

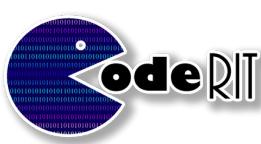


Version Control with Git



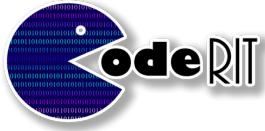


HACK TOBE9 FEST

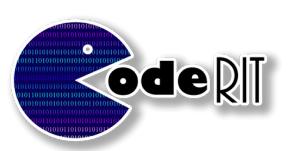
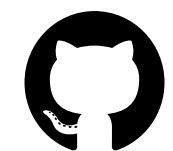


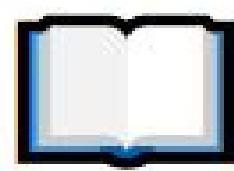


why Git?



2017-04-03	4/8/2017 4:33 PM	File folder	
2017-04-04	4/8/2017 4:33 PM	File folder	
2017-04-05	4/8/2017 4:33 PM	File folder	
2017-04-06	4/8/2017 4:33 PM	File folder	
2017-04-07	4/8/2017 4:33 PM	File folder	
2017-04-08	4/8/2017 4:33 PM	File folder	
app.FINAL.2017.04.08	4/8/2017 8:32 PM	JavaScript File	0 KB
app.final	4/8/2017 8:32 PM	JavaScript File	0 KB
app.final.real	4/8/2017 8:32 PM	JavaScript File	0 KB
app	4/8/2017 8:32 PM	JavaScript File	0 KB
app.send.customer.final	4/8/2017 8:33 PM	JavaScript File	0 KB

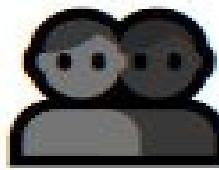




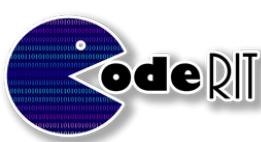
History: Know exactly which files changed, who made those changes, and when those changes occurred.

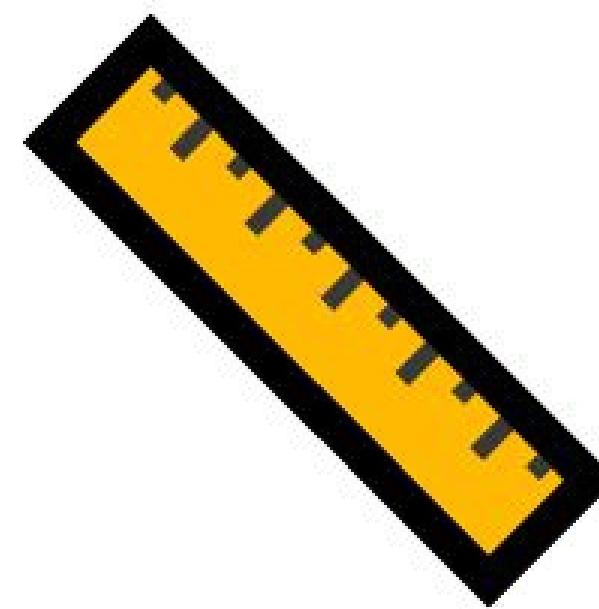


Backup: Ability to have different versions of the code in different places.

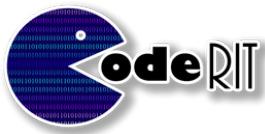


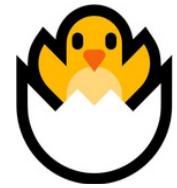
Collaboration: Collaborate easily with other people on the same codebase





Workshop Outline





my first git: repositories, staging, committing



git good: branching, jumping around, merging



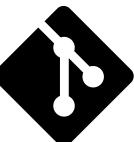
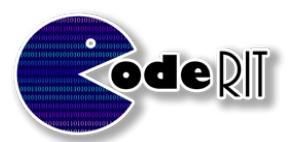
git world: enter in the repository world



git ideas: cool stuff to do with git



open sourcing: the idea that it's a changing.



Before we begin...

\$terminal commands are typed
with this font and color.



