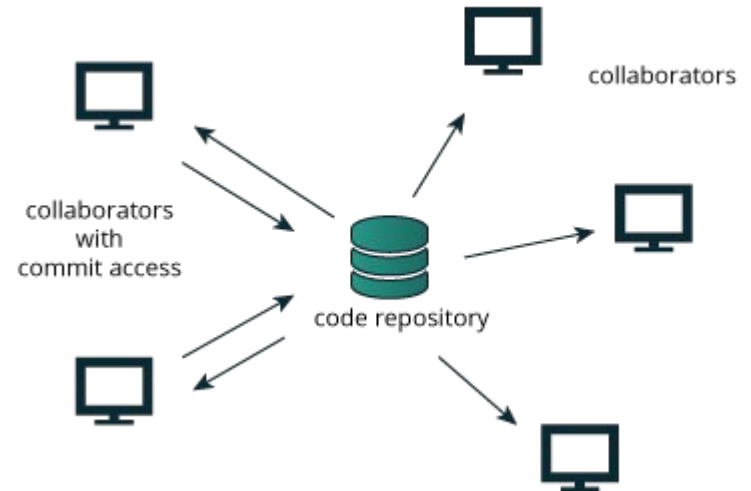


# Git Demo

David McHugh

# What is Github

- Github is an open source version control system allowing teams to collaborate
- Simply put: Github saves your codebase on the cloud and lets you undo changes when you mess up
- Anyone with access to your repository can make submissions but only approved users can accept changes



