# Lecture-02

version control

### WHAT IS GIT?

- Git is a 'distributed version control system' eh?
- That basically means...
  - It's a system that records changes to our files over time
  - We can recally specific versions of those files at any given time
  - Many people can easily collaborate on a project and have their own version of project files on their computer



Project X for client

### PROJECT X

Link 1 Link 2 Link 3 Link 4 Link 5

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book.



click me



Project X for client

### **PROJECT X**

Link 1 Link 2 Link 3 Link 4 Link 5 Lir

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### Project X for client

### PROJECT X

Link 1

Link 2

Link 3

Link 4

Link 5

Link 6

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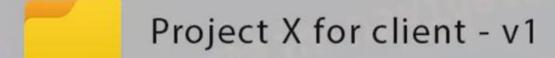
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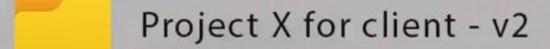


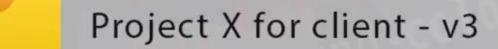
Project X for client

### PROJECT X









Project X for client - v4



Project X for client - v1



Project X for client - v2

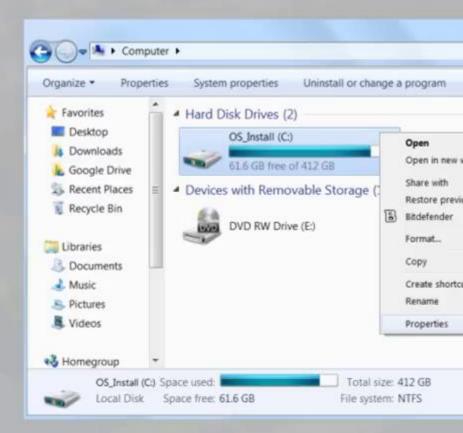


Project X for client - v3

...several days / emails later....



Project X for client - v25!!!





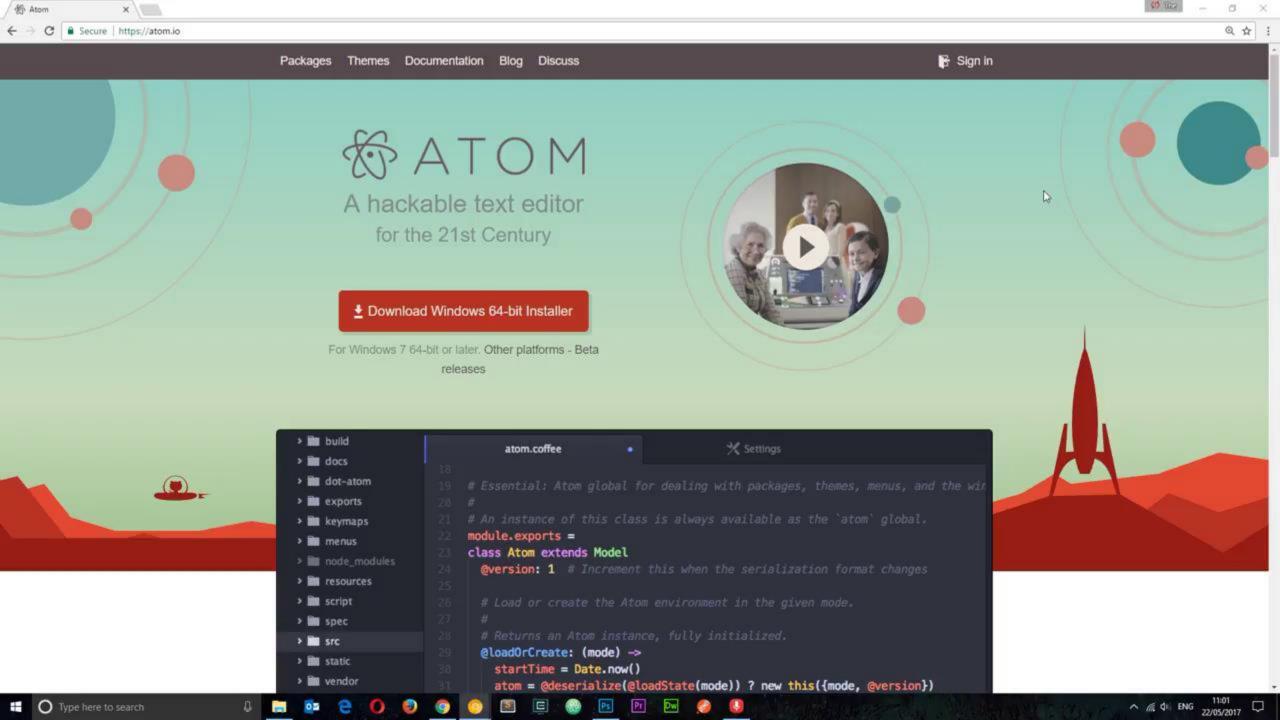


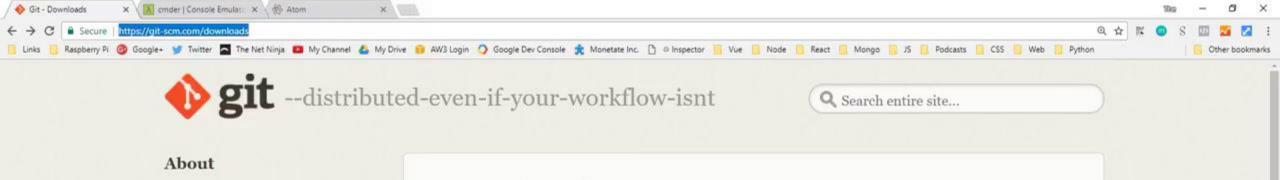
- Store revisions in a project history in just one directory
- Rewind to any revision in the project I wanted to
- Work on new features without messing up the main codebase
- Easily collaborate with other programmers

### **GITHUB**

- Online service that hosts our projects
- Share our code with other developers
- Developers can download the projects and work on them
- They can re-upload their edits and merge them with the main codebase







Documentation

Blog

#### Downloads

**GUI Clients** Logos

#### Community

The entire Pro Git book written by Scott Chacon and Ben Straub is available to read online for free. Dead tree versions are available on Amazon.com.

### Downloads



Older releases are available and the Git source repository is on GitHub.



#### **GUI Clients**

Git comes with built-in GUI tools (git-gui, gitk), but there are several third-party tools for users looking for a platform-specific experience.

View GUI Clients →

#### Logos

Various Git logos in PNG (bitmap) and EPS (vector) formats are available for use in online and print projects.