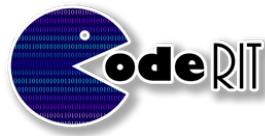


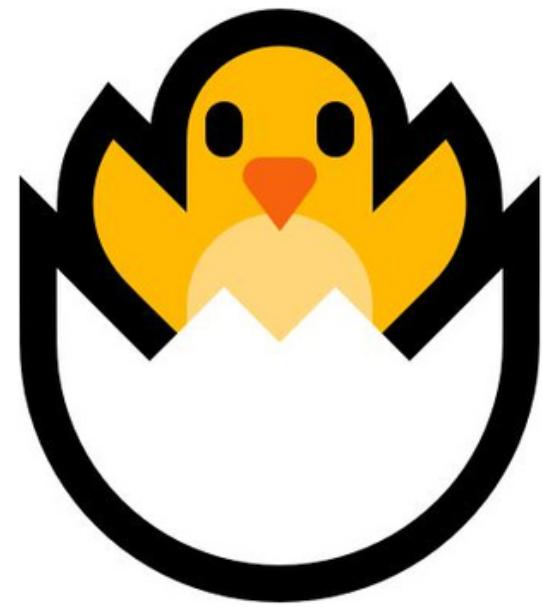
Don't Worry!
there is always a cheat sheet!





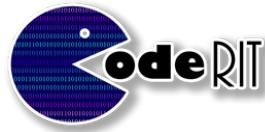
Time to start the workshop!





my first git

Create your shiny repo and your first commit.

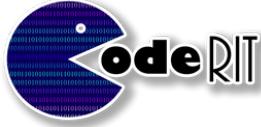


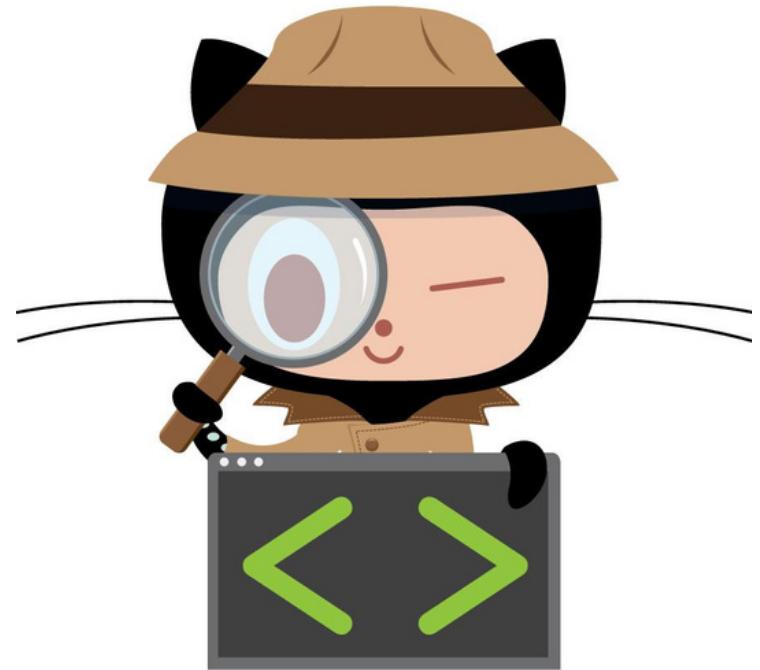
What is a Repository?

A repository is like any other folder on your computer, it can contain any type of file and works in exactly the same way...

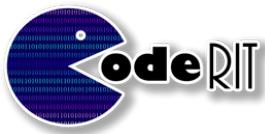
Except:

It has a hidden file named ".git" that stores the history of that folder





First, install git



Second, start a new repository by

```
$ git init <repository name>
```





What are Commits?

Snapshots of the state (i.e. code) of your
repository



Commit your work by using

\$ git add .

\$ git commit -m “<details>”



More about commits



Commits form a linked list structure which shows what you have done over time.

Use [git log](#) to see your commit history.