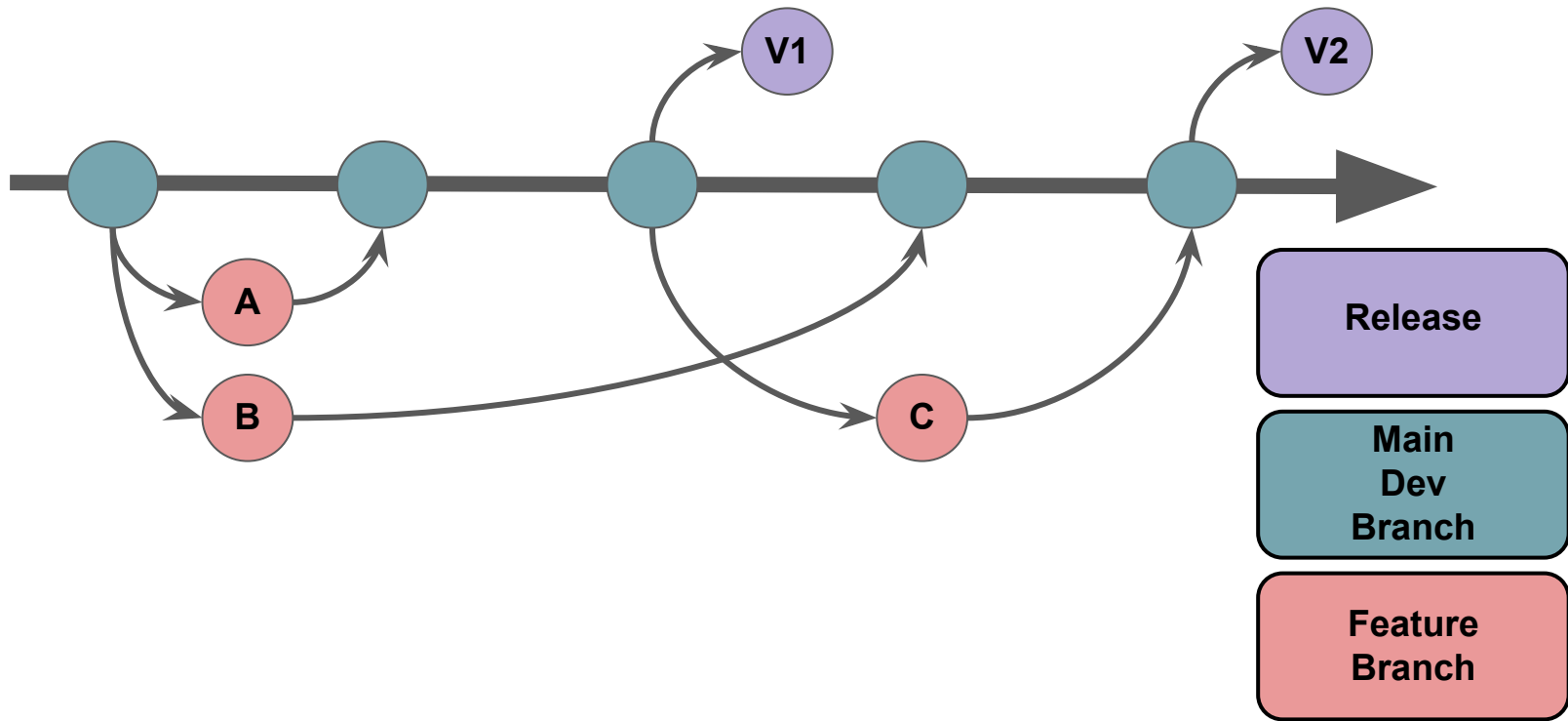
# Git Dictionary

- **Branch** - a copy of your codebase that does not mess up the original
- **Master** - your original codebase that you add **tested** changes to
- **Commits** - small changes made on a branch
- **Push** - collection of commit(s) that you send to Git
- **Pull Request** - Requesting all changes in your 'push' be put into the main branch
- **Pull** - Ask Git to give your branch the most updated version
- **Merge** - taking 2 branches with changes and putting them together

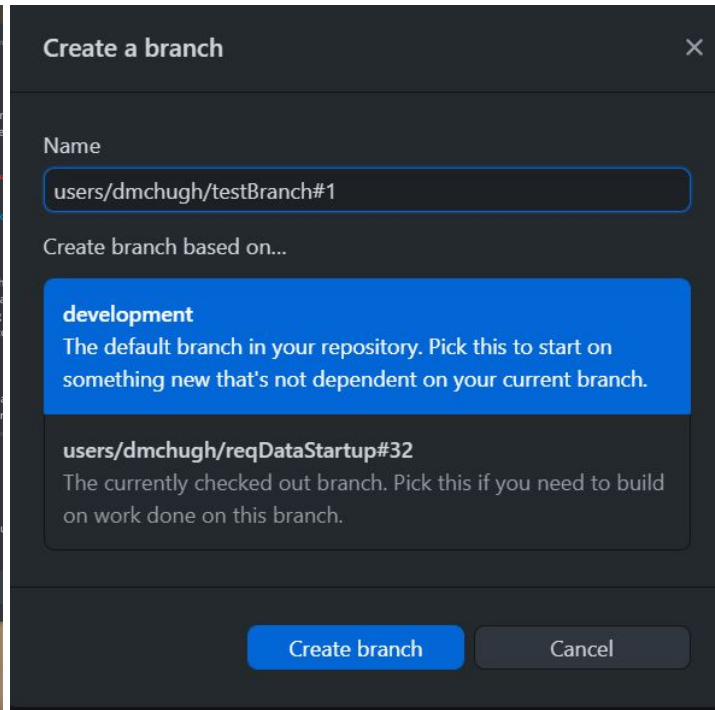
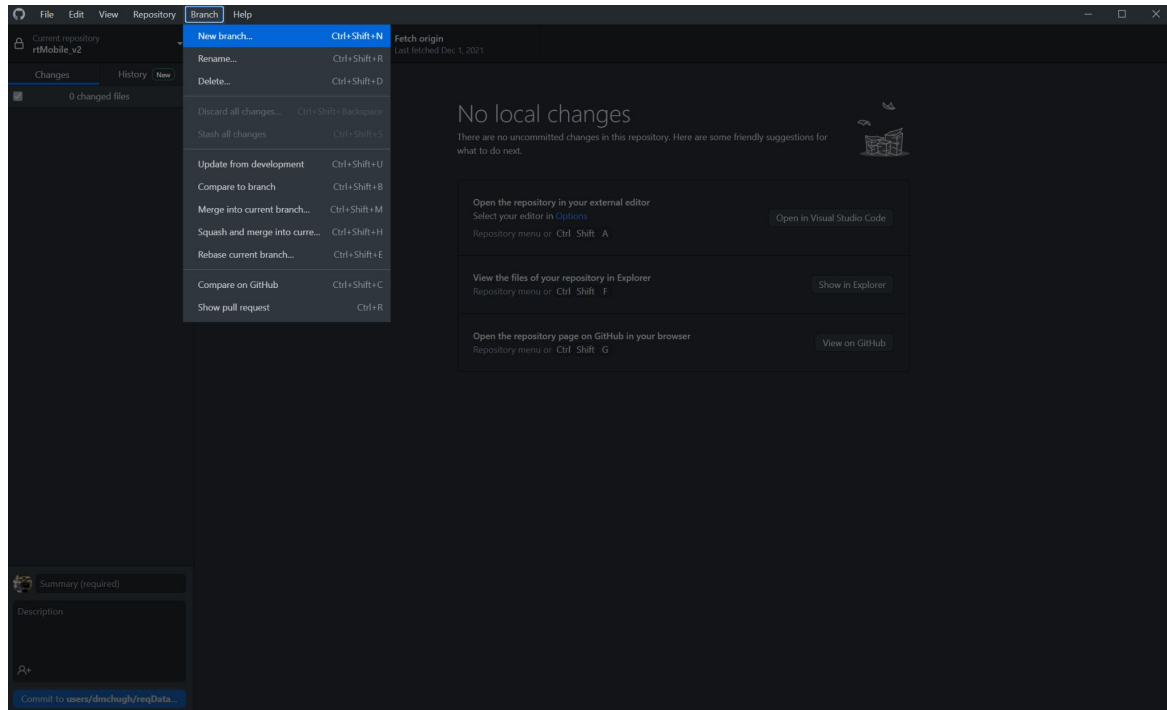
# Some things to know

