



Effective GitHub

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Ricardo Prins (@thericardoprins)





Rishit is a 10 grade student and is a past [TED-X and Ted-Ed speaker](#). An AI and android enthusiast and is also a Google Certified Mobile site developer. He has often represented India in [international level Hackathons](#) and competitions and also won a few. He loves to conduct [research](#) and has written 7 research papers too



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Rishit Dagli





Ricardo is not a 10 grade student, but he is cool anyways. He is a Software Engineer with, among other stuff, a B.Sc. in International Relations and a Masters in Military Sciences. He is currently pursuing a Bachelor degree in Computer Science. He is a Microsoft Beta Student Partner, and a Co-Founder in Tesseract Coding.



@thericardoprins



Ricardo Prins



ricardoprins



@ricardoprins



iamprins.com



Ideal Audience

- Devs who want to make their life a lot easier
- Devs who have not worked with GitHub a lot



Motivation behind **01**
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- Repository
- Remote
- Branch
- Merge
- Conflicts
- Commits

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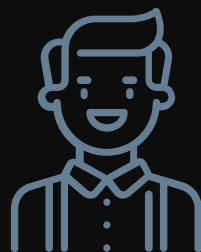
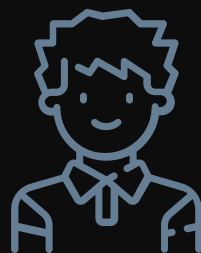
07 What next?

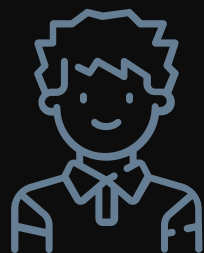
08 QnA

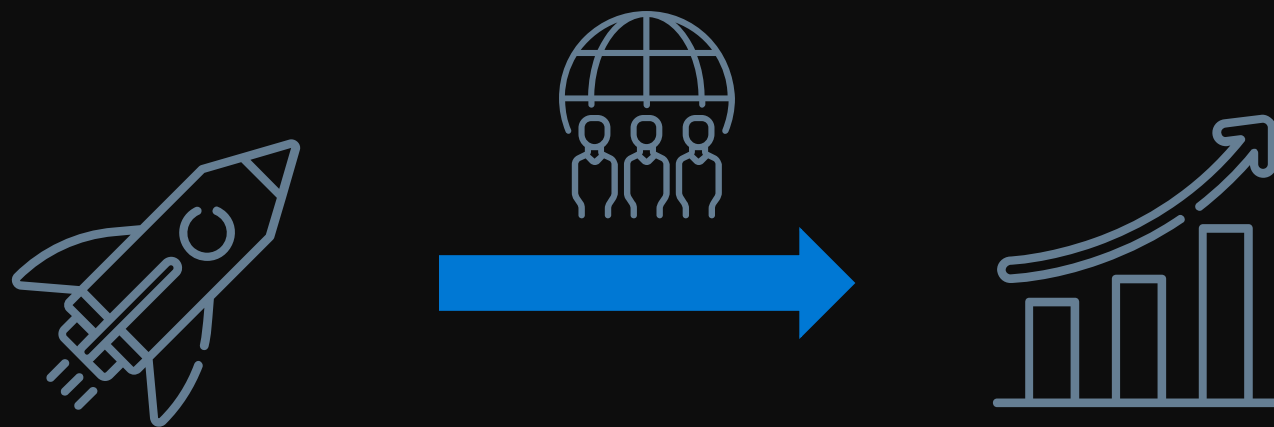


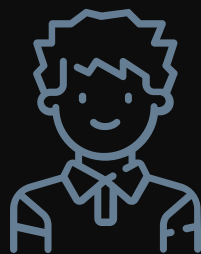
Motivation behind a Version Control

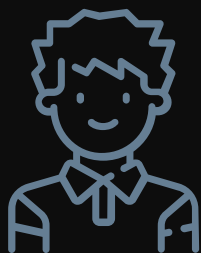












Version Control Systems



Major Types

- Distributed
- Central



Version Control Systems

- Change history of all files



Version Control Systems

- Change history of all files
- Author, date and message



Version Control Systems

- Change history of all files
- Author, date and message
- Branching and merging



Git vs GitHub

0	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1	0	1	1	0	0	1	0	0	0	1	1	0	0	1
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1	0	0	1	0	0
0	1	1	1	0	0
1	1	1	1	0	1
1	1	1	1	0	1



