

CSc 317

Git, Github, Maps

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Announcements

- The SCS
 - If response rate $\geq 80\%$, will drop a PA
 - ***Please leave thorough, honest feedback!***
- Project check-in meetings in one week!
- The Quizzes

Git and Github

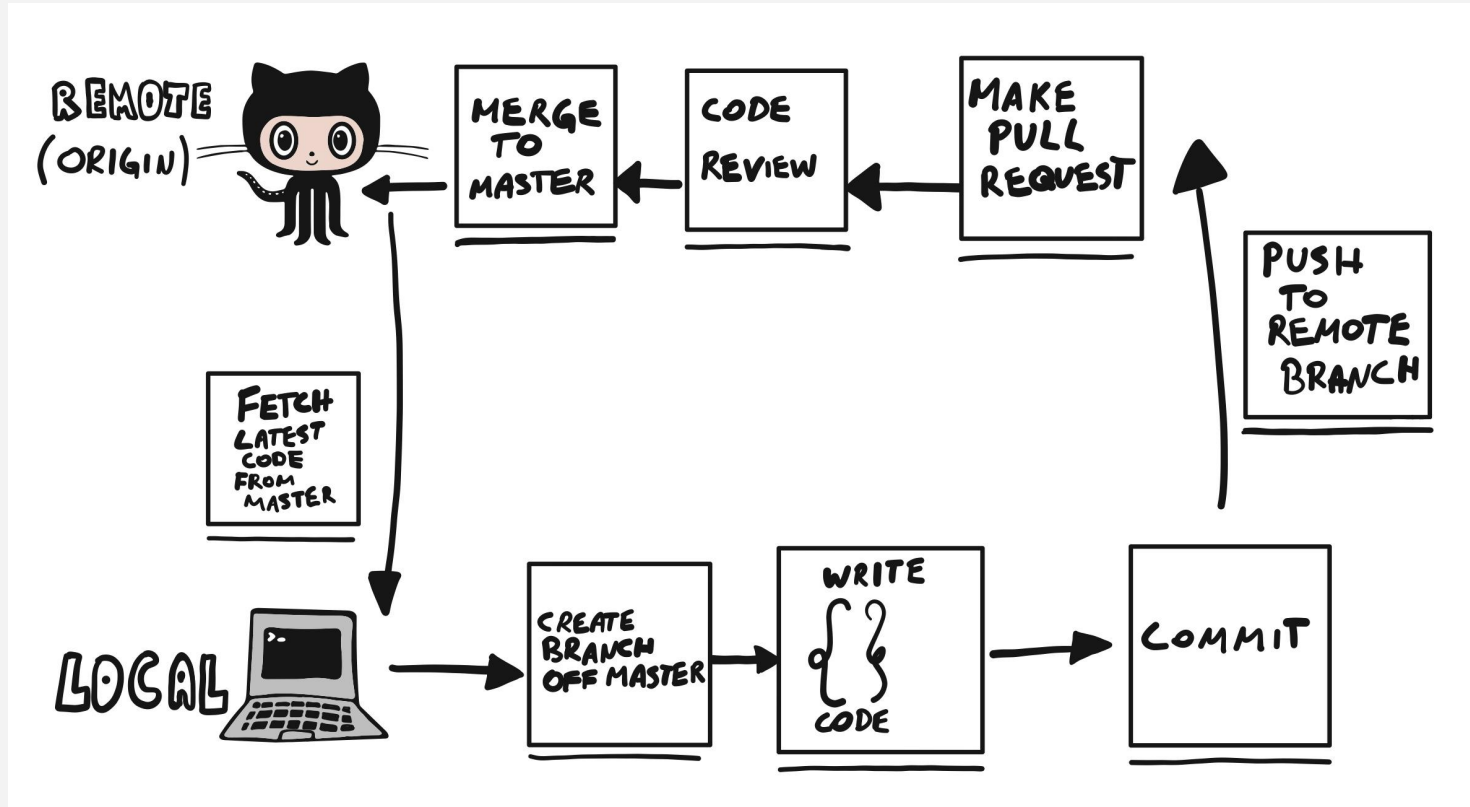
- **Git** - “...a distributed version-control system for tracking changes in source code during software development.”
 - Version Control System (**VCS**)
- **Github** - a subsidiary of Microsoft, that provides hosting for git repositories



Repos and Branch

- Create a git **repository** for a particular project
- Depending on the work-pattern, may have multiple branches
 - One primary branch (master) with the main code, and other branches for development

Developer Workflow



Example A (poor team git/hub usage)

- A. Create a project in Android studio for group
- B. Push android studio project (robot) to repo
- C. **Ben** is tasked with adding a second moving image
- D. **Thomas** is tasked with adding some comments
- E. Ben and Thomas each check out master branch, start working on different things
- F. One commits and pushes, then the other
- G. What happens?

One PR per one Issue

- A good github workflow is as follows:
 - Create an **issue** for each major component of the app
 - (Perhaps 10-20 total for your final projects)
 - Each **issue** can be completed by one person (perhaps with help from another)
 - Before beginning on a new issue, make a branch for it
 - Work, commit, push, PR

Example B (better team git/hub usage)

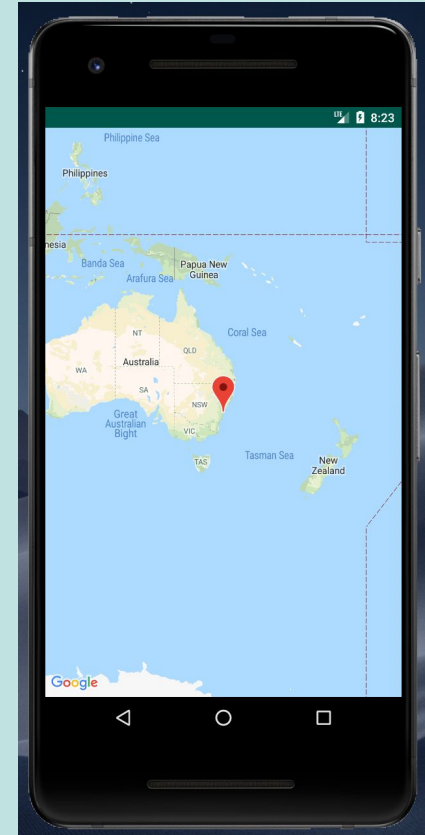
- A. Create a project in Android studio for group
- B. Push android studio project (robot2) to repo
- C. **Ben** is tasked with adding a second moving image
- D. **Thomas** is tasked with adding some comments
- E. Ben and Thomas create a separate branch for each task to be completed
- F. Work, commit, push
- G. Make pull requests for each issue

Android Maps API

- An Android API that allows you to utilize google maps info within your app!
 - “The API automatically handles access to Google Maps servers, data downloading, map display, and response to map gestures.”
- You can customize by . . .
 - Adding markers, zooming, moving the view, adding lines, polygons, etc

Maps and Location

- Create a new map project
- Download Google Play Services API, via Android Studio preferences
- Get an API key
- Add API key to XML file
- Run the application



The GoogleMaps object

- To use a map in your application, use the **SupportMapFragment** class
 - Add the fragment to the activity of your choice
- Once the fragment is ready, update the map using the **GoogleMap** object