

# Github Tips

## Local vs Remote

- When you connect a project to Github, there will be a local and remote repository
  - Local - on your device only
  - Remote - the repository you see on GitHub.com

**\*\*You should take note that, if you make changes on the Remote repo (Like deleting a branch). You may still see it in your NetBeans app, because it still exists in the Local repository.**

**\*\*So, note that changes on the Local and Remote repository are separate. You need to either push to sync both**

## How to save changes in 3 steps

1. Select a Branch or Create a Branch
  1. Like choosing the "tab in gdocs", an example branch is "Coding transaction 3"
  2. You then edit and write your code under this Branch. When you are under a certain branch, your edits will only be visible in that branch. If you switch branches like "Coding add technician", the edits in "Coding transaction 3" won't be seen.
  3. Make sure you are under the right branch, before making edits
2. Commit
  1. This is to save your modifications. You can add a "Commit Message", here you can describe the changes you made.
  2. Take note just like saving a file, you can only "Commit" when you have modifications
3. Push
  1. This will now sync your Local and Remote repo. If you do the first 2 commands only (Commit, Select branch), you will not see the changes in [GitHub.com](https://github.com) You need to Push it to sync
  2. When you push, you can choose which Branch you will sync to. Make sure to choose the right branch you want to sync to

## How to revert changes in 5 steps

**\*\*before you revert any changes, you must save it. Make sure the branch has been "Commit" first before proceeding. Once it is saved (there should be no "[-/M]" beside the class name, this message indicates the file is modified), then proceed below**

1. Click "Revert Commit" under Git->Revert/Recover->Revert Commit
  2. Click the Select button beside the text box for Revision
  3. Choose the Commit version you want to revert to
  4. If "Resolve Conflicts" show up, click "Resolve"

1. In this window you will see the difference from Left (Current version) to Right (Old version)
  1. The two sides both have an "Accept" button, simply click on the side with the result you want
  2. Below there is a "Result after Merge" tab. It just shows what your code will be with the version you accepted
  3. Once all conflicts are good, click "Ok"
5. The changes have been applied at this point. Make sure to Commit (To save) and Push (To sync with Remote Repo)

### **Suggested structure for GitHub**

1. Every time we code, we create a branch
  1. Branch Name format "First Name initial-Description"
  2. Ex. M-Added technician code (Marc)
  3. B (Bernard), AL (Alberto), AN (Anton)
2. After a coding session, we push it to the branch we created and make a pull request on Github
3. Then, every morning. We review the pull requests and merge them to the MASTER branch (the branch with everyone's code compiled together)

### **What is Pull request?**

- It is done to let the group know if you can merge your code to the MASTER branch
  - Someone will check and approve the request

### **Push vs Pull**

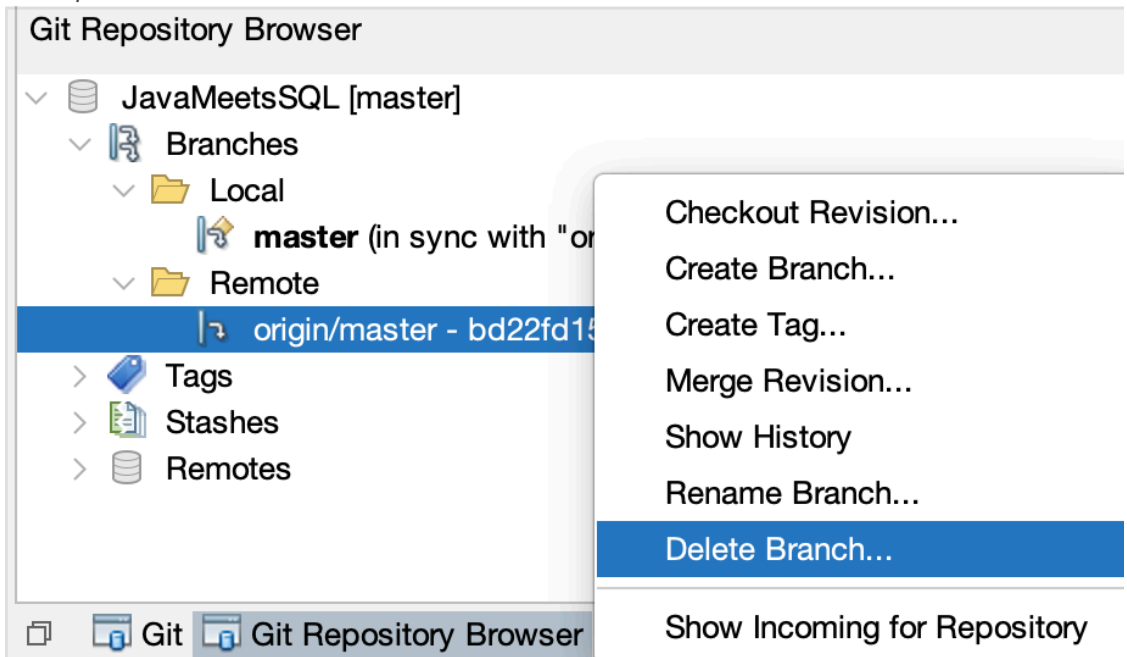
- Push - You are taking the edits you made on Netbeans and pushing it into your repository on [Github.com](https://github.com)
  - Ex situation. You did a coding session, etc. etc. Then time to save in Github.com
- Pull - You are taking the edits you made on [Github.com](https://github.com) and pulling it into your Netbeans
  - Ex situation. You merged 2 branches/accepted a pull request on [Github.com](https://github.com) and need the changes to reflect on Netbeans