View Logos →

Git via Git

























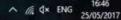


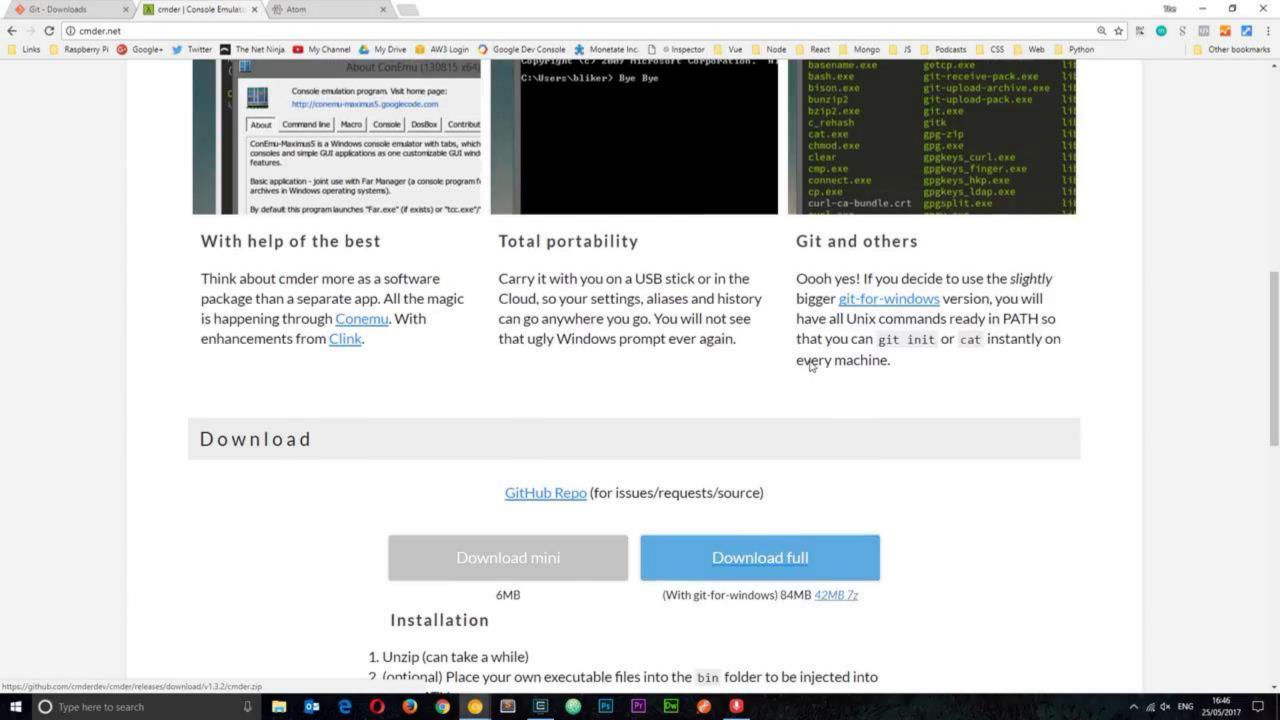












# REPOSITORIES (REPO'S)



A repo is a container for a project you want to track with Git (e.g. a website project)



Can have many different repo's for many different projects on your computer

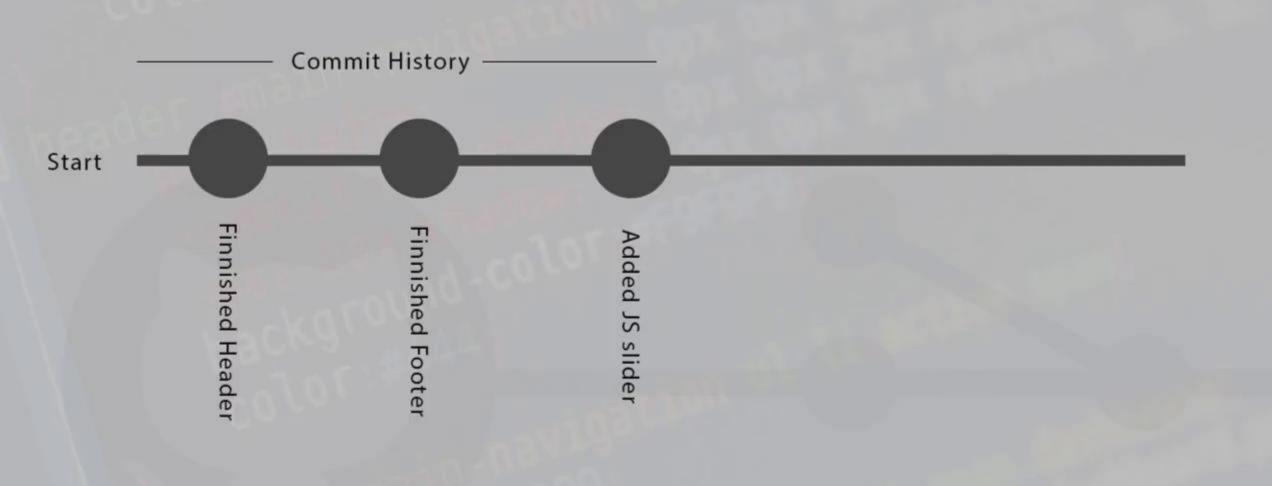


Like a project folder which Git tracks the contents of for us

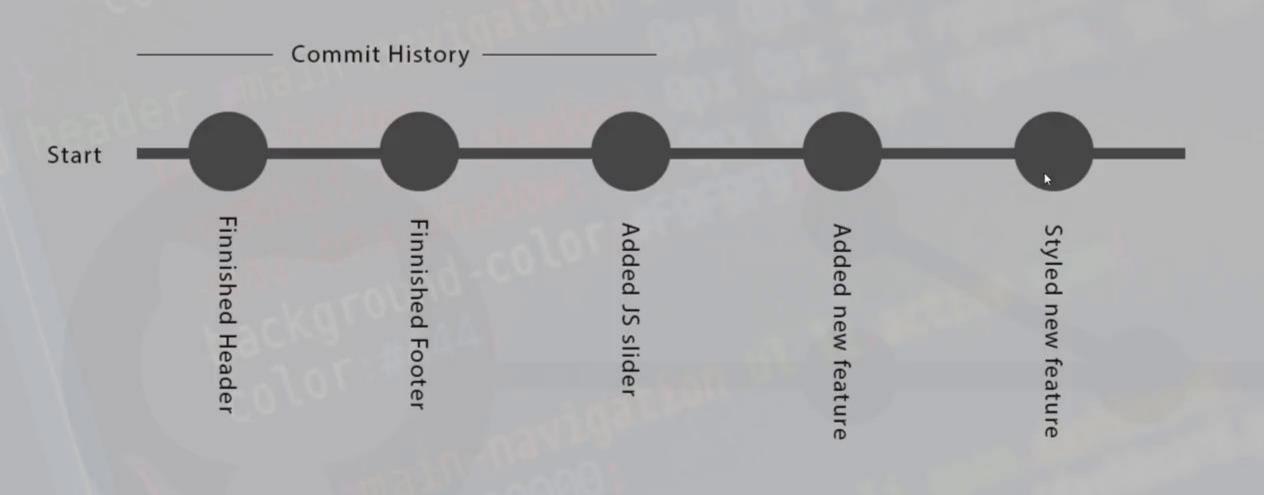
# REPOSITORIES (REPO'S)

```
My Project
-- .git
-- index.html
-- style.css
       img
     -- logo.png
     -- crazy_cat.jpg
```

# **COMMITS**



# **COMMITS**



### COMMITS



My Project

-- .git

-- index.html

-- style.css

-- <u>img</u>

-- logo.png

-- crazy\_cat.jpg

Modified

Changed files
Not committed

Staging

Add any changed files to staging that you want to commit

Committed

Any files in the staging area are added to the commit when we make one

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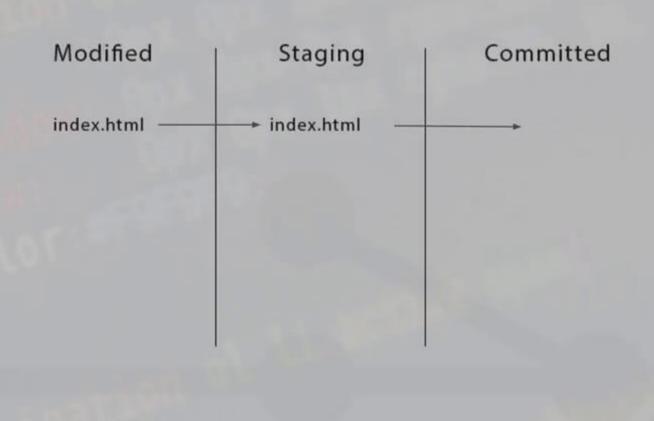
# STAGING FILES