Git Concepts

0	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1	0	1	1	0	0	1	0	0	0	1	1	0	0	1
0	1	0	0	1	0	0	0	0	0	0	1	1	0	1	0	0	1	0	1	1	1	0	0	1	1	0	0	1	0
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0	1	1	0	0	1	1	0	0	1	0	1	0	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1	0	1



Git Concepts Demos

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0 1 1 0 0 1 1 0 0 1 0 1 0 1 1 0 0 0 1 1 0 1 1 0 1 1 1 1 0 1

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Branch: master ▾

[Effective-GitHub-Training](#) / demos.md[Find file](#)[Copy path](#)

Rishit-dagli Added commits and remote demo

4054ea8 1 minute ago

[1 contributor](#)

38 lines (27 sloc) | 550 Bytes

[Raw](#)[Blame](#)[History](#)

Demos

This file contains all demo commands used for Effective GitHub training.

Repositories

- Initialize a repository

```
mkdir effective-github-demo-1
git init
nano test.py
```

- Add to staging area

Repository

- Simply the codebase



Repository

- Simply the codebase
- With the Git specific files



Repository

- Simply the codebase
- With the Git specific files
- `git init`



Repository

- Simply the codebase
- With the Git specific files
- `git init`
- Tracked and untracked files



Repository

- Simply the codebase
- With the Git specific files
- `git init`
- Tracked and untracked files
- `git add`



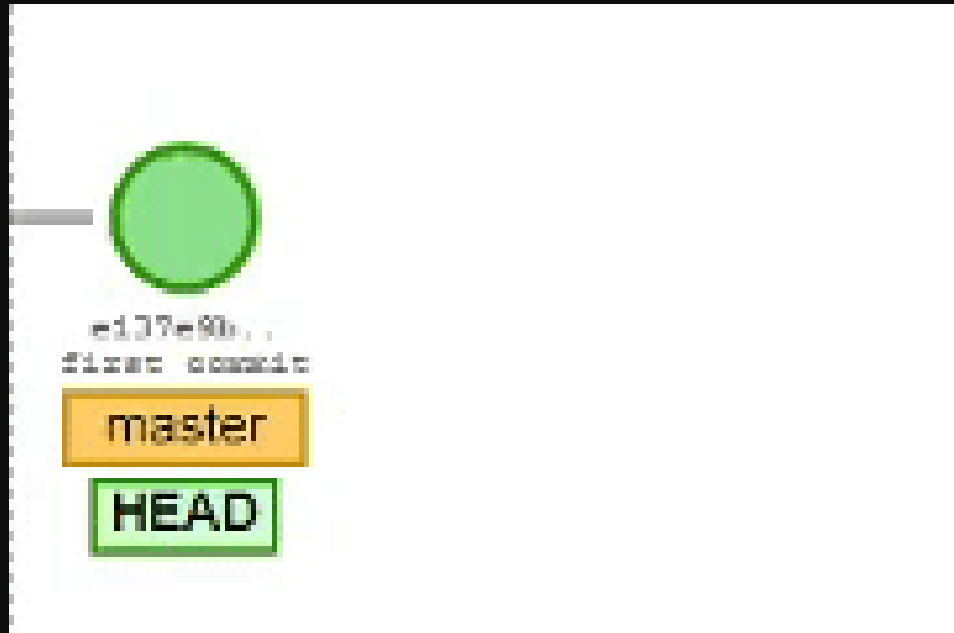
Repository

- Simply the codebase
- With the Git specific files
- `git init`
- Tracked and untracked files
- `git add`
- The staging area



Commits — ○ —

- Add it to the changelog



Commits



- Add it to the changelog
- Not pack everything in one commit



Commits



- Add it to the changelog
- Not pack everything in one commit
- Messages



Commits

- Add it to the changelog
- Not pack everything in one commit
- Messages
- `git commit`
- `git commit -m "Subject"`



Remote

- Git repository not on your machine



Remote

- Git repository not on your machine
- `git remote add <name> <url>`



Remote

- Git repository not on your machine
- `git remote add <name> <url>`
- `git remote -v`



Remote

- Git repository not on your machine
- `git remote add <name> <url>`
- `git remote -v`
- `git commit -m "Some changes"`



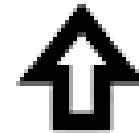
Remote

- Git repository not on your machine
- `git remote add <name> <url>`
- `git remote -v`
- `git commit -m "Some changes"`
- `git push <name>`