- Your 'master' branch is your primary code housed on git
- Your 'local'/ 'feature' branch are made for every group of changes you feel go well together. Ex: Adding 3 new buttons to your web page
  - DO NOT make all your changes on a single branch
- Windows: Github desktop
- Mac: Github desktop or Tower (my personal favorite/ free student license)
- Linux: use the command line like a real Linux user

**NEVER MERGE DIRECTLY TO MASTER!**

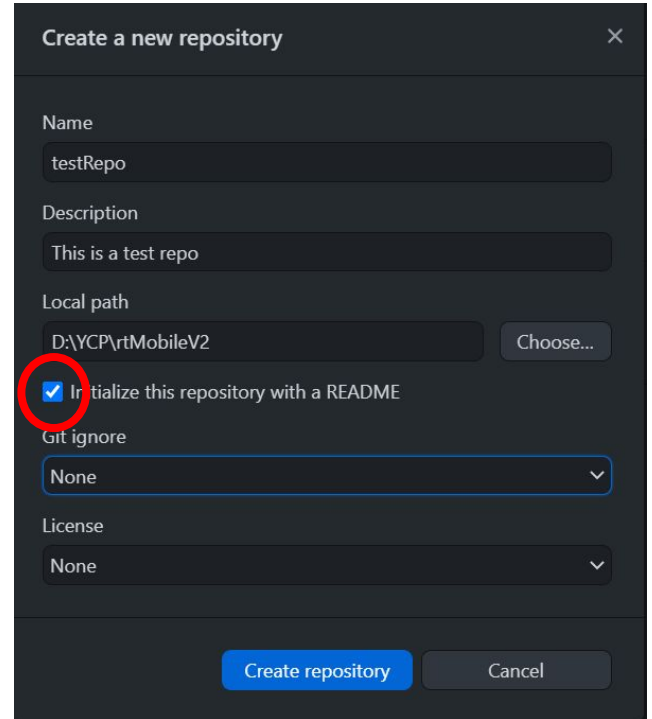
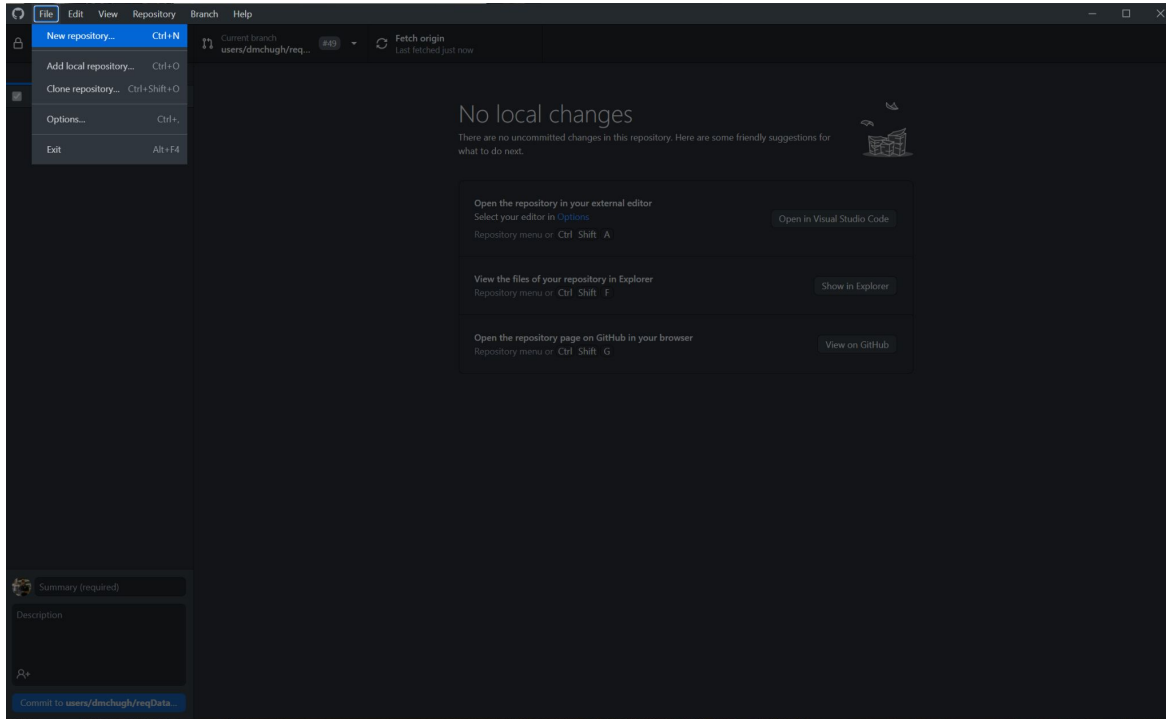