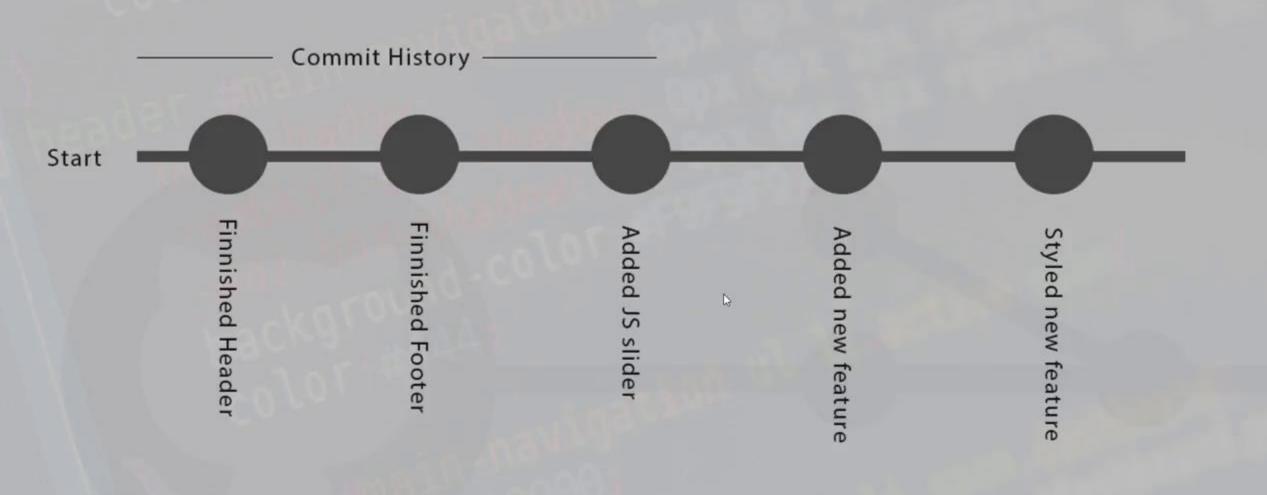
Committed

## STAGING FILES

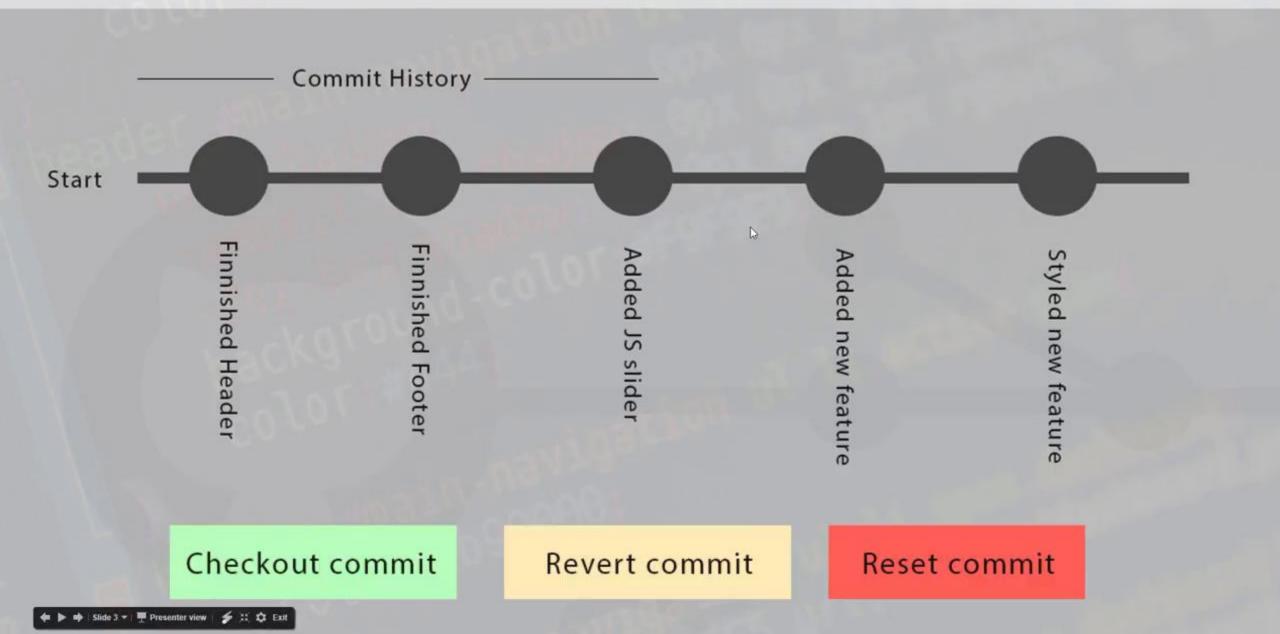




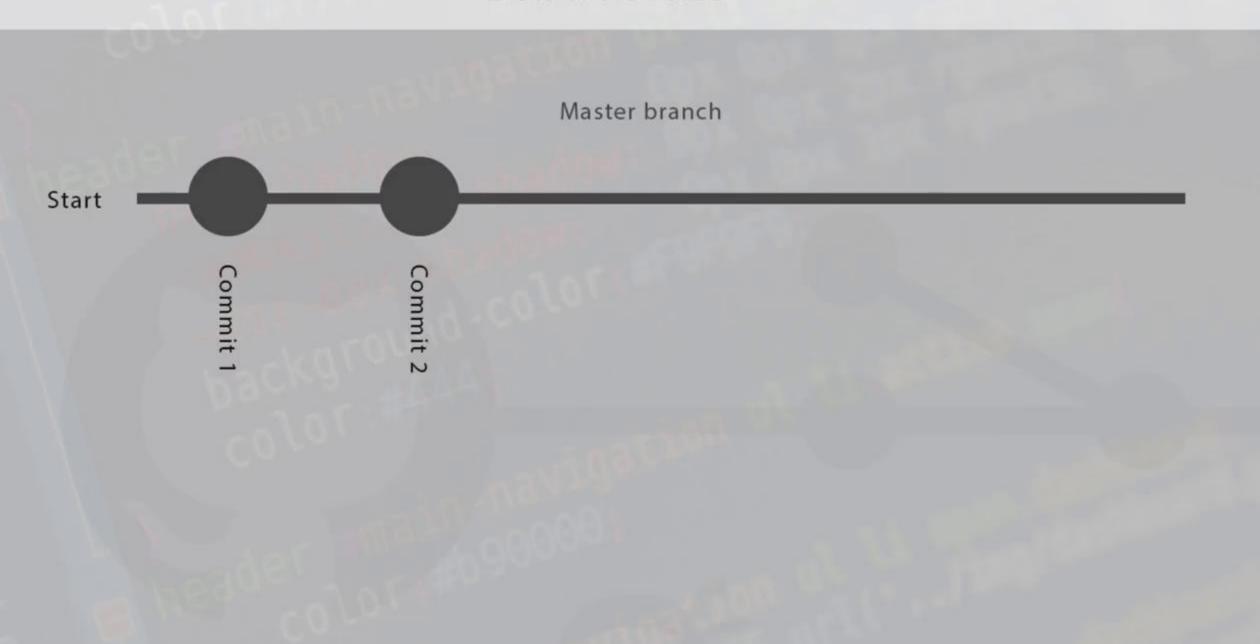
# **UNDOING THINGS**



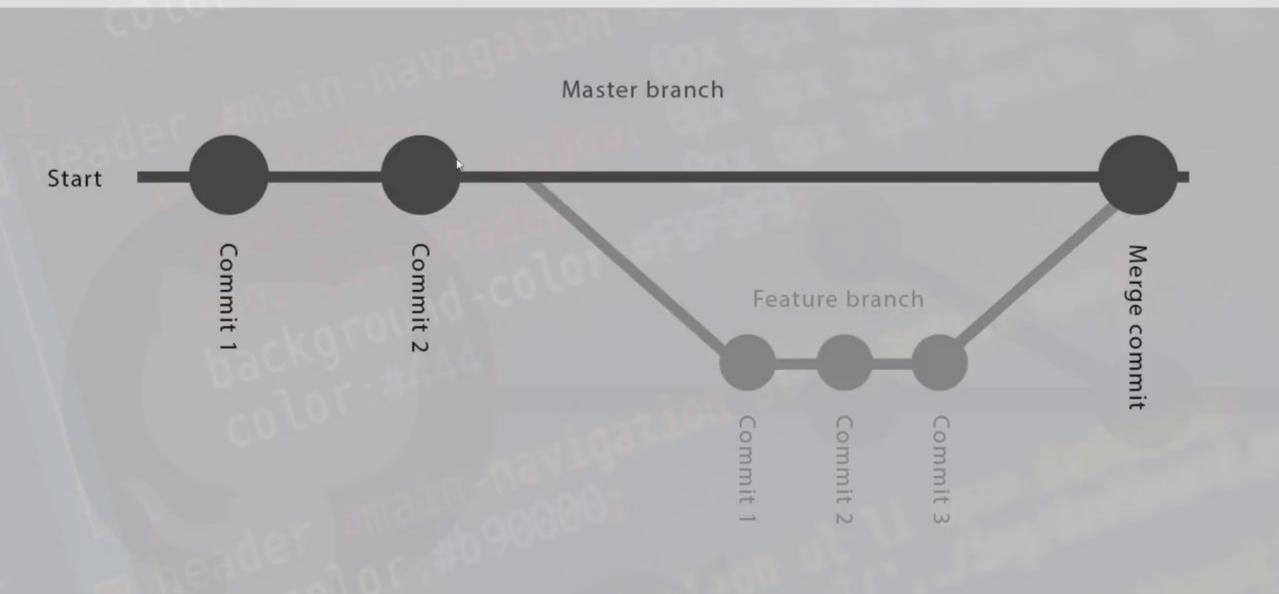