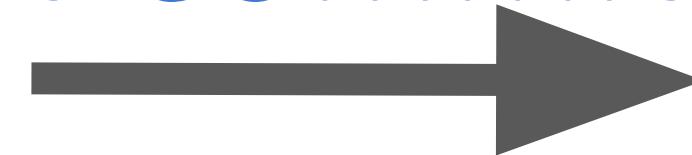


staging changes

`git add`



`git commit`



Unstaged
Changes

Staged
Changes

Committed
Changes

`git reset .`



`git reset <hash>`



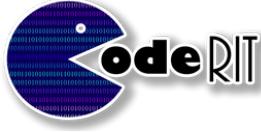


git world

publishing, updating and downloading



Let's take a look at GitHub

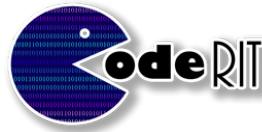


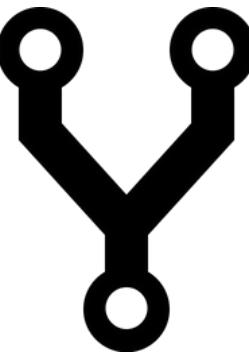
Downloading / Updating Repos

`$ git clone <url>` - downloads a copy of a remote git repository.

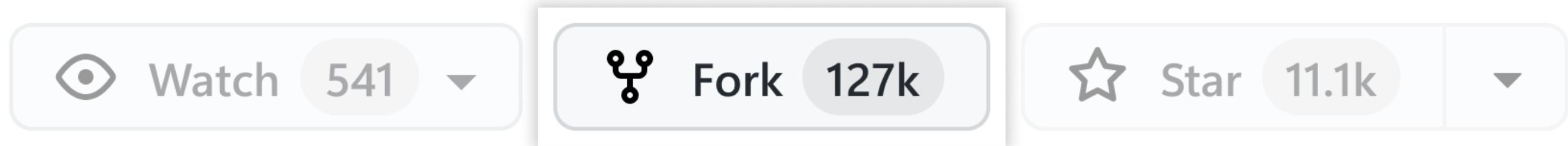
`$ git pull` - download and merge new data from the remote

`$ git push` - sends your version to the server





Fork a Repo



A fork is a copy of a repository. Forking a repository allows you to freely experiment with changes without affecting the original project.





git good

branching, context switching, merging



Commits

Bc7fd9

“Add oranges”



a3ffde

“Add apples”



9cd1ce

“First commit,
Add fruit.txt”





Working with branches

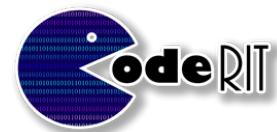
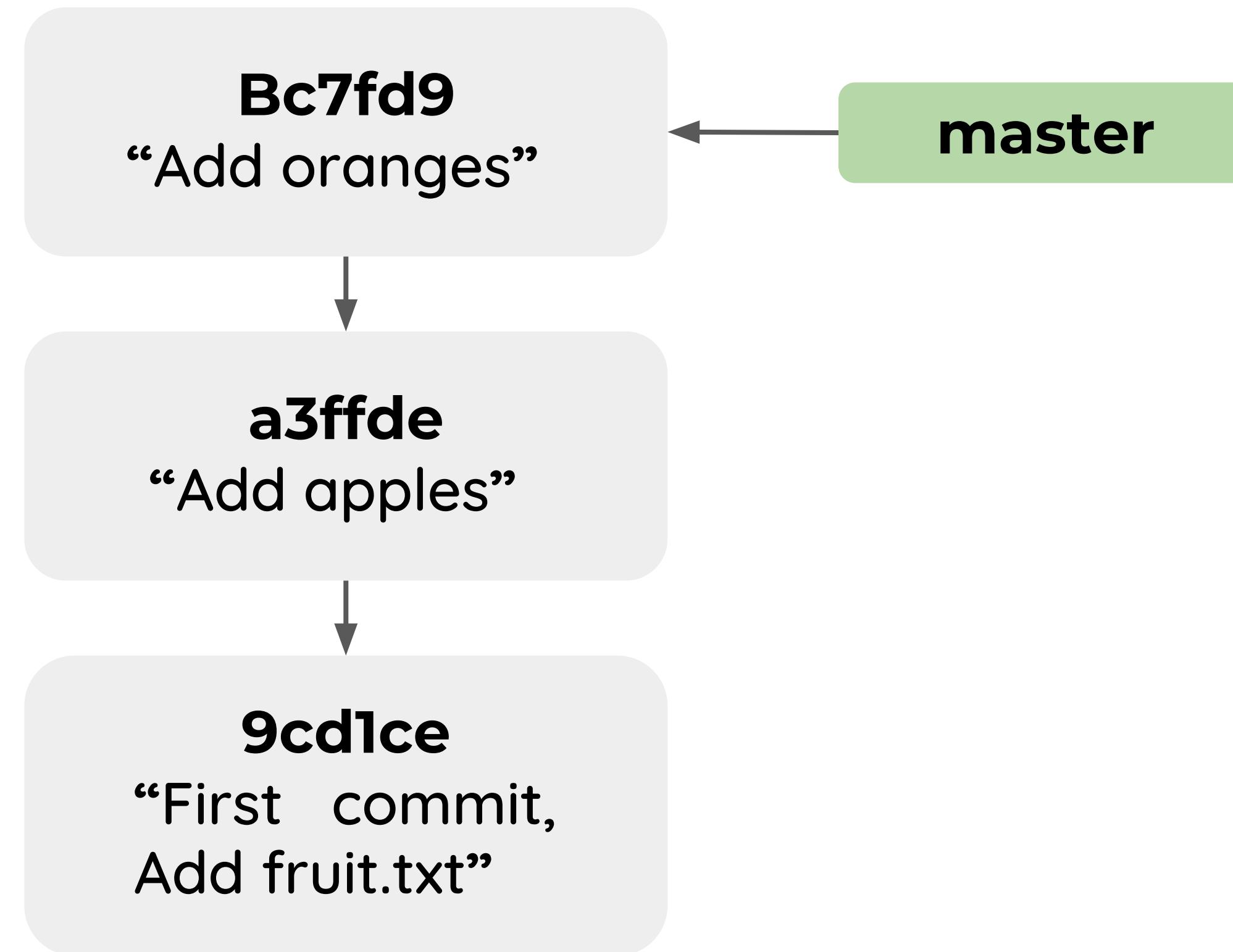
\$ git branch - see a list of all available branches.