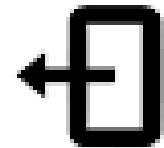
In case of fire



1. `git commit`



2. `git push`



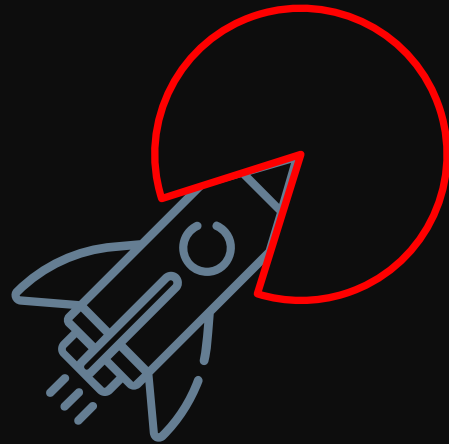
3. leave building



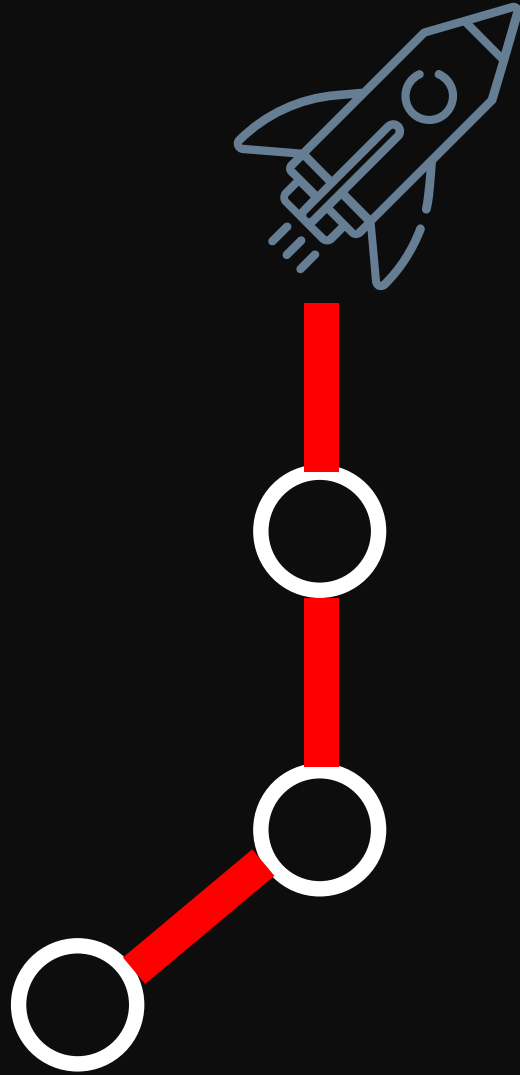
Branches



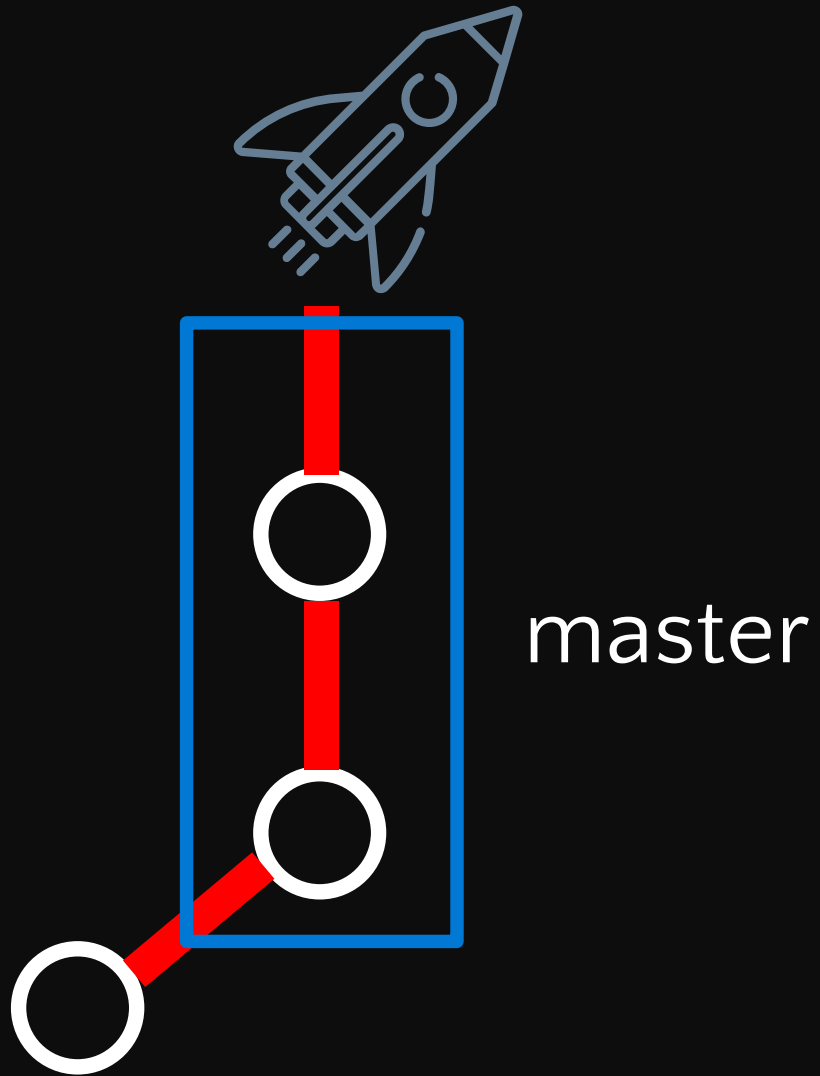
Branches