## **UNDOING THINGS**



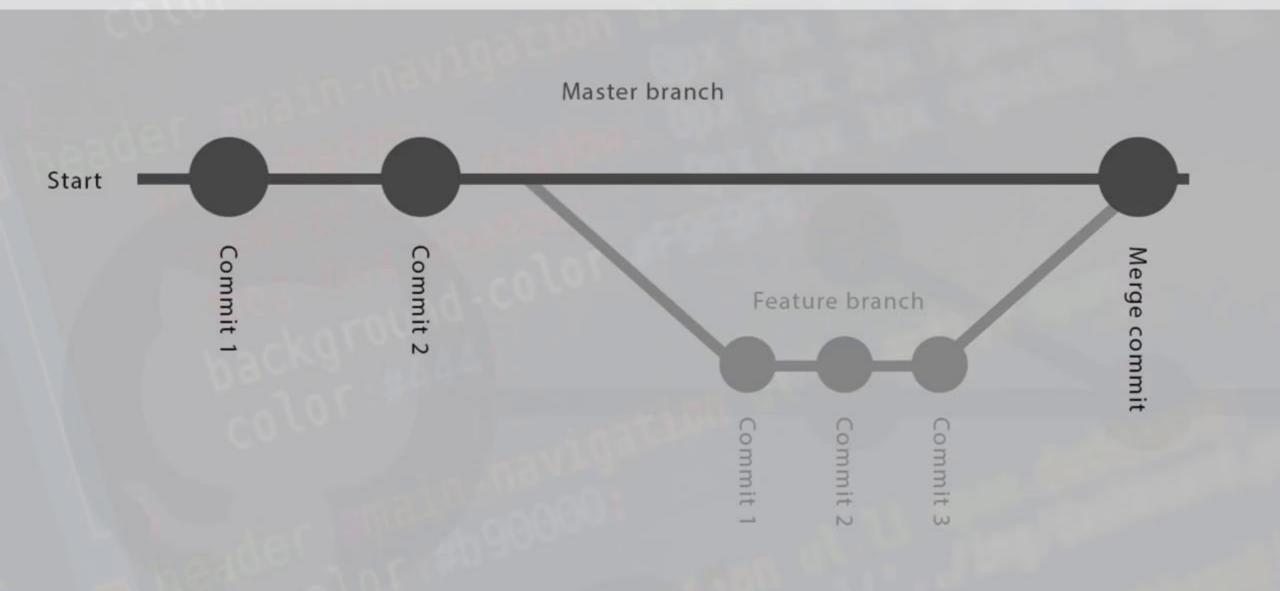
# **BRANCHES**



# **BRANCHES**



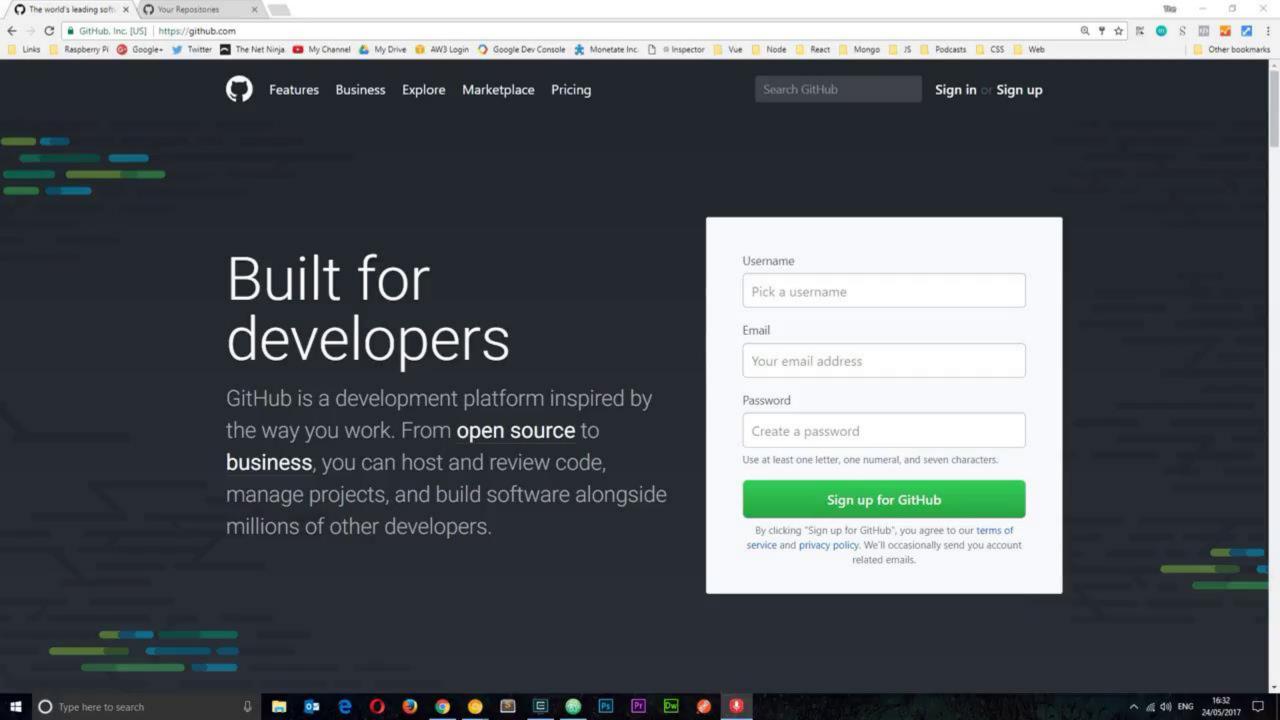
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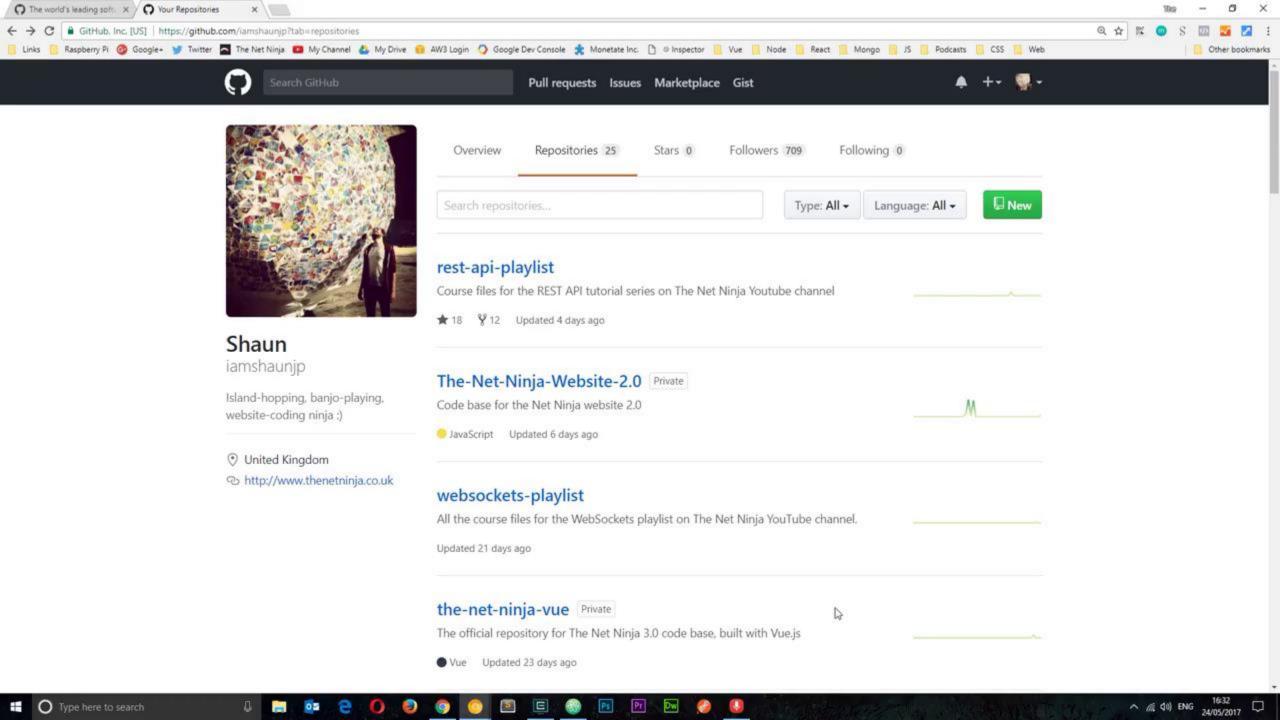