\$ git branch <branchname> - create a new
branch with the desired name, based on the current
branch.



commits

branches





Working with HEAD

\$ git checkout <branch name> -

Redirect HEAD to

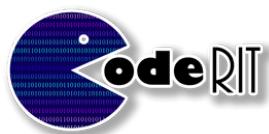
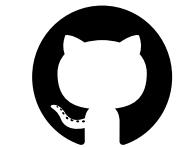
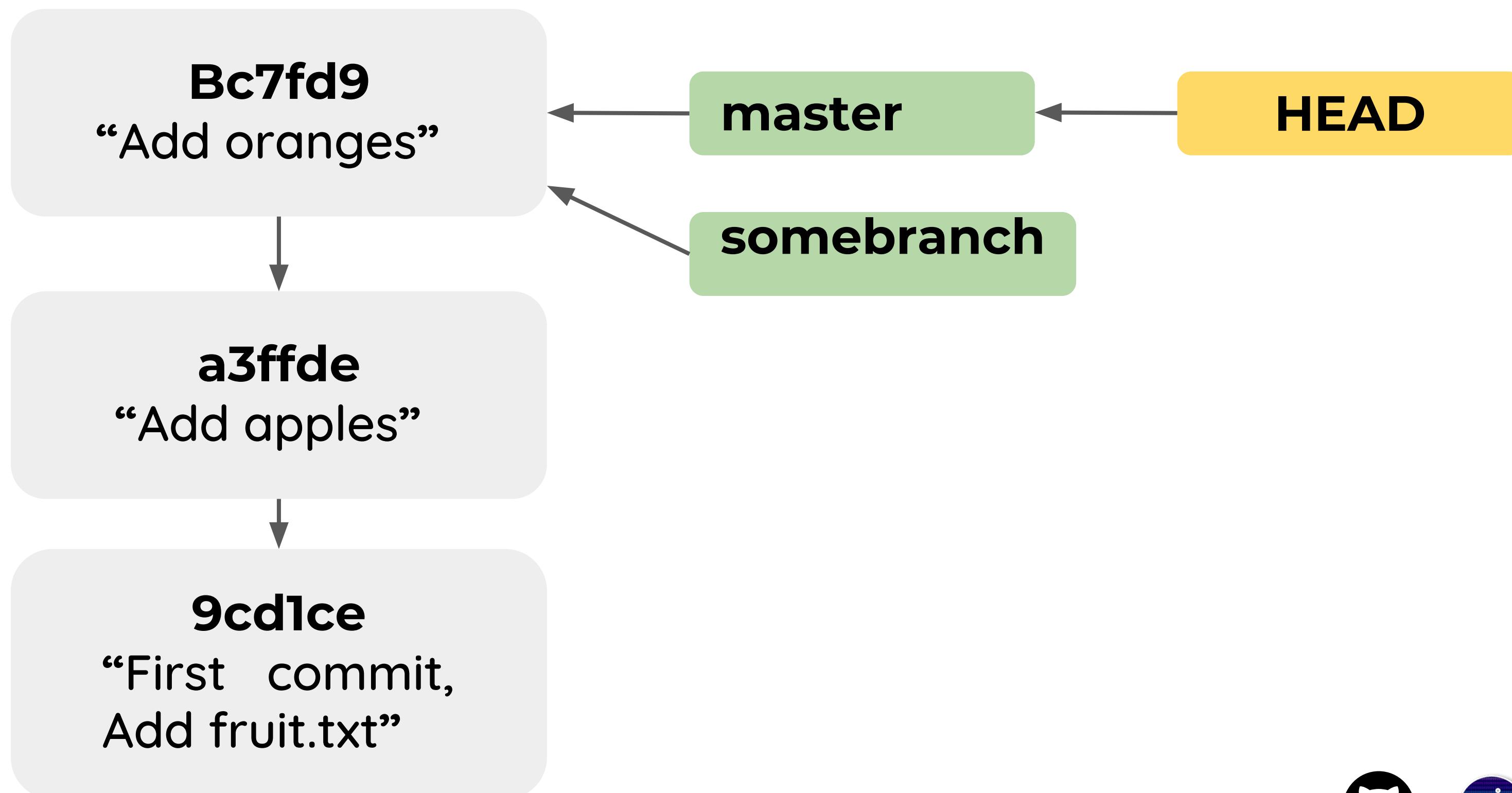
the desired
branch