# Creating a branch

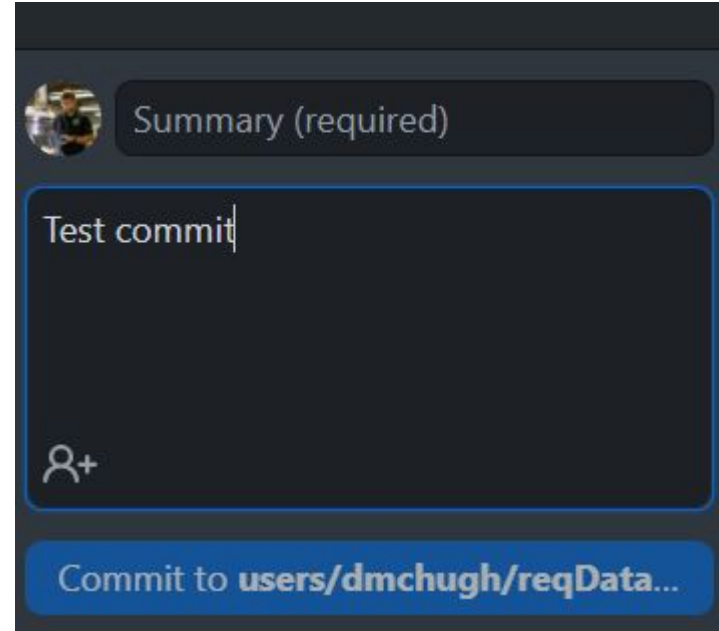
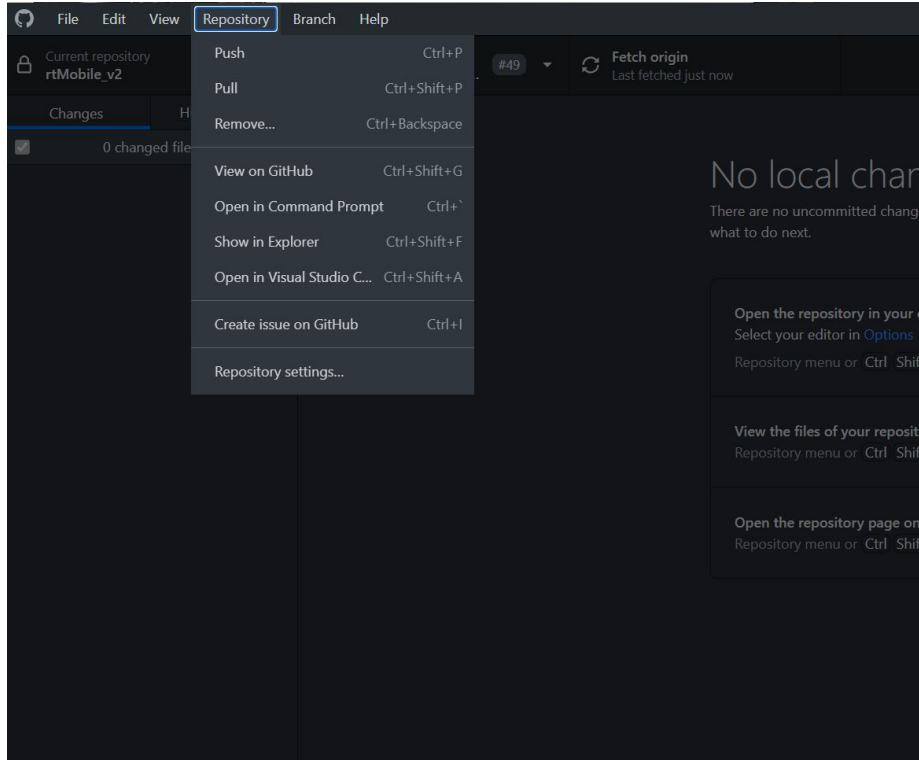


