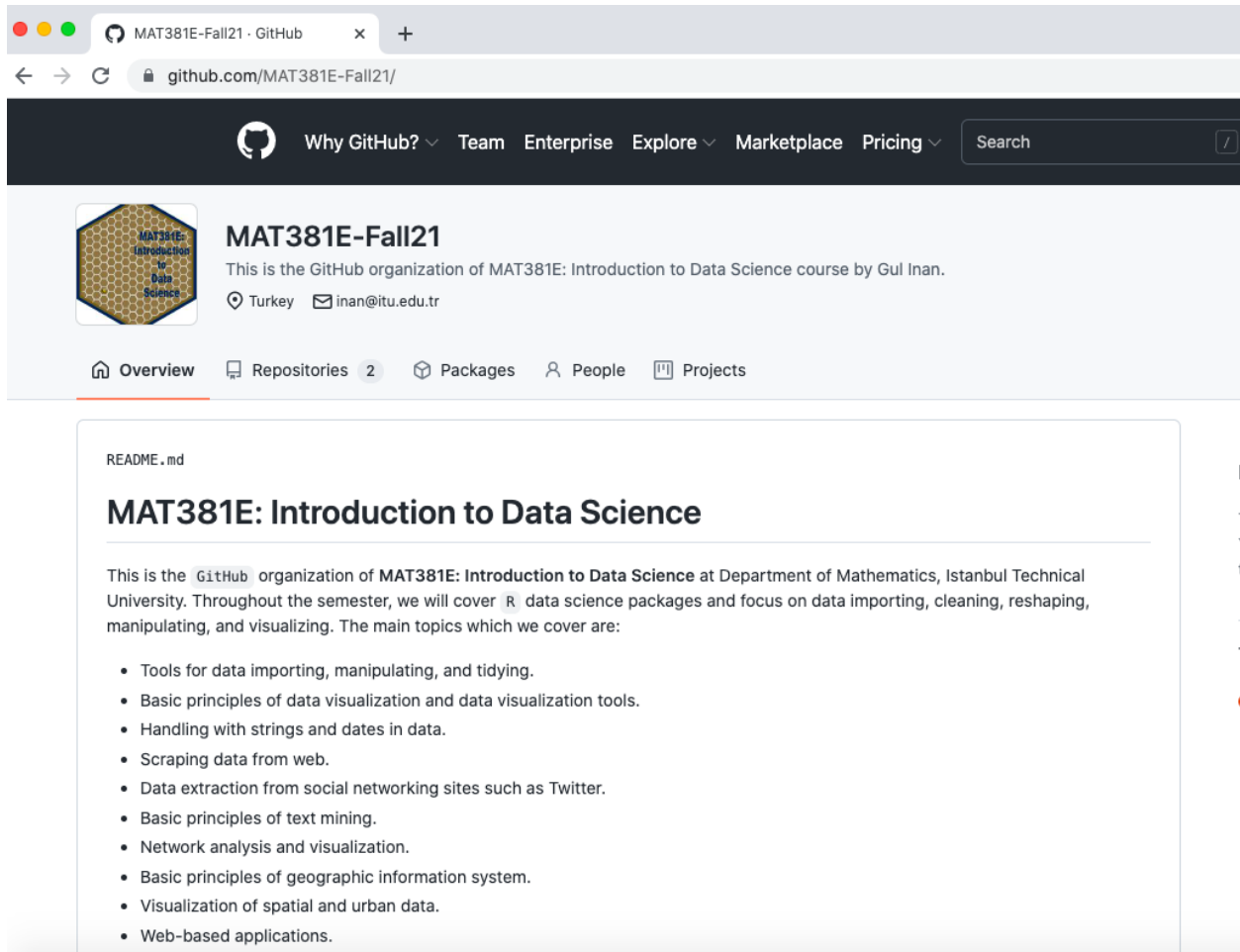
Fall 2021

We will be using `git` and `GitHub` to get send your individual-based and team-based studies and get them back. In this short tutorial, we will show you the process using `git` and `GitHub` through `RStudio`. For that reason you have to install `git` (the one most suitable for your operating system), introduce your `GitHub` account to your local `git`, and make sure `RStudio` can talk to local `git` (and, therefore, `GitHub`). If you need assistance, I strongly suggest you to take a look at the following great sources:

<https://happygitwithr.com/> and

<https://ourcodingclub.github.io/tutorials/git/>.