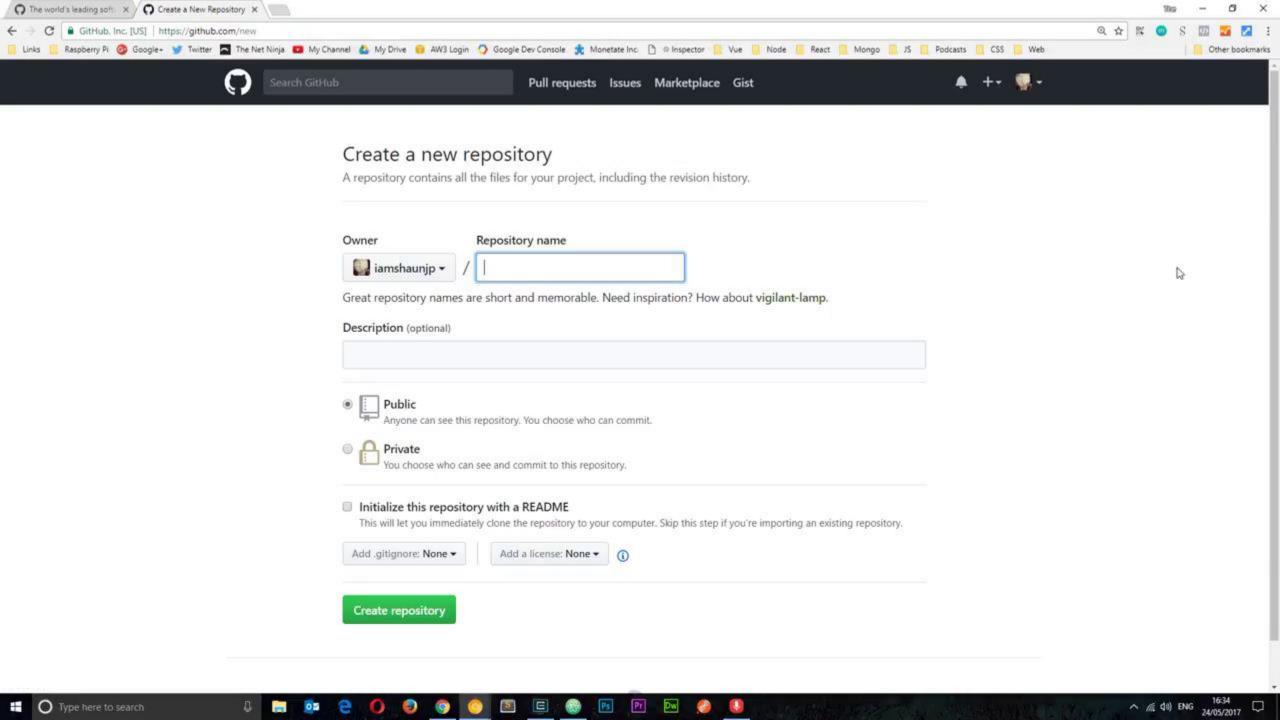
### **GITHUB**

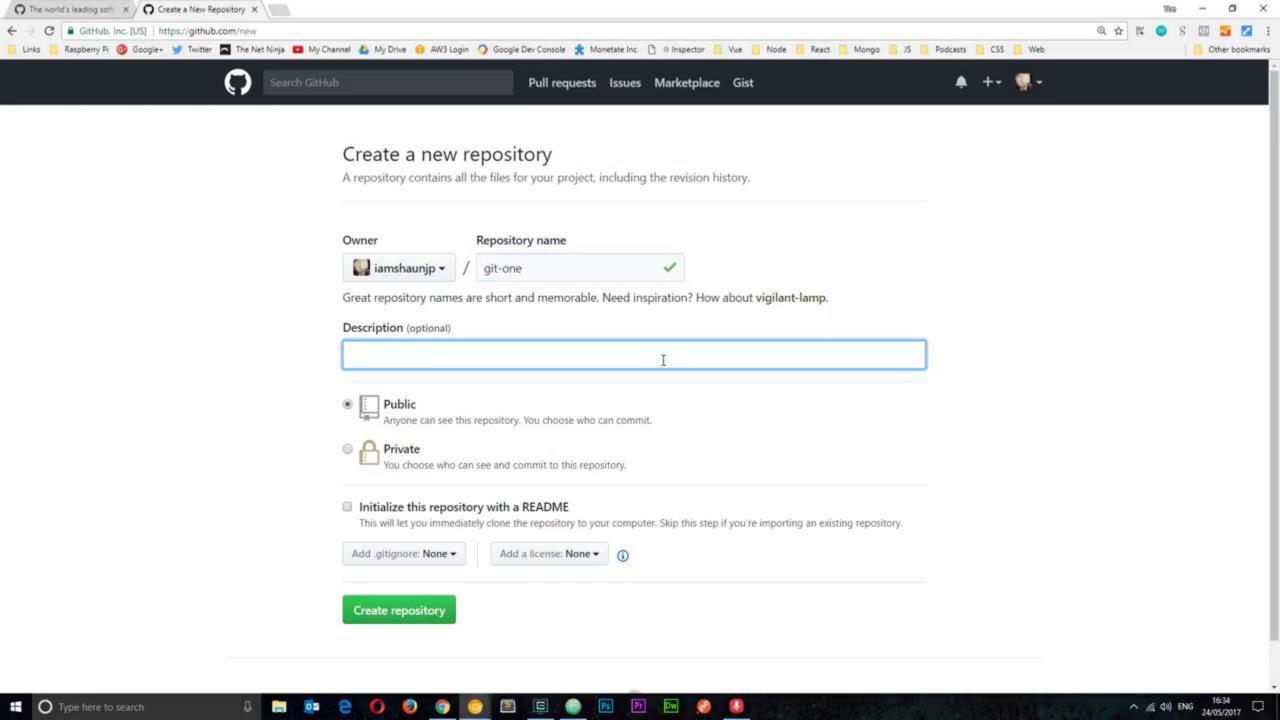
- GitHub is a service that lets us set up hosted repositories
- Central online repository which multiple team-members could access