# Creating a repository

Be sure to initialize with a README. This is where you tell the user how to setup your project and extra details



# Push, Pull, Commit

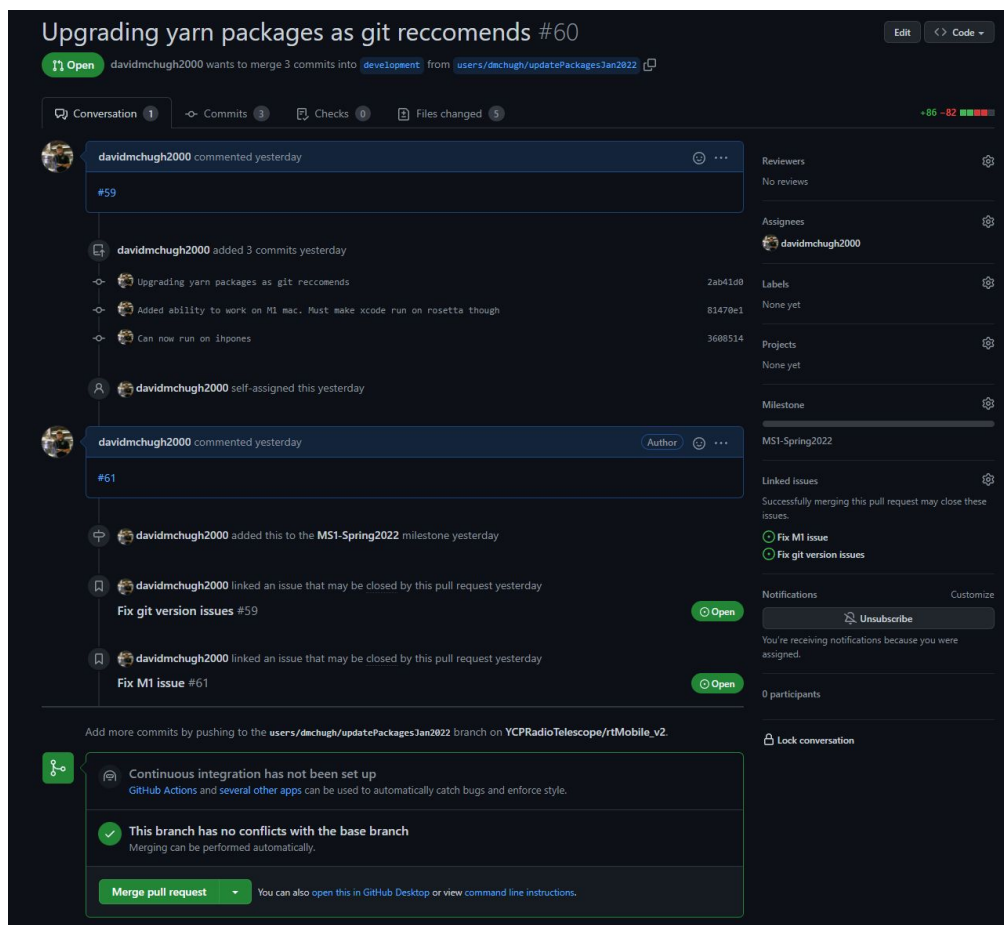
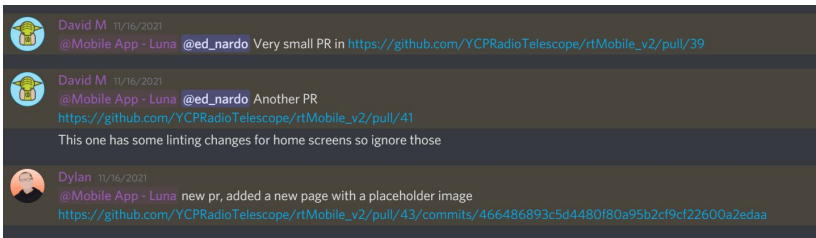





