# Git/Github for Collaborative Engineering

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## Hello World (Again)

- Why me?
  - I've given many intro-to-Github talks?
  - I learned it a few years ago and have used it for an array of projects.



#### What Is This?

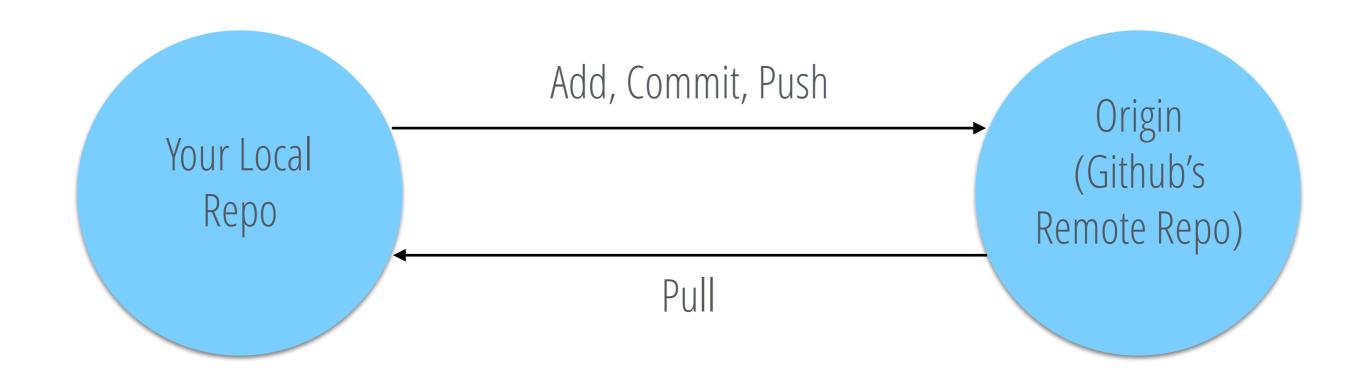
- Git and Github Workshop
  - Please ask questions whenever!
  - Start out with a basic tutorial.
  - Move into a discussion of how to use Github on a professional engineering team
  - Actually playing with Github.
- Why?
  - One of the most important things Android Summit students learned.

#### Set Up Git/Github

- Create an account: github.com
- Set-up: https://help.github.com/ articles/set-up-git/
- Windows: Make sure you have Git Bash
- Mac/Linux: Make sure command line git is installed and working



#### What Is Git/Github?



#### Take Our Course to Learn More!

- Topics I don't want to cover again:
  - Branching
  - Merging
  - Pull Requests
  - The details of pulling/pushing

## Using Gitflow

- How serious coding projects are structured—a system of branches
  - "Feature" New addition you're working on
  - "Develop" Where all of the new features come together
  - "Release" When you've all made substantial changes
  - "Master" Production version
  - "Hotfix" Bug fixes in the production branch

#### Got a Problem?

- Create an issue.
  - Just notifying the owner of a problem.
  - Know what your company's policy is!
- Create a pull request.
  - You've already fixed the issue!
  - Get someone to read over it, and add updates if necessary before merging.

## Catching Up with Rebasing

- Updating your code so it's based on a more recent version of the base.
- The opposite—cherrypicking.
  - Merging another updated branch into yours.

### Oops! I Did It Again.

- Use "git stash" if you haven't committed yet and want to go back to a version that worked.
- If you want to go back to an old commit, use git reset hard HEAD
- https://git-scm.com/blog/2011/07/11/reset.html

## Workshop Time!

- Goal: Form teams of 5. Each team needs to:
  - Show off your knowledge of Gitflow with a README.
  - Look through another teammates repos, star it, and leave an issue.
  - https://github.com/brynn-udacity/github-tutorial/