We will create all individual-based and team-based assignments in `GitHub` classroom of `MAT381E-Fall121` organization.



The screenshot shows a web browser window with the URL `github.com/MAT381E-Fall21/`. The GitHub header is visible with navigation links: Why GitHub?, Team, Enterprise, Explore, Marketplace, Pricing, and a search bar. The repository page for **MAT381E-Fall21** is displayed. It includes a profile picture, the repository name, a description: "This is the GitHub organization of MAT381E: Introduction to Data Science course by Gul Inan.", location (Turkey), and email (inan@itu.edu.tr). Below this is a navigation bar with links: Overview, Repositories (2), Packages, People, and Projects. The main content area shows the `README.md` file. The README title is **MAT381E: Introduction to Data Science**. The text describes the course and lists the topics covered:

- Tools for data importing, manipulating, and tidying.
- Basic principles of data visualization and data visualization tools.
- Handling with strings and dates in data.
- Scraping data from web.
- Data extraction from social networking sites such as Twitter.
- Basic principles of text mining.
- Network analysis and visualization.
- Basic principles of geographic information system.
- Visualization of spatial and urban data.
- Web-based applications.

Afterwards, we will send out you the assignment invitation links to you via Ninova announcements so that you can join the assignment (you have to accept the invitation to see the assignment repo under MAT381E-Fall21 organization). Once you accept the invitation, you will see that **you have a repository under MAT381E-Fall21 organization for the relevant assignment**. For example `<HW1-yourusername` for Homework 1. Please see my fake student repo for HW 1.

Throughout the semester you will be an **outside collaborator** of MAT381E-Fall21 organization on GitHub, not a member. This means that you can only see your repository under MAT381E-Fall21 organization, whereas I can see all the repositories.

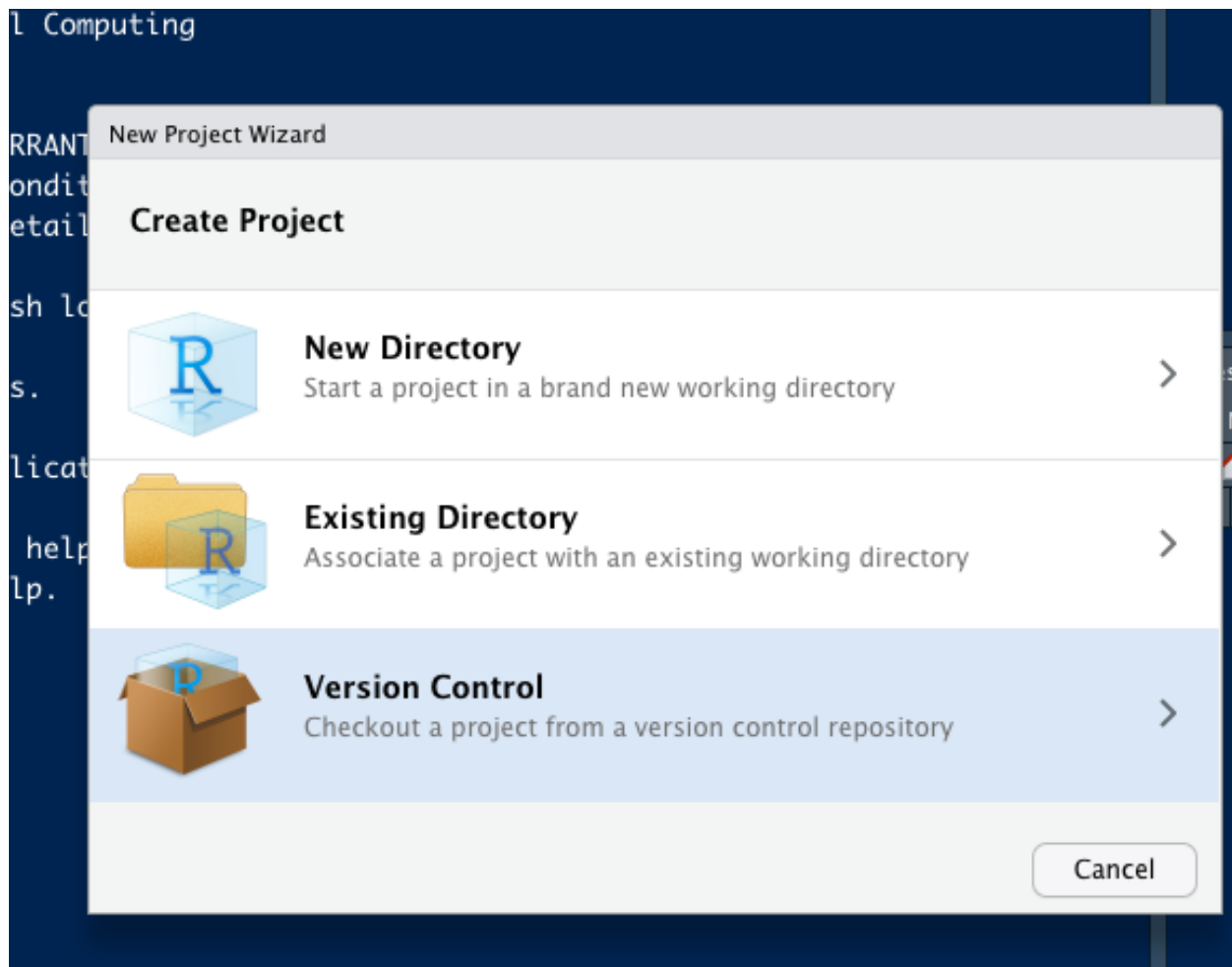
In the “repository URL”, copy the SSH URL of the assignment as shown below (in my fake account, i did not take SSH key, but you should do, otherwise you cannot commit and push your work from R Studio to GitHub) :