# Pull Request

When you are happy with your code push it and create a PR on Github

Let your team know and try to get at least 2 to approve it before merging



# Keep track of issues/ tasks



Test issue

Write Preview

H B I E <> Link List Image @ <> ↩

Fix... it's broken

Attach files by dragging & dropping, selecting or pasting them.

Styling with Markdown is supported

Submit new issue

Remember, contributions to this repository should follow our [GitHub Community Guidelines](#).

Assignees

👤 davidmchugh2000

Labels

enhancement

Projects

None yet

Milestone

No milestone

Linked pull requests

Successfully merging a pull request may close this issue.

Helpful resources

[GitHub Community Guidelines](#)

Filters  Labels 12 Milestones 7 New issue

17 Open	19 Closed	Author	Label	Projects	Milestones	Assignee	Sort
Fix M1 issue	#61 opened yesterday by davidmchugh2000	MS1-Spring2022					
Fix git version issues	#59 opened yesterday by davidmchugh2000	MS1-Spring2022	enhancement				
User authentication	#58 opened 4 days ago by davidmchugh2000		enhancement				
Reset MCU Error bit button	#53 opened on Dec 8, 2021 by davidmchugh2000		bug enhancement				
Error Messages not displaying	#52 opened on Dec 5, 2021 by davidmchugh2000		bug				
API Usage of page data	#47 opened on Nov 29, 2021 by davidmchugh2000		enhancement				
Investigate Push Notifications	#43 opened on Nov 17, 2021 by davidmchugh2000						
EL label - Degree movement	#44 opened on Nov 17, 2021 by davidmchugh2000		bug iOS				
Add Data Parsing for Request Data	#40 opened on Nov 16, 2021 by davidmchugh2000	MS3	enhancement				
Left and Right to Clockwise	#38 opened on Nov 10, 2021 by davidmchugh2000		bug				
Rewrite DenyUsers with a loop	#37 opened on Nov 9, 2021 by davidmchugh2000						
rewrite userInfoPage	#36 opened on Nov 9, 2021 by davidmchugh2000						
Rewrite Status Page Constants	#33 opened on Nov 9, 2021 by davidmchugh2000						
All pages request telescope data on start up	#32 opened on Nov 1, 2021 by davidmchugh2000	MS3	enhancement				
Status page buttons move	#22 opened on Oct 20, 2021 by davidmchugh2000		bug iOS				
iOS Homescreen Fix	#21 opened on Oct 20, 2021 by davidmchugh2000		bug iOS				
Remake "Sensor Screen"	#12 opened on Sep 28, 2021 by davidmchugh2000		enhancement				

# GitHub Process - cmd line

1. Open command prompt
2. CD into your repository (the folder with README.md)
3. Ensure your local development environment is up to date with the latest Github changes. To do this run “git pull” from your local **development** branch
4. Create a new branch and name is based upon the current task followed by the Git issues number
  - a. Ex: branchName#1234
  - b. Run “git checkout -b branchName#1234” to create a new branch.
    - i. **Be sure you are on your *local* development branch**
5. CODE!
6. Run “git status” to see all files changed
  - a. All red files are not checked in
  - b. All green files are checked in
  - c. **Checked:** the files that will be added to Github when pushed
7. Check-in files by running “git add fileName”
  - a. Use “git add .” to check in ALL files. **BE CAREFUL WHEN DOING THIS!**
8. Commit changes with a detailed description by running “git commit -m “description Issue #1234”
9. Push changes by running “git push” or using your IDE git settings
  - a. If it the first time on the branch you will need to copy the long string that appears and looks similar to “git push --set-upstream ...” and paste that into the terminal and run it
10. Open repository on Github.com and at the top, a yellow bar will appear asking you to create a pull request. Click the grey box inside the bar and continue to the next step
  - a. If no yellow bar appears click on “Pull Requests” and create a new one
11. Ensure your branch is pointing into Development and add a comment
12. Click the green button to create the Pull Request
13. Send your team a message with the linked Pull Request for review