Git and GitHub

```
[gchen6@LAMU02Y415TJG5J:/Users/gchen6/gitHub/_myApps $ git clone https://github.com/johngchen/ai-racing-league.git
ClorMing into 'ai-racing-league'...
remote: Enumerating objects: 80, done,
remote: Counting objects: 180% (80/80), done,
remote: Compressing objects: 180% (79/79), done,
remote: Compressing objects: 180% (79/79), done,
remote: Total 320 (delta 33), reused 11 (delta 1), pack-reused 240
Receiving objects: 180% (320/320), 690.24 KiB | 1.93 MiB/s, done,
Resolving deltas: 180% (129/129), done,
[gchen6@LAMU02Y415TJG5J:/Users/gchen6/gitHub/_myApps $ cd ai-racing-league/
[gchen6@LAMU02Y415TJG5J:/Users/gchen6/gitHub/_myApps/ai-racing-league (master) $ git status
```

Activity:

Join GitHub.com; Fork the original project; Clone it to your own PC; Hack the code and have fun

Questions:

- 1. How to join GitHub.com
- 2. How to fork a repository
- 3. How to raise a new issue
- 4. How to make some quick and dirty changes on GitHub
- 5. How to contribute back to the project
- 6. How to install git on your PC
- 7. How to make code changes on your PC

- 1. https://github.com/join
- 2. Go to https://github.com/CoderDojoTC/ai-racing-league, click on "fork"
- 3. Go to https://github.com/CoderDojoTC/ai-racing-league, click on "issues", then "New issue"
- 4. Go to your forked project, e.g. https://github.com/johngchen/ai-racing-league, click the file you want to edit, click the pen icon , make changes, then "Commit changes"
- 5. Go to your forked project, click on "New pull request"
- 6. Mac: already installed, type git --version to verify; Windows: https://git-scm.com/download/win
- 7. \$ git clone https://github.com/johngchen/ai-racing-league.git
- \$ cd ai-racing-league/
- \$ touch myDemo.txt
- \$ git status
- \$ git add .
- \$ git commit -m "just a demo"
- \$ git push

Useful info:

- https://gist.github.com/arttuladhar/5887559
- https://gist.github.com/jedmao/5053440
- https://git-scm.com/docs
- https://www.atlassian.com/git/tutorials

GitHub – A Tool For Source Control

git The command line interface

gitHub The central repository hosted on internet

Install git to use locally, or interact with GitHub

Mac already installed, type git --version to verify

Windows https://git-scm.com/download/win, or use git bash

Setting your Git username/email for every repository on your computer

- Create a GitHub Account to have access to the GitHub repository
 - https://github.com/join
- Help https://help.github.com/en
 - Set up Git
 - Create a repo
 - Fork a repo

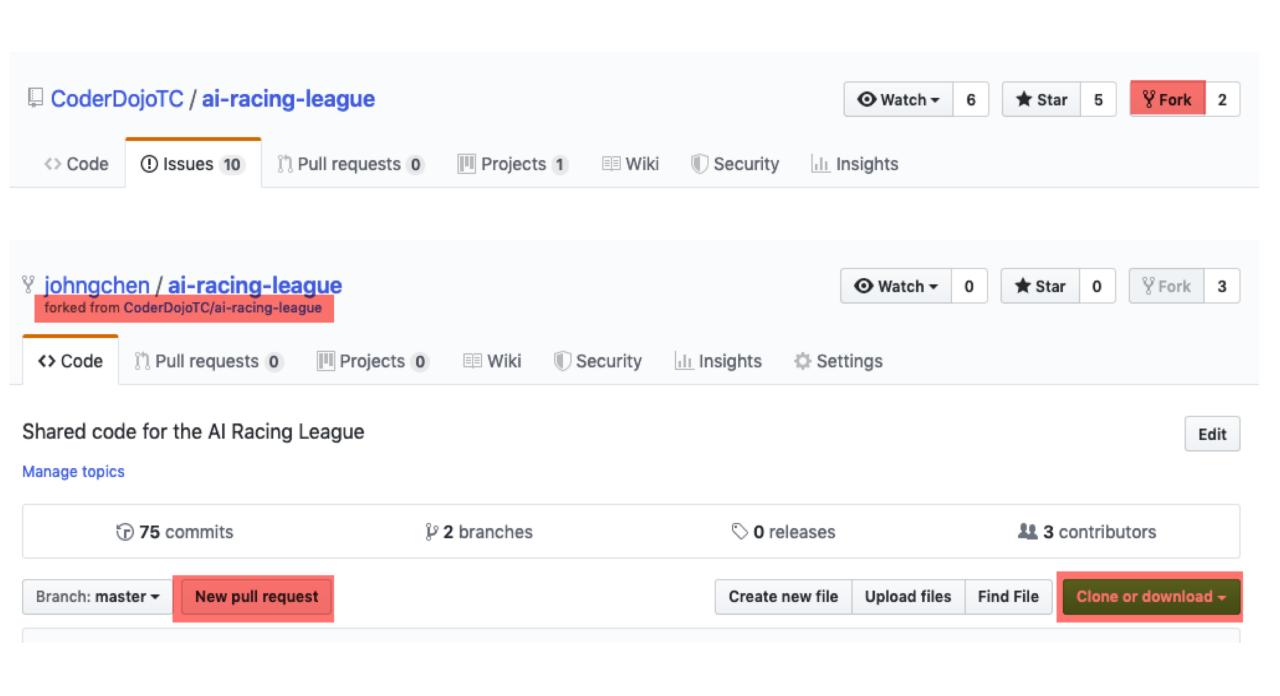
GitHub – Fork a Repository

Use "Fork" to make your own copy (your own repository) of an existing repository

- To play with/hack the code
- To contribute back, submit a pull request to the original owner
- Your repository is also in the GitHub repository on internet

Use "New pull request" to send your changes to dmccreary (original owner) for his approval to accept (or not).

