**Git Branching**

* Allows you to create a new feature, or change some part of the original code
* Branching makes it possible to create an isolated environment when creating a new feature, or to correct an issue in the main code no matter the scope
* Steps:
  + Navigate to the repository folder on your computer
  + In Terminal, type git pull or git pull origin master and press Enter
  + Type git checkout -b simple-leaflet-map and press Enter
    - git checkout lets us navigate between branches
    - -b indicates we are creating a new branch
    - The name of the new branch follows -b
    - Confirm that you are in the simple-leaflet-map branch by typing git branch and pressing Enter
* The master code contains the finished code
* All developmental code should be kept on a different branch
* Separating developmental code from finished code prevents developers from breaking the code they have already completed
* When initializing a Git repository, the master branch is automatically created
* Create a development branch by typing git branch dev and pressing Enter
  + When a branch is created it will be an exact copy of the branch it came from
  + git branch will return a list of all the branches in your repository with a star next to the branch you are currently on
  + git branch and git status show what branch you are on
    - git status gives the status of a branch
* Adding files or folders to a GitHub branch:
  + git checkout branch\_name
  + git status
  + git add .
  + git status
  + git commit -m
  + git push
    - When pushing to a branch for the first time, use git push --set-upstream origin branch\_name
* Merging a branch with the master branch on GitHub:
  + Compare the changes between the branches
    - If changes have been made in the master branch after you added files to a branch, you might not be able to merge
    - Click the “Compare & pull request”, or the “Pull request” button
    - A new page called “Open a pull request” will launch
  + Create a pull request on GitHub
    - Click on the “Compare: ” button and select the branch you want
    - Scroll to see the files you’re adding to the pull request
    - Click the “Create pull request” button
    - “Click the “Merge pull request” button
  + Pull the latest changes on the master branch onto your computer
    - In Terminal, type git checkout master and press Enter
    - Type git pull and press Enter
* Merging a branch with the master branch in Terminal:
  + Start on the branch you want to merge into (master)
  + Type git merge branch\_name and press Enter
* Merging a branch with the master branch on GitHub with a pull request:
  + Create a new repository and name it pull\_requests (without a README.md)
  + Find the git remote add origin url\_link command to create a connection between the local repository and the remote repository you just created
    - Run this command in Terminal, and then push your master branch to the remote with git push origin master
* git status and git status -u show the files that will be tracked in the branch
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