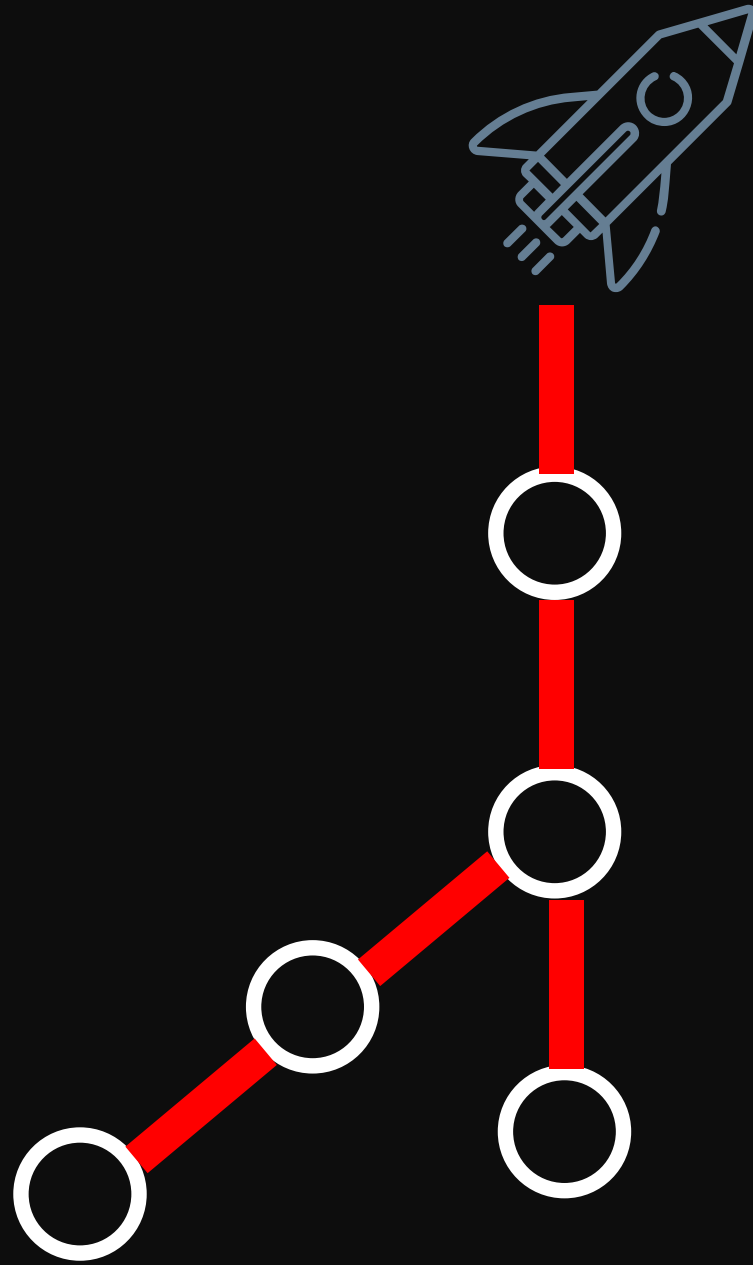
Branches



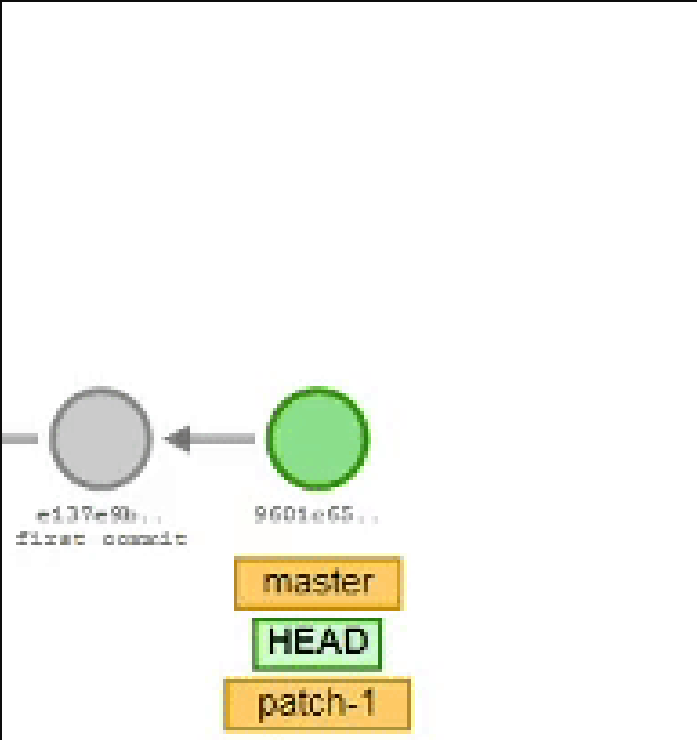
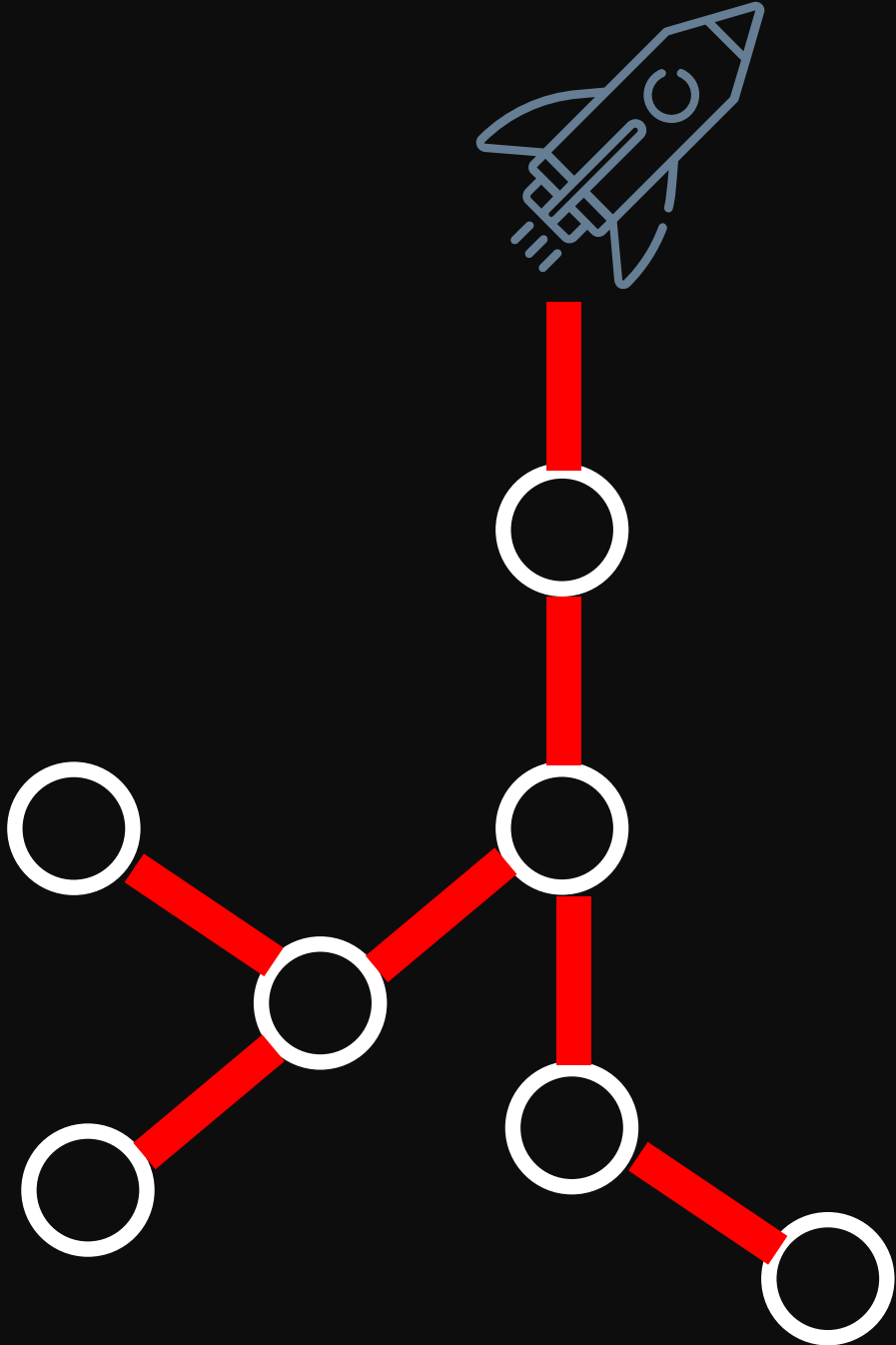
Branches



