**Java Part 2 GitHub/IntelliJ Documentation**

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**GIT TERMONOLOGY:**

* Git Push 🡪 Upload content from a local repository to a remote repository
* Git Pull 🡪 Upload content from a remote repository to local repository
* NOTE: Recommended to PULL before you PUSH to PREVENT MERGE CONFLICTS

**STEPS TO PREP IN INTELLIJ**

1. **Ensure your personal GitHub account is linked in IntelliJ.** 
   1. Select IntelliJ (top right corner) 🡪 Settings 🡪 Version Control 🡪 GitHub.
   2. Your personal GitHub should appear like mine. If not add it and use your token (ensure your classic token is configured with repos). Click OK.

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* 1. Excellent YouTube resource [here](https://www.youtube.com/watch?v=HM6CawhRvVQ).

1. **Create a Project in IntelliJ**
2. **Once Project is Enabled, go to top back 🡪 VCS 🡪 Enable Version 🡪 Git.**
   1. **Return to top bar and click on Git (Git replaced where VCS was on the top bar).**
   2. **Git 🡪 Clone 🡪 Paste remote repo’s address.**
3. **Ensure your LOCAL, and you may choose to remain on master or create your own branch from that LOCAL master.** I personally created my own LOCAL branch and called it the same as my remote branch is called (ameliaBranch). Check out either one, but ANY changes done on these remote changes will NOT appear on the remote branches.

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1. **Update your LOCAL branch.** 
   1. **When you attempt to commit from your local branch to your remote branch, IntelliJ will ask you to track that branch with whatever remote branch you choose. Select which remote branch you want and check the checkbox.**

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* 1. **Now whenever you go to your LOCAL branch, and click UPDATE, the LOCAL branch will pull whatever changes are from your selected REMOTE branch.**

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1. **ALWAYS COMMIT FIRST, THEN COMMIT AND PUSH** 
   1. **You most likely will need to click on “Amend” before you can Commit and Push.**
   2. **ALWAYS CHECK WHICH REMOTE BRANCH YOU ARE PUSHING TO!!! IntelliJ defaults to Master on the first few commits so CHANGE IT TO THE APPROPRIATE BRANCH FIRST!!!**

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**After Pushing 🡪 GitHub 🡪 Appropriate branch you pushed to 🡪 Refresh.**

1. **In GitHub, you will see commits to be made, you can request a Pull Request and merge your REMOTE branch into REMOTE main/master. If you want your REMOTE branch to be updated from REMOTE main, GitHub will be keeping track of all the commits and asking if you want to be updated or not through a pull request. ALWAYS CHECK WHAT IS BEING MERGED BEFORE YOU REQUEST A PULL REQUEST AND MERGE IT.**

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**You can always check the comparisons in GitHub before you merge! See top red box in the above image.**

1. **Rollback and Revert Changes. Excellent YouTube link** [**here**](https://www.youtube.com/watch?v=bKrtYNOs0PU)**.** 
   1. **If you make a change BEFORE committing the change. Highlight the change 🡪 Right Click 🡪 Git 🡪 Rollback**
   2. **If you make a change AND commit. Bottom left corner click on Git 🡪 select branch your commit was on 🡪 find your commit 🡪 select the file you want to revert 🡪 Click on the REVERT icon.**

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