Setting up GitHub and Git: Four Steps

| Step 1: Sign up for GitHub | |
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| Go to **github.com** with your browser.  Type in your e-mail address and **Sign-up for GitHub**………………..> | Screenshot from GitHub |
| Enter in a **password** and create a **username**  You will need to verify that you are human being | Screenshot showing that e-mail and password are required |
| You will also be sent a **verification code** to your email address.  Enter the verification code —-------------------> | Screenshot showing launch code input |
| You will be asked some demographic-type questions  Answer them however you prefer.  Instructors and TAs will not see this information. | Screenshot show demographic info |
| You will see a button for a paid or free account - click on **Continue for free** —----------------------> | Screenshot showing continue for "free" |
| Step 2: Get your personal access token | |
| Go up to your account icon and click on it.  Click on **Settings** - just above the Sign out option —------------------> | Screenshot showing the "Settings" menu option |
| Update your public profile, as you like. In many ways, GitHub is a very social place, like Facebook. |  |
| On the left navigation bar, select **Developer settings** —-------------> | Screenshot showing the "Developer settings" option |
| Click on **Personal access tokens** —------> | Screenshot showing the personal access token option |
| Click on **Generate a personal access token** —-------------------> | Screen shot showing the "Generate personal access token" |
| Give your token a note, such as “INFO-201B Autumn 2022”  —--------------------------->  **Important: Make the expiration date  90 days** —----------------> | Continued |
| For select scopes, select all of the checkboxes. | Select all scoping checkboxes |
| Click **Generate token**  ------> | Screenshot showing "Generate token" button |
| You will get a long string, which looks something like the string on the right. This is your **personal access token**!  It acts like a password. Copy the token. Then, paste it into a txt file and save the file.  **Keep your personal access token in a safe place!** You will need it when working with git from your computer.  (If you lose it, no problem! Just create another one by following these steps.) | Screenshot showing "Copy" button |
| Step 3: Install git on your computer For more information, go to [section 1.2](https://learning.oreilly.com/library/view/programming-skills-for/9780135159071/ch01.xhtml#sec1_2) in Freeman and Ross (2019). Normally, git is installed on Macintosh computers. For PCs, you will likely need to download and install git. | |
| Step 4: Setting up git on your computer | |
| **(1) Open a terminal window.**  On a Macintosh, type command + space. Then, type terminal. Select terminal. | Screenshot showing "Terminal" on MacOs |
| **(2) In the terminal type the following commands:**  git config --global user.name “your github username”  git config --global user.email “your e-mail that you used in github”  **(3) To check that git has the right information type these commands:**  git config --global user.name  git config --global user.email  It should look something like this:  Screenshot showing git commands | |
| **(4) Now go ahead and use git and github! In other words, get to work with Assignment 1.**  At some point, when you issue a command to git, it will ask you for a password. When git asks you for a password, copy your personal access token and paste it into the terminal window.  Your password, in other words, is your personal access token. When you type, **git push**, your terminal should look something like:  Screenshot showing git commands  When you paste your password, you will not see it. But git will take it and use it to communicate with GitHub.  Note: Be careful to copy the token **exactly** (avoid extra whitespace or other characters at the beginning or end of the password). If you run into problems, go back generate a new token and press the “copy button” to make a copy of your token.  Screenshot showing how to copy personal access token  You will only need to do this once; thereafter, git will remember your password. | |
| (5) To check on the password that git is using, you can type:  git config --global user.password  When you have set things up, this command should return with your personal access token (which is used as a password). | |
| If you run into problems That was a lot! If you run into problems, please reach out to your Teaching Assistant and/or post a question on Microsoft Teams.  As always, start early. Work through these steps. If you encounter an impasse back up, double check your work, and try going forward again. | |

**Reference**

Documentation on GitHub: [Creating a personal access token](https://docs.github.com/en/authentication/keeping-your-account-and-data-secure/creating-a-personal-access-token)