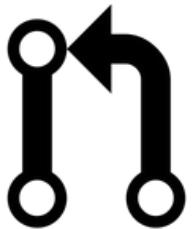


commits

branches

HEAD

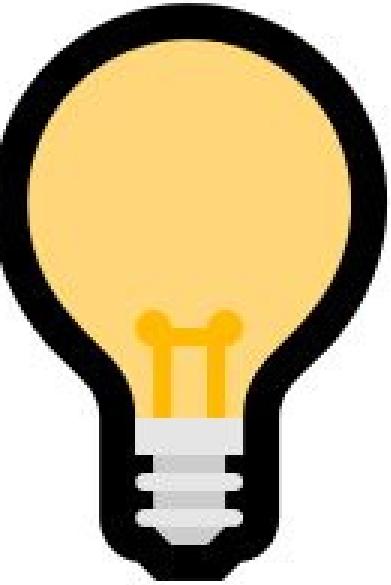




merging = combining commits

\$ git merge <branch name> - creates a new commit that combines the last commit of the current HEAD branch with the last commit of the desired branch.





git ideas

a quick look at what other folks are doing on

GitHub



GitHub Education

programs and technology leadership at your school



GitHub
Student Developer Pack

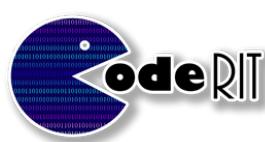


GitHub Campus Advisors



GitHub
Campus Experts

and much more...



GitHub Pages

Host your personal page for free on **GitHub**





#OpenSourcing

Understand more about the movement that is
changing the way you collaborate.

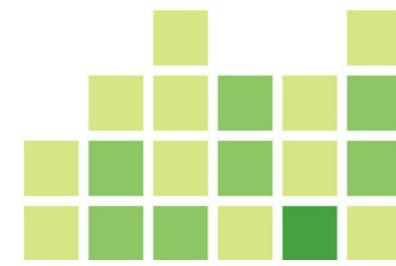


Collections on GitHub

open and explore the vast world of repositories
that exist. I'm sure you'll be surprised!



Social Impact



Learn to Code

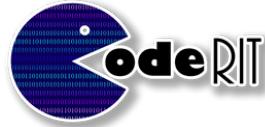


Organizations



Open Journalism

and much more...