The top screenshot shows the GitHub repository page for `MAT381E-Fall21 / hw1-gulstudent`. The repository is private and was generated from `MAT381E-Fall21/HW1`. The main branch is `main`, and there is 1 branch and 0 tags. The commit history shows an initial commit by `github-classroom` 1 minute ago. The README file is named `HW1`.

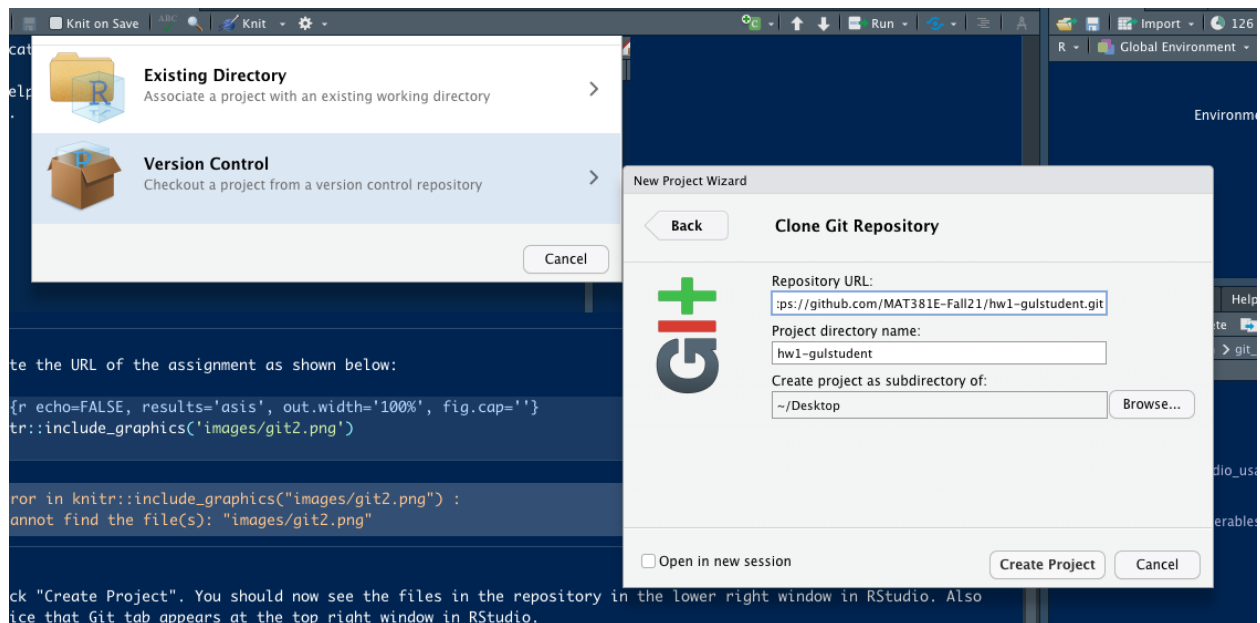
The bottom screenshot shows the same repository page with a 'Clone' dialog box open. The dialog displays the repository URL `git@github.com:MAT381E-Fall21/hw1-guls` and a warning that the user does not have any public SSH keys in their GitHub account. The dialog also shows options to clone via HTTPS, SSH, or GitHub CLI, and to open the repository with GitHub Desktop or download a ZIP file.