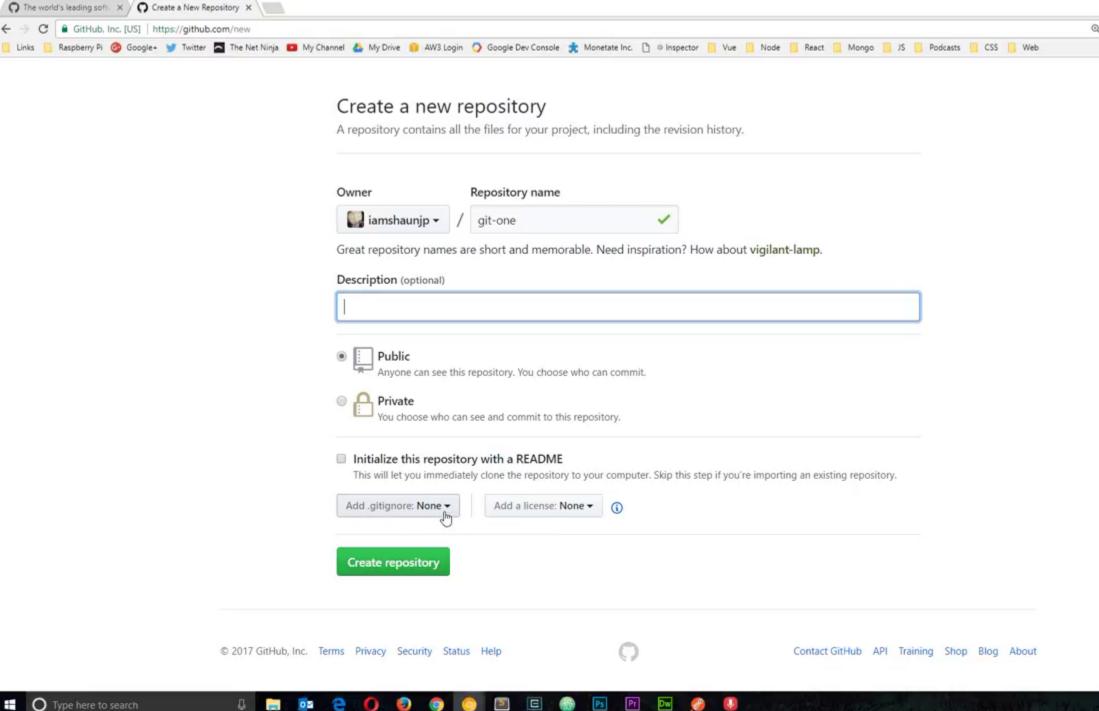








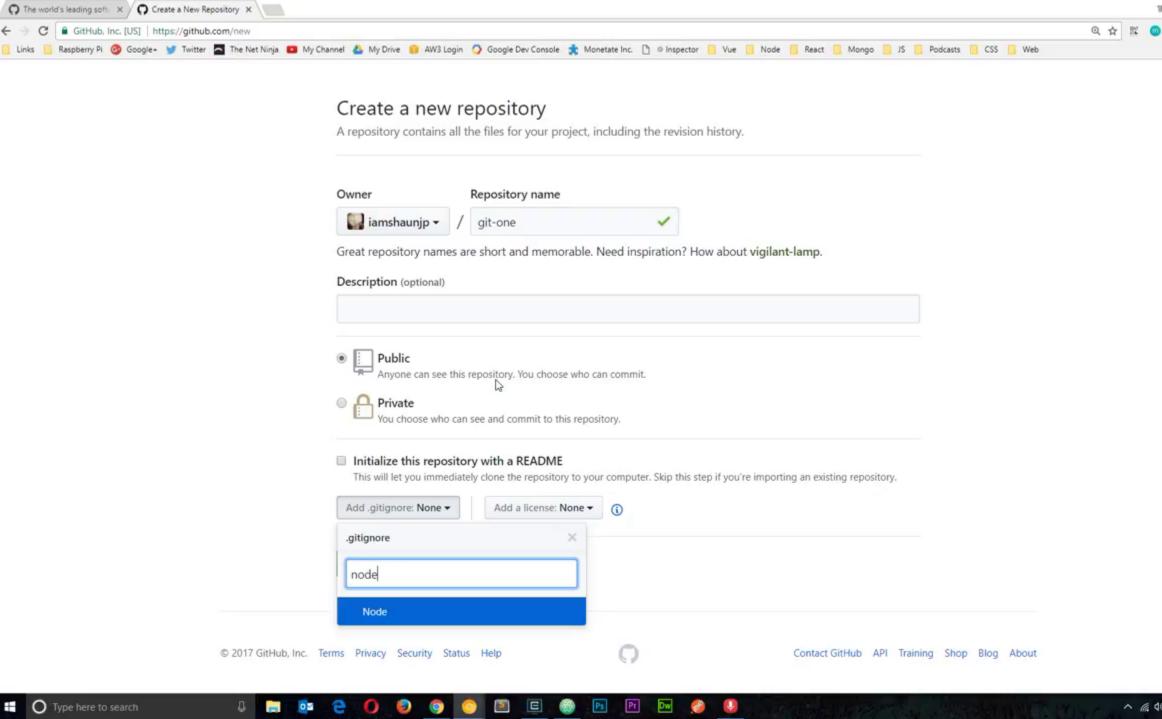




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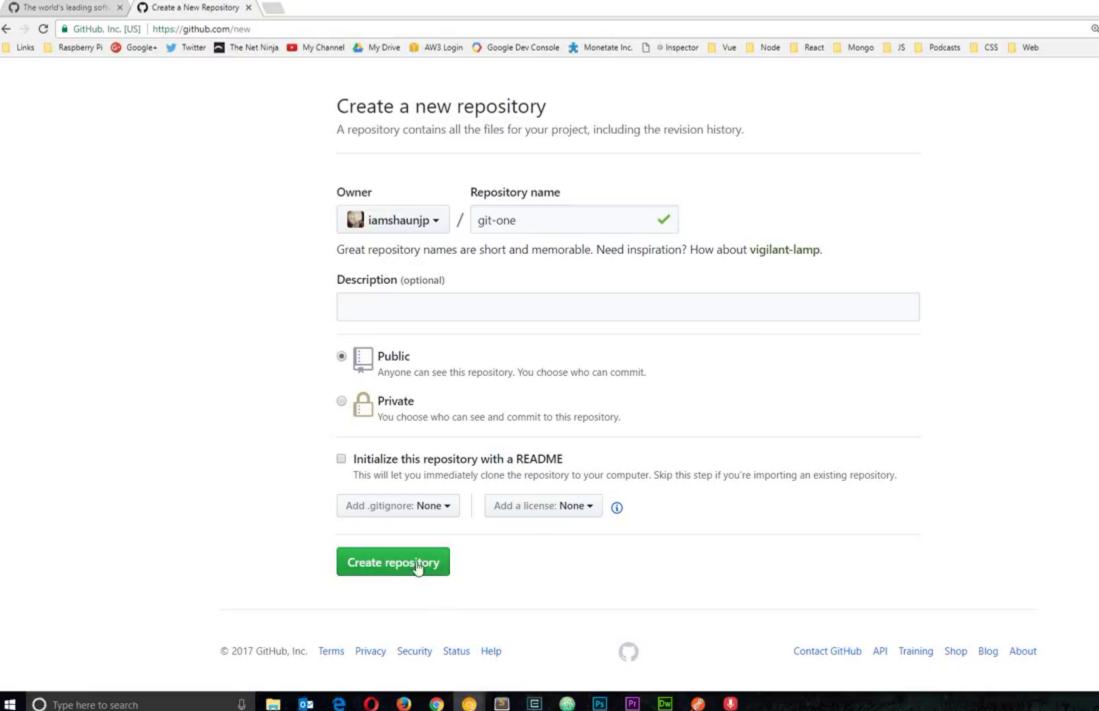