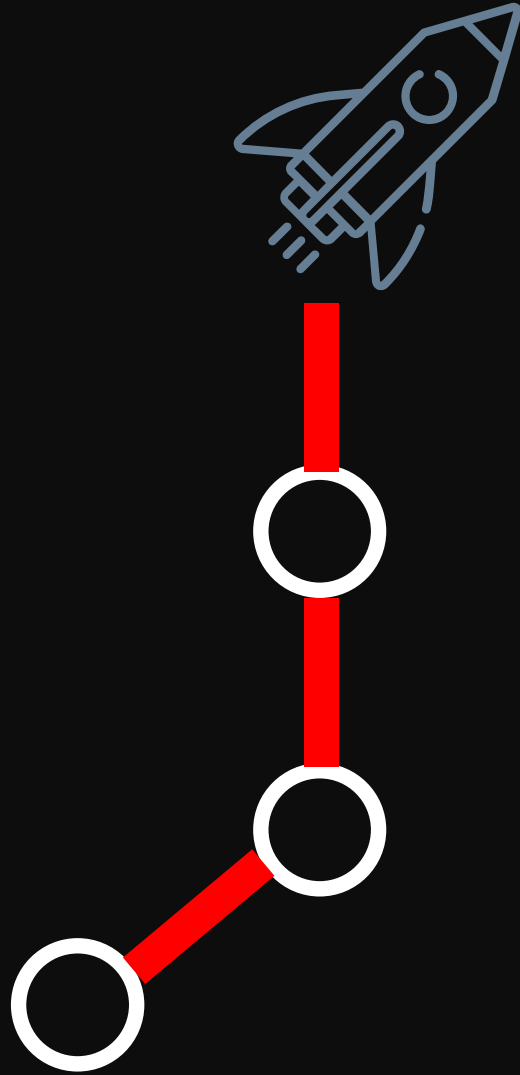
Branches



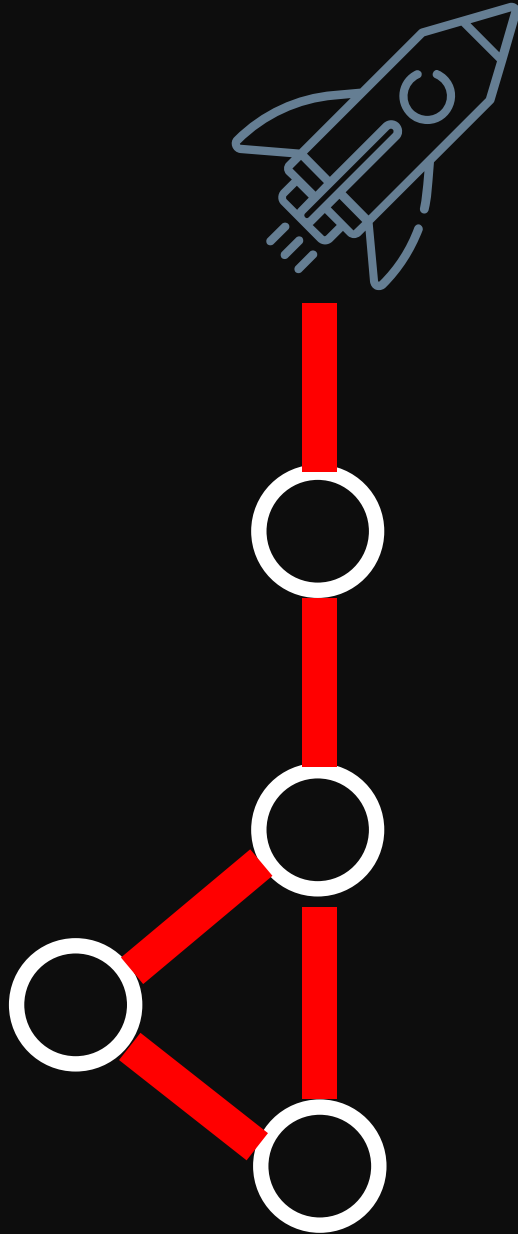
Branches



Branches



Branches



Merge



master



```
print("Hello World!")
```

hello_world.py



master



```
print("Hello World!")
```

hello_world.py

hola



```
print("Hola")
```

hola.py



master



```
print("Hello World!")
```

hello_world.py



```
print("Hello World!")  
print("How are you doing?")
```

more_greetings.py

hola



```
print("Hola")
```

hola.py



master



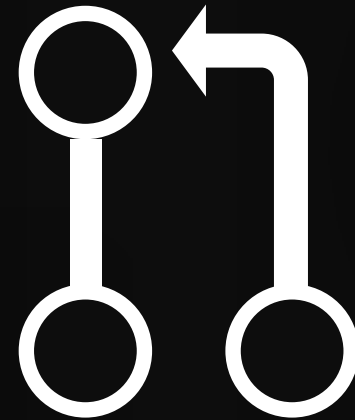
```
print("Hello World!")
```

hello_world.py



```
print("Hello World!")  
print("How are you doing?")
```

more_greetings.py



hola



```
print("Hola")
```

hola.py



master



```
print("Hello World!")
```

hello_world.py



```
print("Hola")
```

hola.py



```
print("Hello World!")  
print("How are you doing?")
```


more_greetings.py



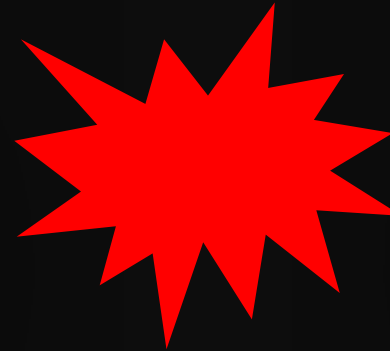
Conflicts




Conflicts



```
print("Hello World!")
```



Merge conflict



```
print("Hola")
```

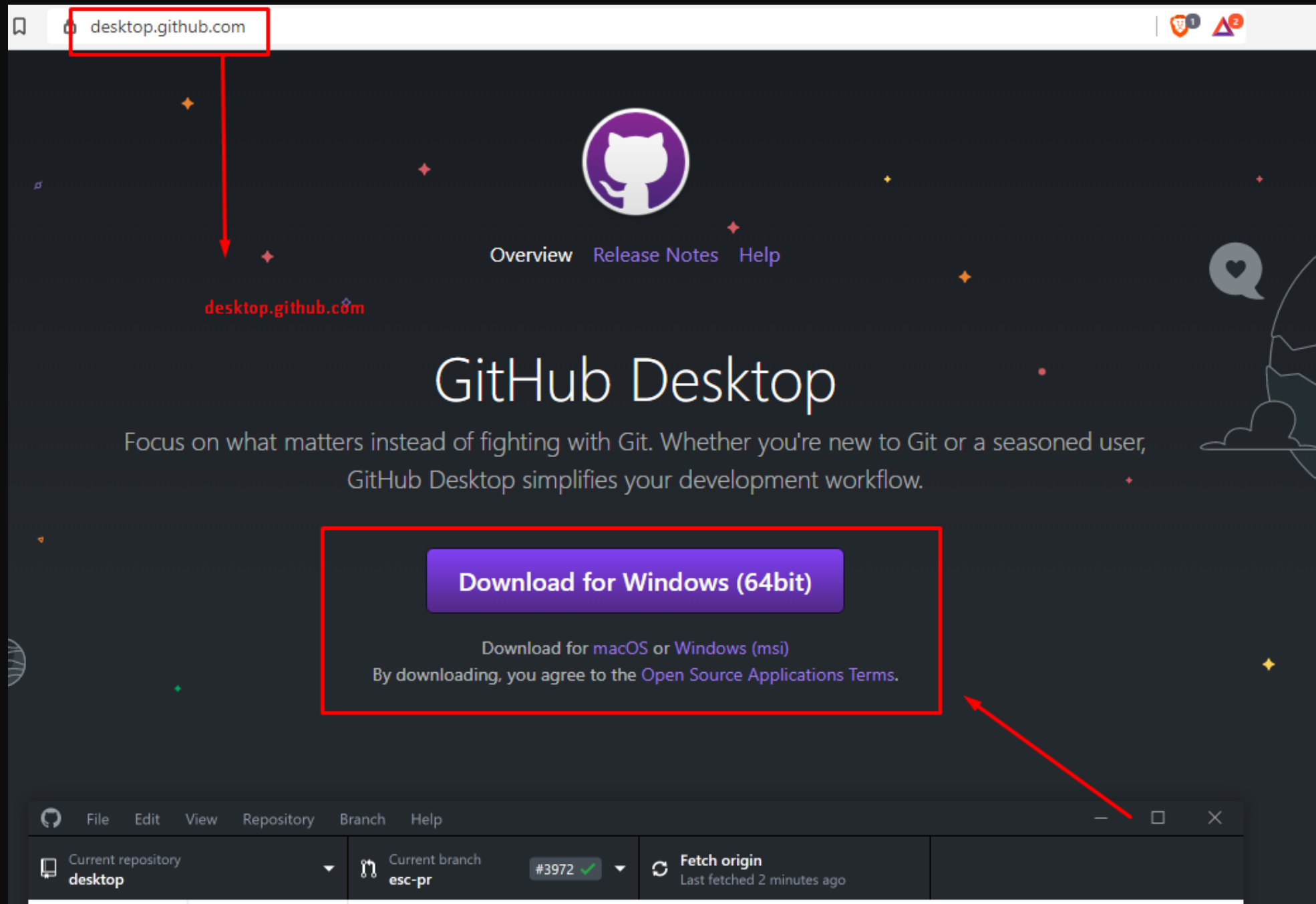
Conflicts

- Use `git mergetool`

GitHub Desktop

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0	0	0		0	1	1	0	1	1	0	0	0	1	1	0	1	0	0	1	0	1	1	0	0	1	1	0	0	1
1	0	0	1	0	1	0	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1	0	1	1	0	0	1	0	0
0	1	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	1	0	1	0	0	1	0	1	1	1	0	0