Then, in RStudio, start a new project:

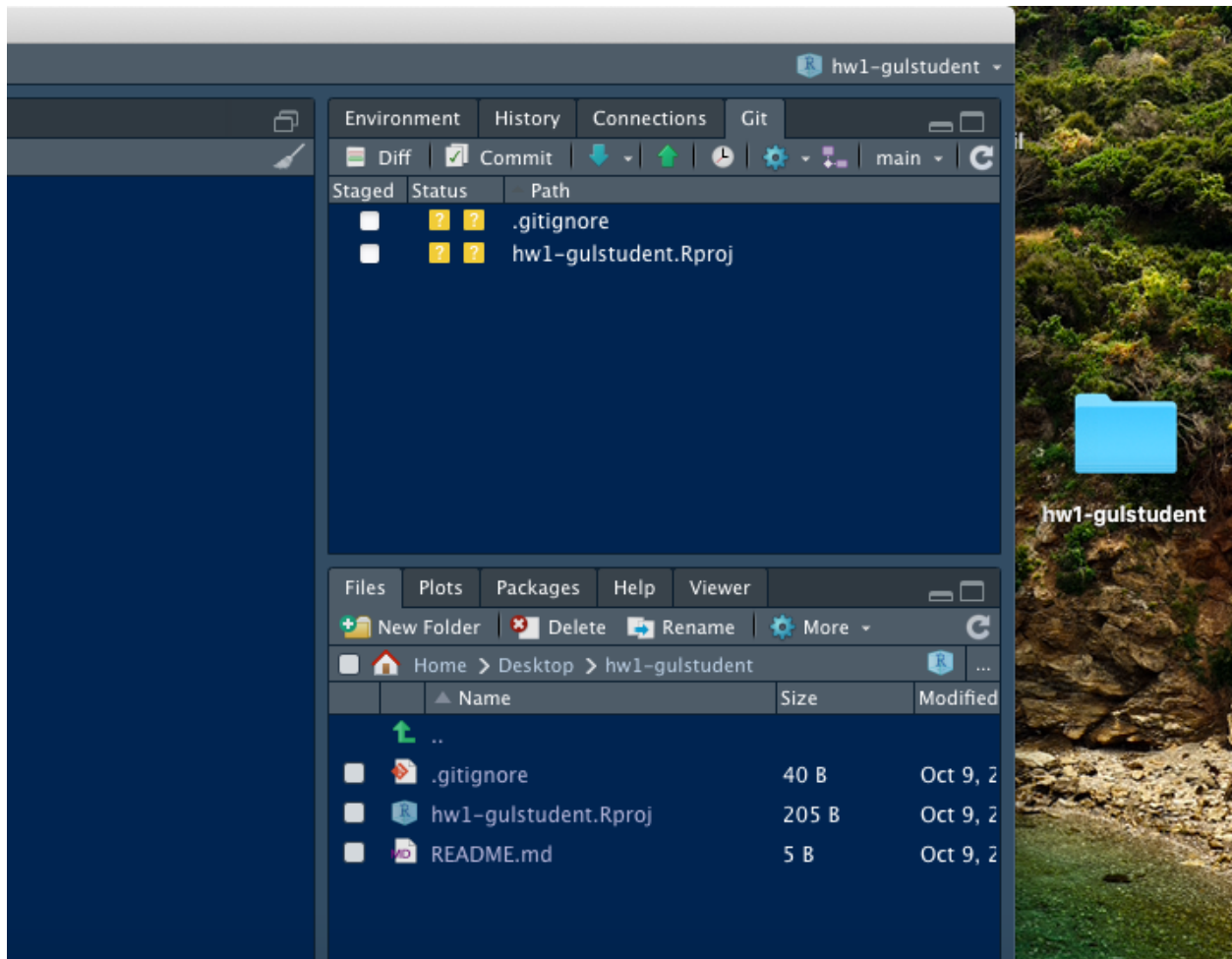
File > New Project > Version Control > Git