### **What is Merge?**

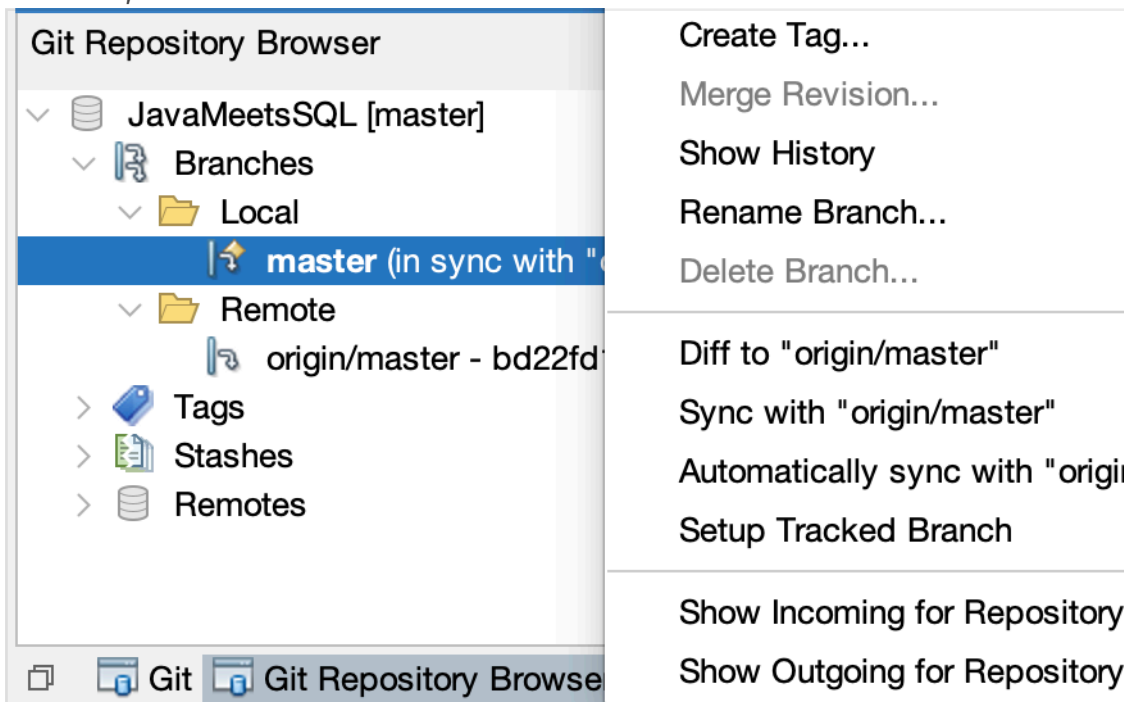
- It's about combining branches together, its purpose is to compile the code modifications together to ONE branch (Usually to the MASTER branch)
    - Once the branch has been merged, (Ex. M-Added technician code) you can delete the branch safely.
- \*\*Take note this merge is done on [Github.com](https://github.com) and you won't see the changes in your app immediately. For the changes to reflect do the following**
1. Under the Master Branch, do a **Pull**

2. If you deleted a branch

1. In netbeans, open GitHub repository browser
2. First, delete the branch under remote



- 3.
4. Second, delete the branch under local



- 5.
6. \*\*Netbeans doesn't allow deleting a branch under local, if it still exists under Remote (In the Github repository browser)