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0	1	1	0	0	1	1	0	0	1	0	1	0	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1	0	1

GitHub Desktop



GitHub + VS Code .



code.visualstudio.com

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license and privacy statement.

HERE!!! YOU CAN EVEN CHOOSE YOUR PLATFORM :)

NOT HERE, YOU CAN IGNORE THIS

File Edit Selection View Go Debug Terminal Help

EXTENSIONS: MARKETPLACE

@sort:installs

Python 2019.6.24221 54.9M 4.5
Linting, Debugging (multi-threaded, ...
Microsoft Install

GitLens — Git sup... 9.8.5 23.1M 4.5
Supercharge the Git capabilities buil...
Eric Amodio Install

C/C++ 0.24.0 23M 3.5
C/C++ IntelliSense, debugging, and ...
Microsoft Install

ESLint 1.9.0 21.9M 4.5
Integrates ESLint JavaScript into VS ...
Dirk Baumer Install

Debugger for Ch... 4.11.6 20.6M 4
Debug your JavaScript code in the C...
Microsoft Install

Language Supp... 0.47.0 18.7M 4.5
Java Linting, Intellisense, formatting, ...
Red Hat Install

vscode-icons 8.8.0 17.2M 5
Icons for Visual Studio Code
VSCo Icons Team Install

Vetur 0.21.1 17M 4.5
Vue tooling for VS Code
Pine Wu Install

C# 1.21.0 15.6M 4
C# for Visual Studio Code (powered ...
Microsoft Install

JS App.js JS index.js JS serviceWorker.js

src > JS serviceWorker.js > register > window.addEventListener('load') callback

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checkValidServiceWorker(swUrl, config);