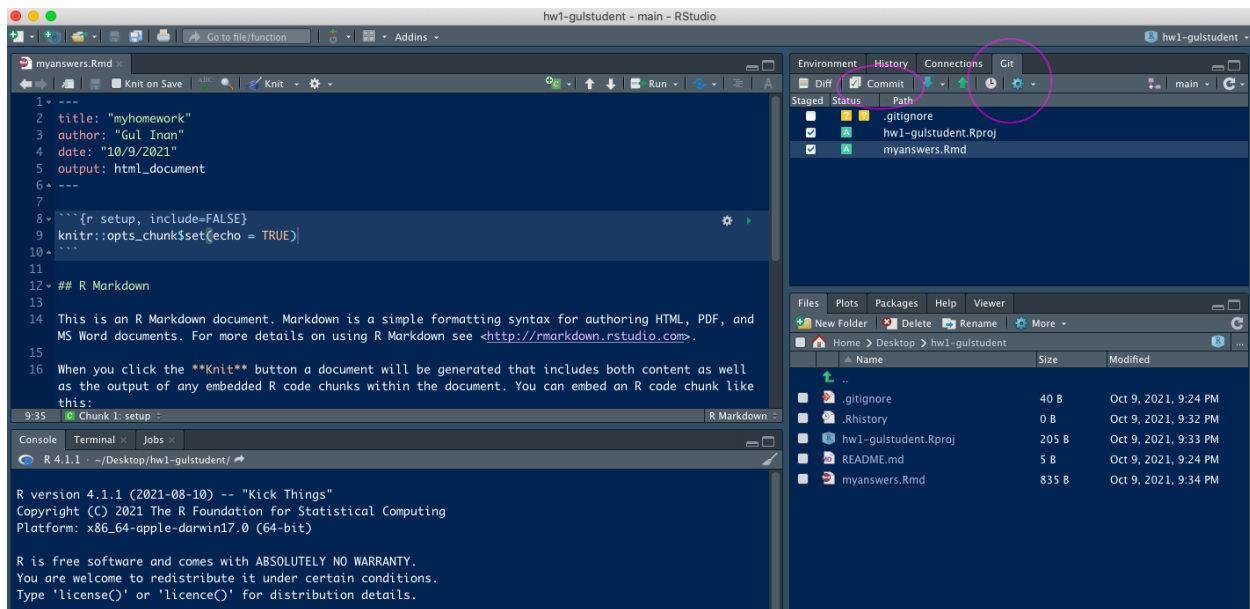
Paste the URL of the assignment as shown below:



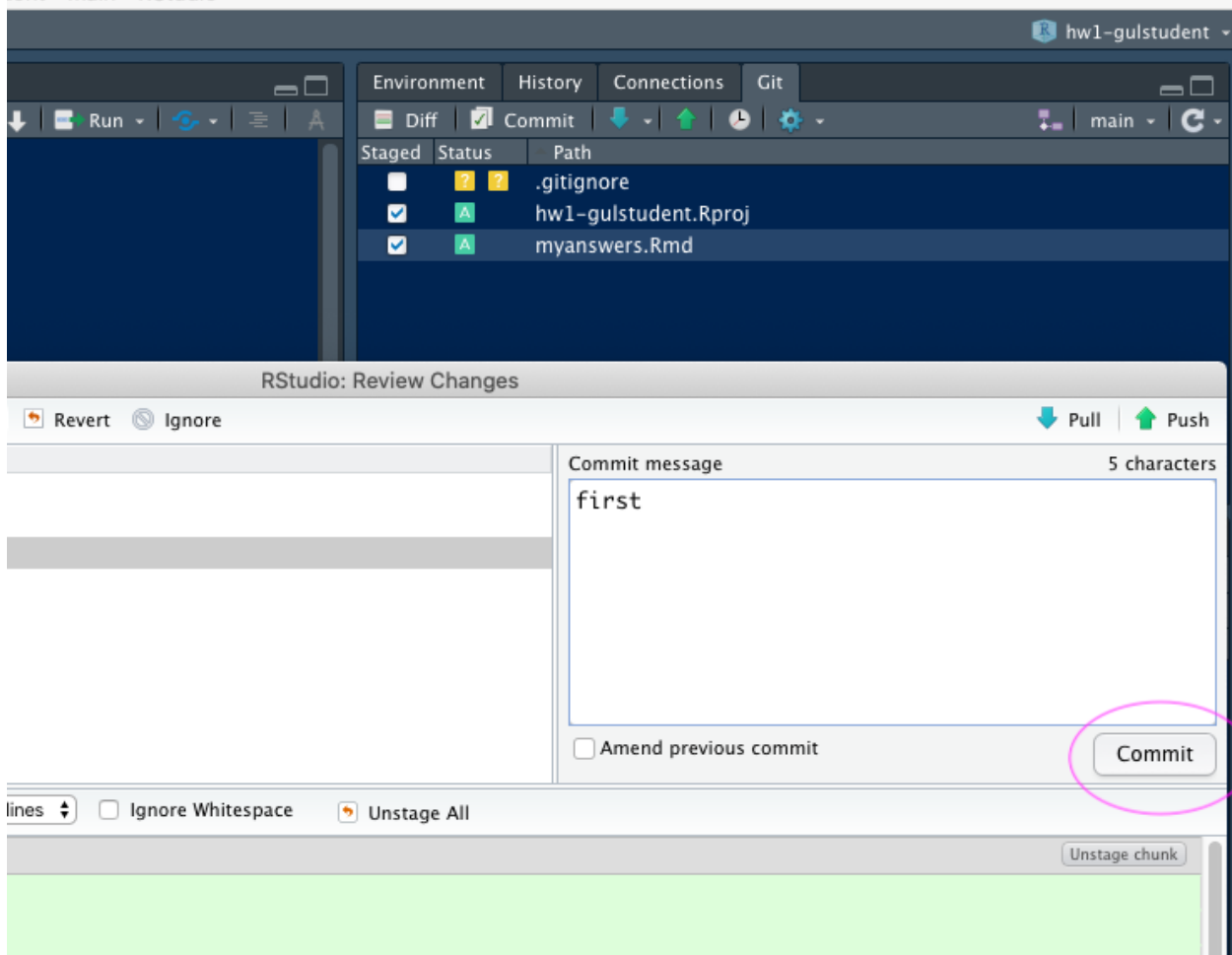
Click “Create Project”. You should now see the files in the repository in the lower right window in RStudio. Also notice that Git tab appears at the top right window in RStudio.