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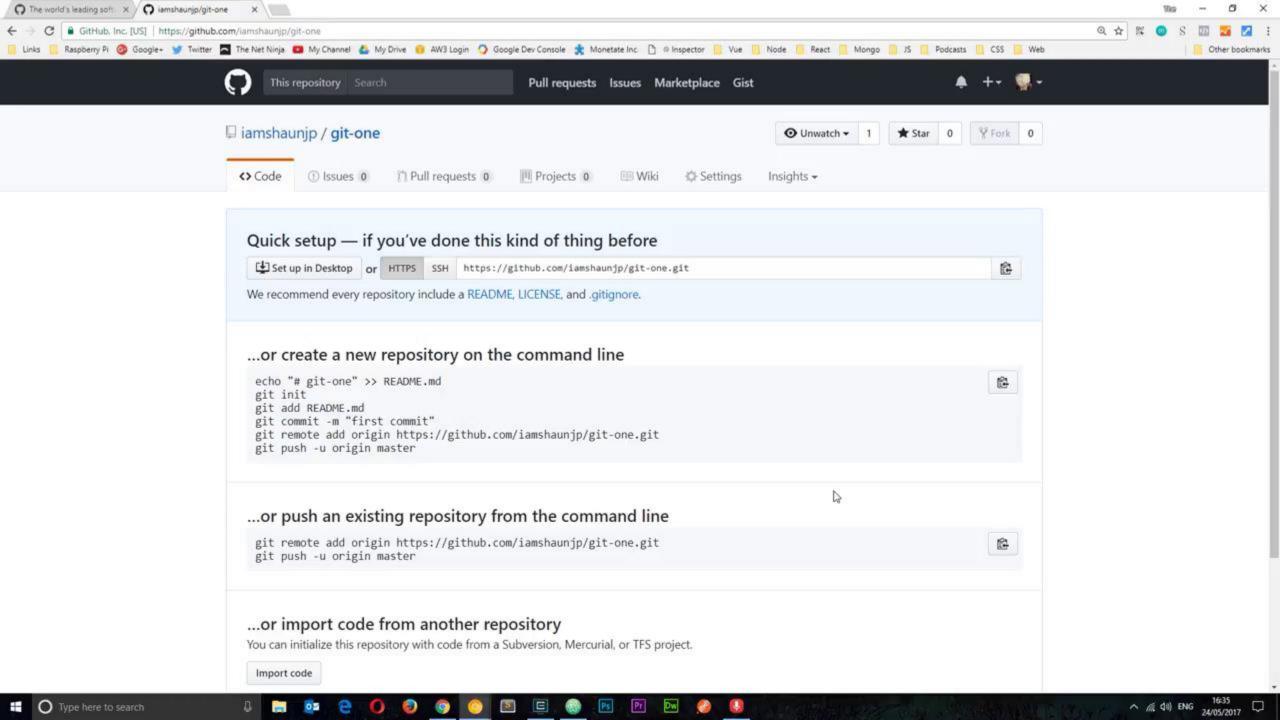
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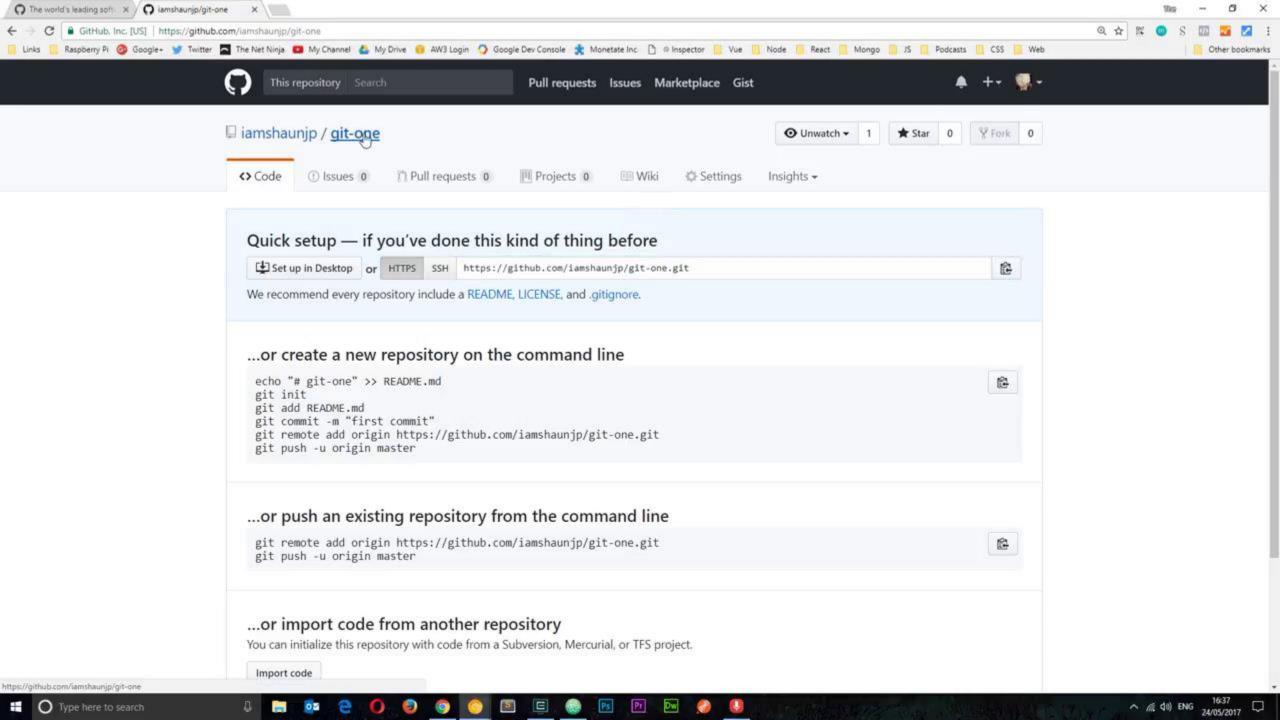