// Add some additional logging to localhost, p
// service worker/PWA documentation.
navigator.serviceWorker.ready.then(() => {
 product
 productSub
 removeSiteSpecificTrackingException
 removeWebWideTrackingException
 requestMediaKeySystemAccess
 sendBeacon
 serviceWorker (property) Navigator.serviceWorke...
 storage
 storeSiteSpecificTrackingException
 storeWebWideTrackingException
 userAgent
 vendor
})

function registerValidSW(swUrl, config) {
 navigator.serviceWorker
 .register(swUrl)
 .then(registration => {

TERMINAL ... 1: node

You can now view create-react-app in the browser.

Local: http://localhost:3000/
On Your Network: http://10.211.55.3:3000/

Note that the development build is not optimized

Code Reviews and templates

0	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1	0	1	1	0	0	1	0	0	0	1	1	0	0	1
0	1	0	0	1	0	0	0	0	0	0	1	1	0	1	0	0	1	0	1	1	1	0	0	1	1	0	0	1	0
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0	1	1	0	0	1	1	0	0	1	0	1	0	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1	0	1

What next?

0	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1	0	1	1	0	0	1	0	0	0	1	1	0	0	1
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0	1	1	0	0	1	1	0	0	1	0	1	0	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1	0	1
0	1	1	0	0	1	1	0	0	1	0	1	0	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1	0	1

Microsoft Student Partners