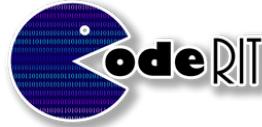
Communities on GitHub

open and explore communities that do a change in the open source world.



freeCodeCamp(🔥)

and many others ...



Events on GitHub

Open and participate in events that happens around the world of the open source.



24 Pull Requests

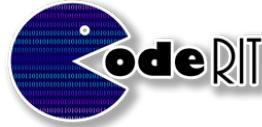


Hacktoberfest



GitHub Field Day

and much more...





RIT's First Ever National Level Hackathon

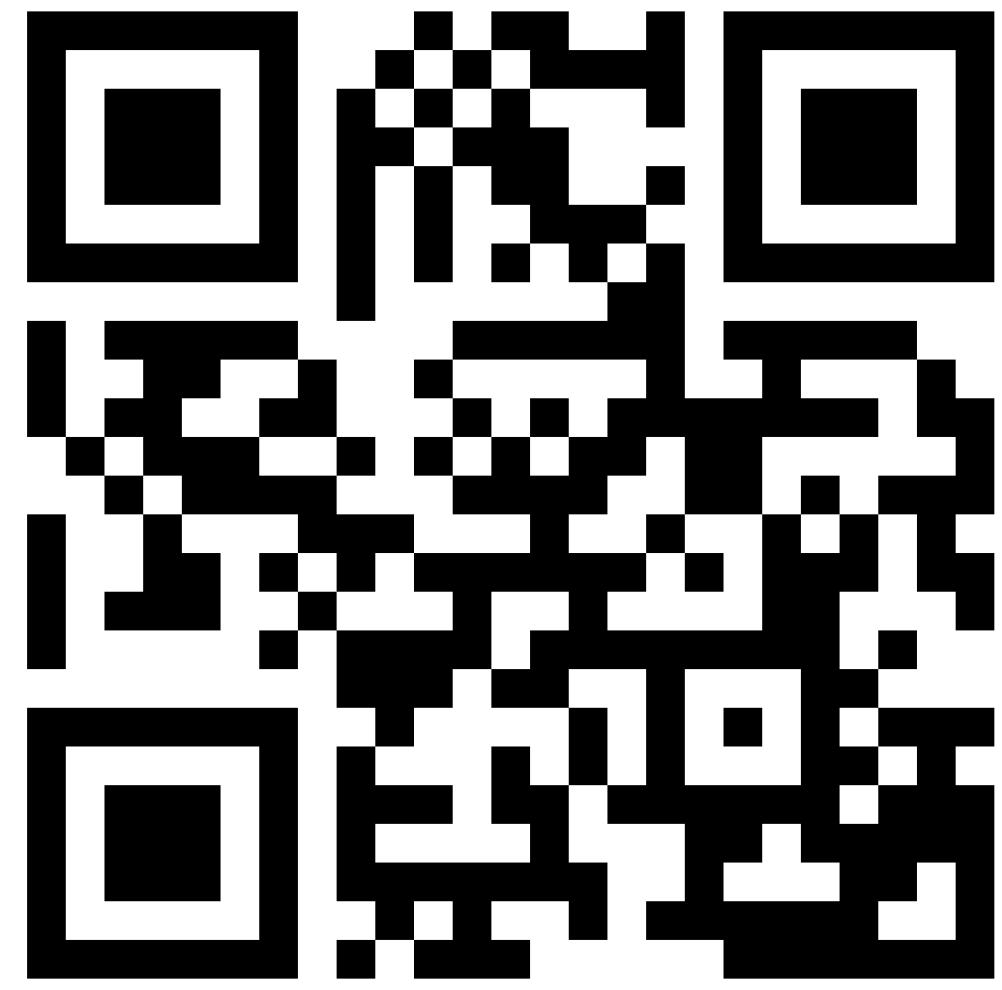
25th-27th Nov.



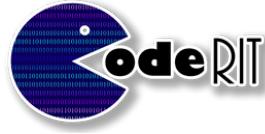


4.5L in Cash Prizes





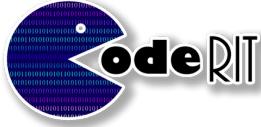
Scan for more details...