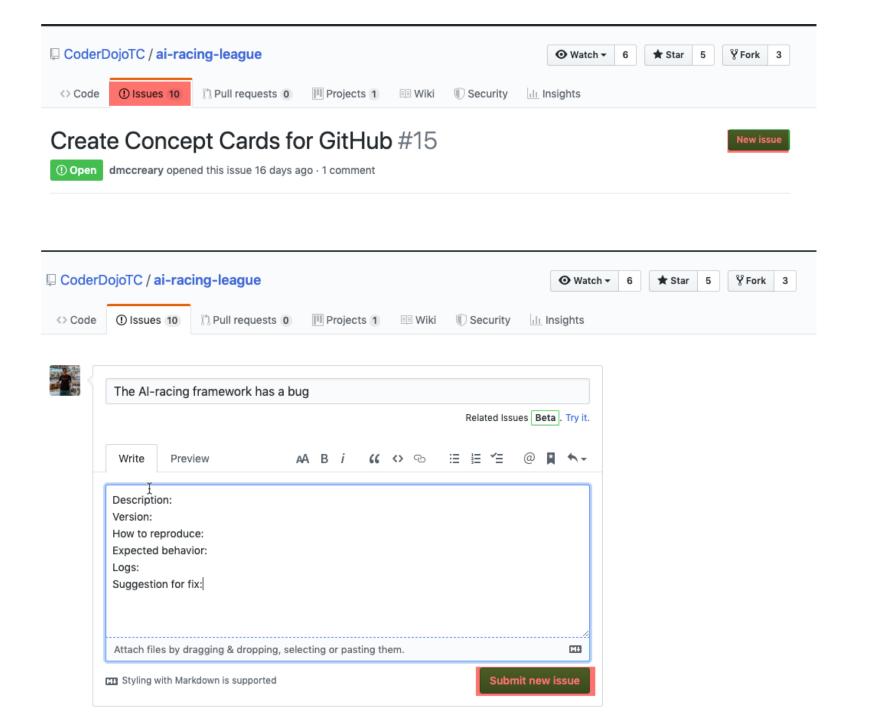
Use "Clone or download" to find the URL of a repository



GitHub – Raise a new issue

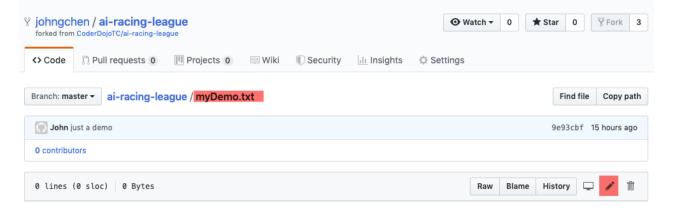
Report an issue or a bug

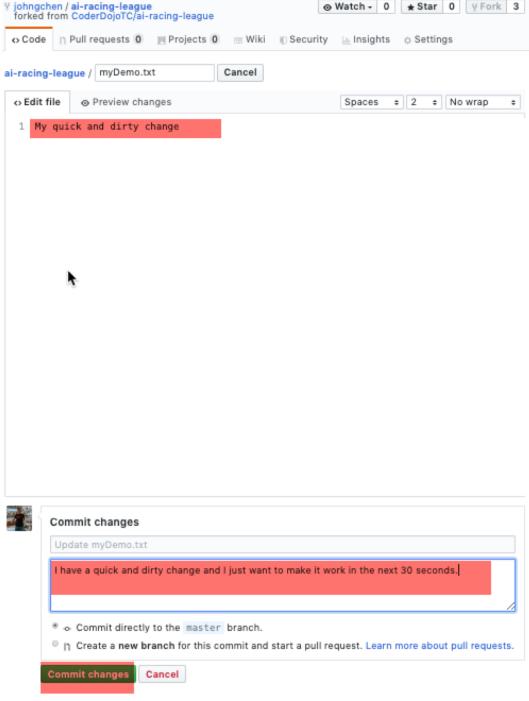
- Describe the issue
- Specify the version/branch where the issue is found
- Describe how to reproduce
- Describe the expected behavior
- Attach relevant logs
- Maybe suggest how to fix (or fix it yourself)



GitHub – Quick and Dirty Changes

- The best way is to clone the code and work on your own computer
- But for quick and dirty changes, you can change it on GitHub directly





Git – work on your own computer

- git clone: make a copy of the source code to your computer
 - If you are new to gitHub, just work on the master branch, otherwise
 - git branch: make yet another copy of the source code on your computer
 - git checkout: switch to the branch to work on it
- edit your code using vi or your favorite IDE
- git add: add the changes you make to git to be tracked
- git commit: commit changes to your local repository
- git push: push your changes to your github fork

- myUserName@myComputer:/gitHub/_myApps \$ git clone https://github.com/johngchen/ai-racing-league.git
- myUserName@myComputer:/gitHub/ myApps \$ cd ai-racing-league/
- myUserName@myComputer:/gitHub/ myApps/ai-racing-league \$ touch myDemo.txt
- myUserName@myComputer:/gitHub/ myApps/ai-racing-league \$ git status
- myUserName@myComputer:/gitHub/ myApps/ai-racing-league \$ git add .
- myUserName@myComputer:/gitHub/ myApps/ai-racing-league \$ git commit -m "just a demo"
- myUserName@myComputer:/gitHub/ myApps/ai-racing-league \$ git push

Git – Some Useful Info

- https://gist.github.com/arttuladhar/5887559
- https://gist.github.com/jedmao/5053440
- https://git-scm.com/docs
- https://www.atlassian.com/git/tutorials
- www.google.com