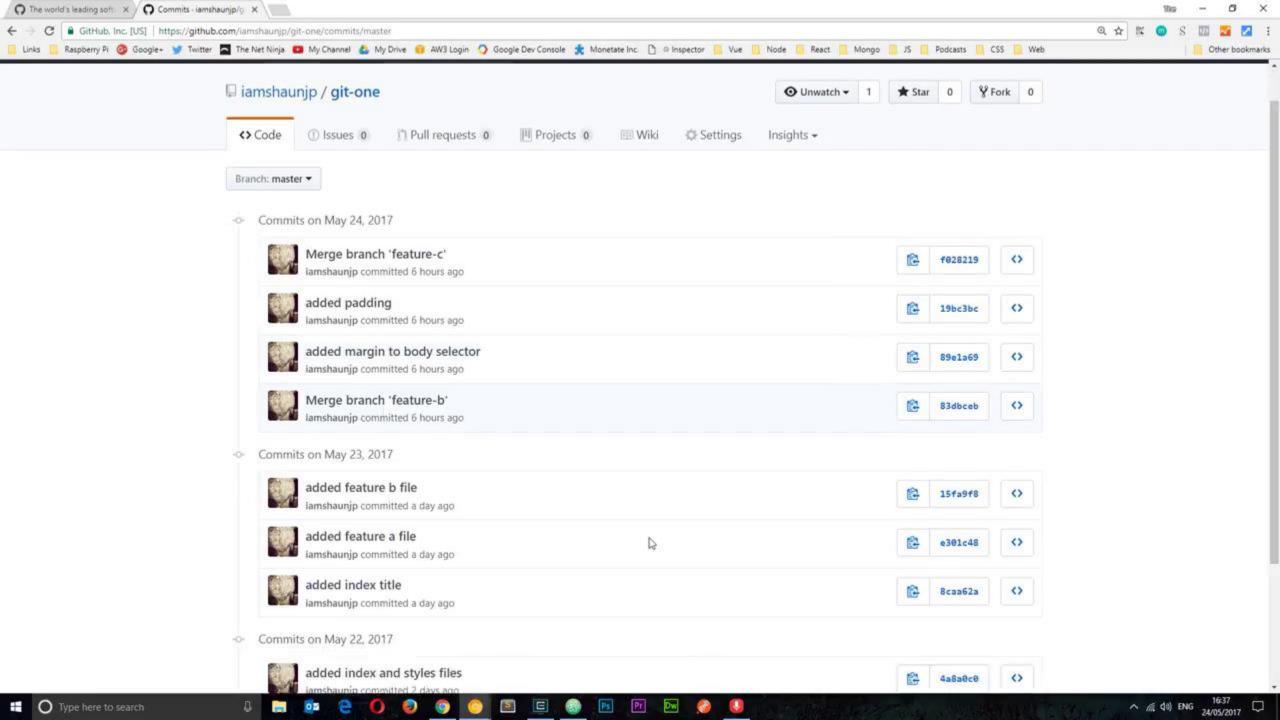
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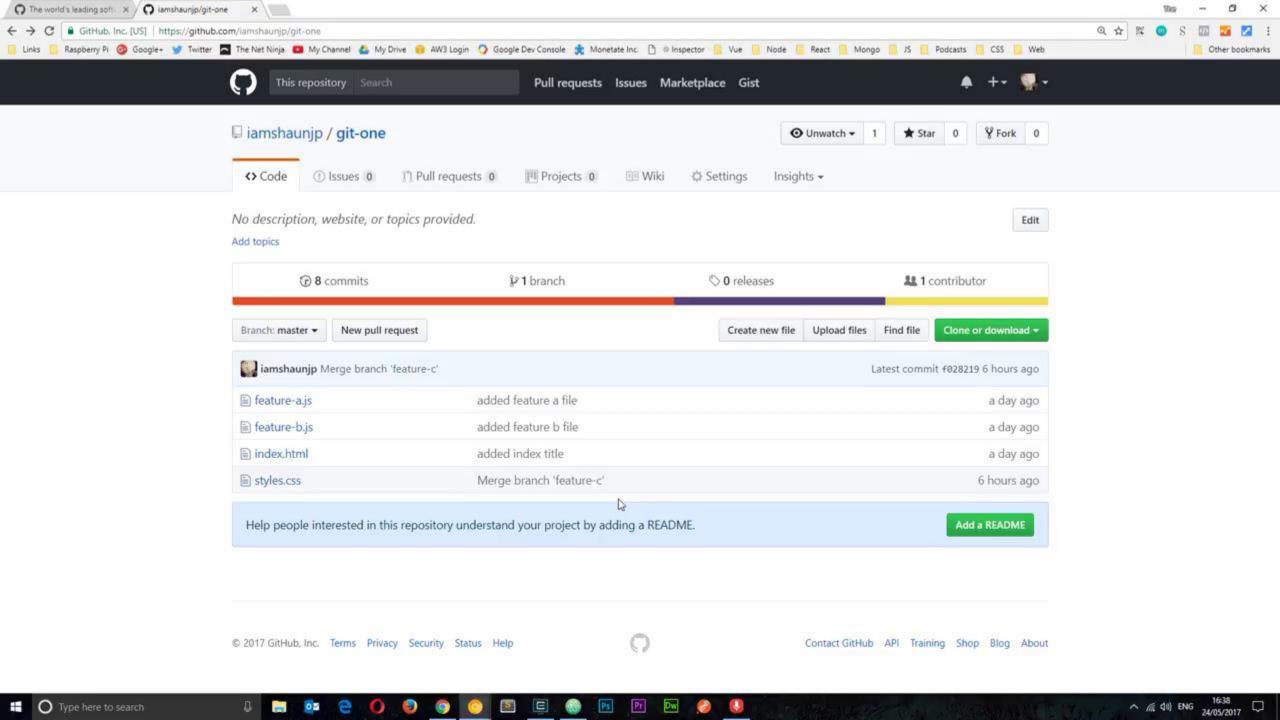
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### **GITHUB**

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