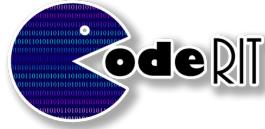
Doubts? Suggestions? Feedback?

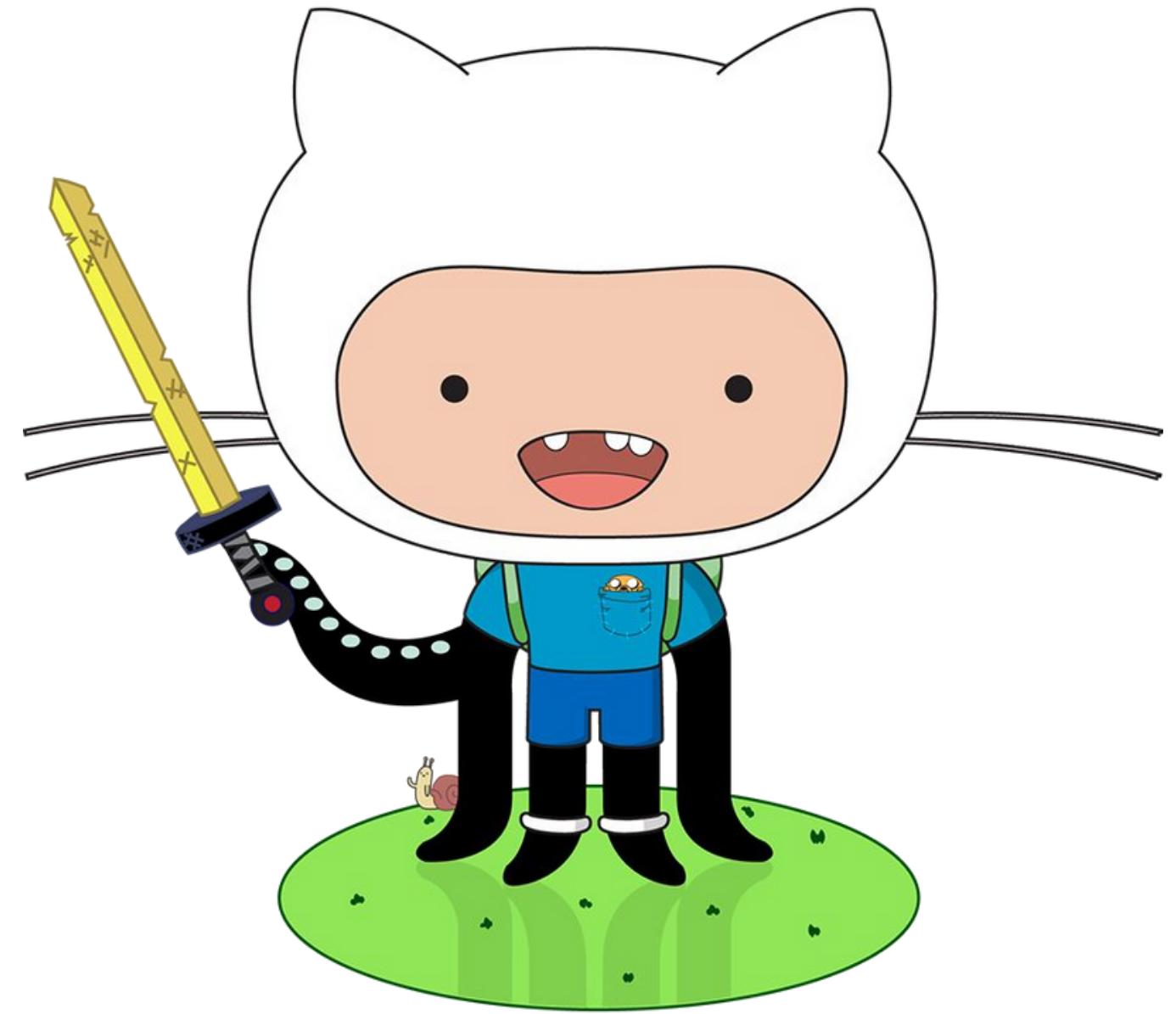
Your opinion is worth gold stickers!



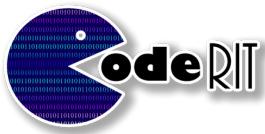


Let's take a picture?





Thank you!





Let's stay connected