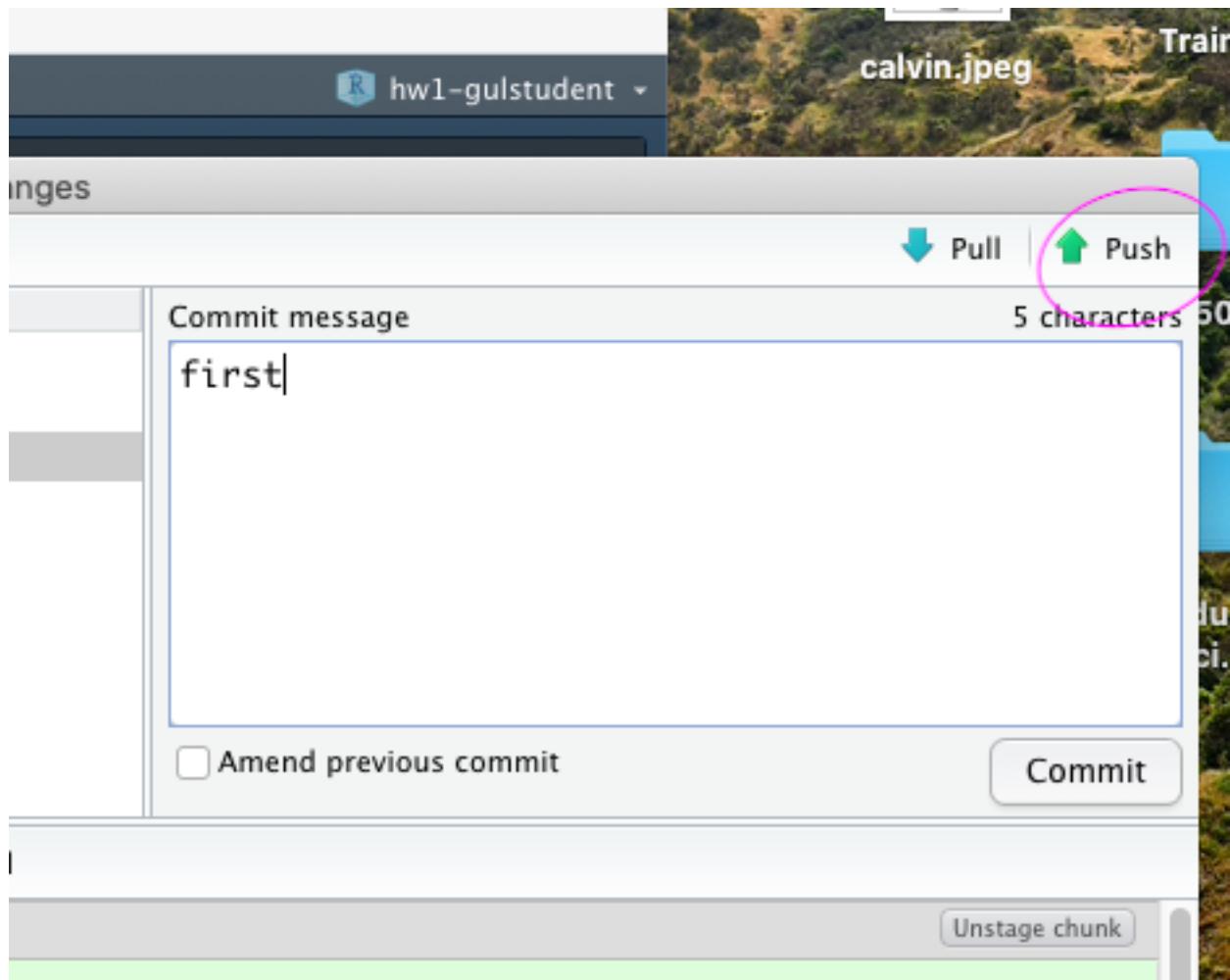


Now, you have a local copy of your assignment. Work on it. Do whatever you need. You can use Git tab to commit and push.



hw1-gulstudent - main - RStudio





Check back your repository on GitHub!..Always send your assignments on time!..(In the terminal window, use git commands `commit` and `push` to send the changes you have done to your local repository to GitHub.)

Wish you a productive semester!..

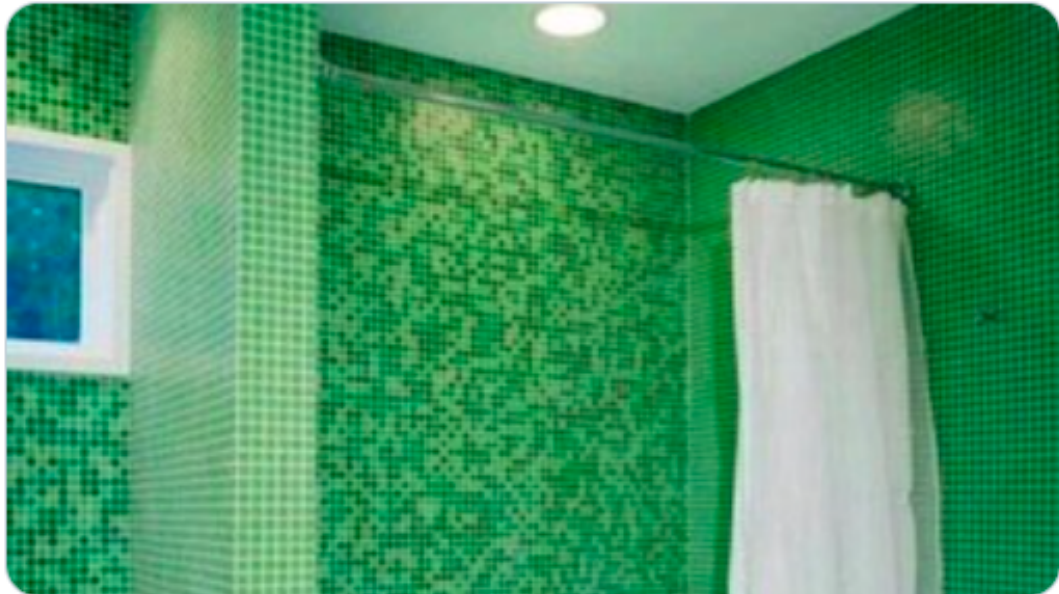
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**Hello World Programmer** @helloworldprog · 2 Şub



Github commit history goals 2021



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