Rensselaer Center for Open Source

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# **Git + Repo Management**

#### Definitions

Repo = Repository = Place where code is stored

**git** = Keeps track of your repository and changes within it. It's a version control system, so you can go back to previous versions if you break something.

**GitHub** = Web interface for git. RCOS uses GitHub a lot!

**Commit** = save changes you made to your repository

### **Git Commands**

- Basics
  - config
  - <u>init</u>
  - <u>clone</u>
  - <u>status</u>
  - log
  - <u>add</u>
  - <u>reset</u>
  - <u>diff</u>
  - commit
  - <u>push</u>
  - <u>pull</u>
  - <u>rm</u>
  - <u>mv</u>
  - <u>rebase</u>
  - <u>reset</u>

- Branching
  - <u>branch</u>
  - <u>switch</u>
  - <u>checkout</u>
  - <u>merge</u>
  - <u>stash</u>
    - list
    - pop
    - drop

# .gitignore

File to designate stuff in your repo that shouldn't be committed

- security/API keys
- build/compilation artifacts

https://git-scm.com/docs/gitignore

(scroll to bottom for examples)

## **More Git(Hub) Stuff**

- forking
- <u>pull requests</u>
- <u>issues + projects</u>
- "actions" CI/CD
- <u>wiki</u>

#### Docs

- <u>License</u>
- README
- Code of conduct
- Issue/PR templates

## **Any Questions?**

Ask now or use the #helpdesk Discord channel or DM Coordinators/Faculty Advisors if you ever have questions.

#### **Attendance**

Everyone gets attendance credit for these first meetings, but in the future we will take attendance.