

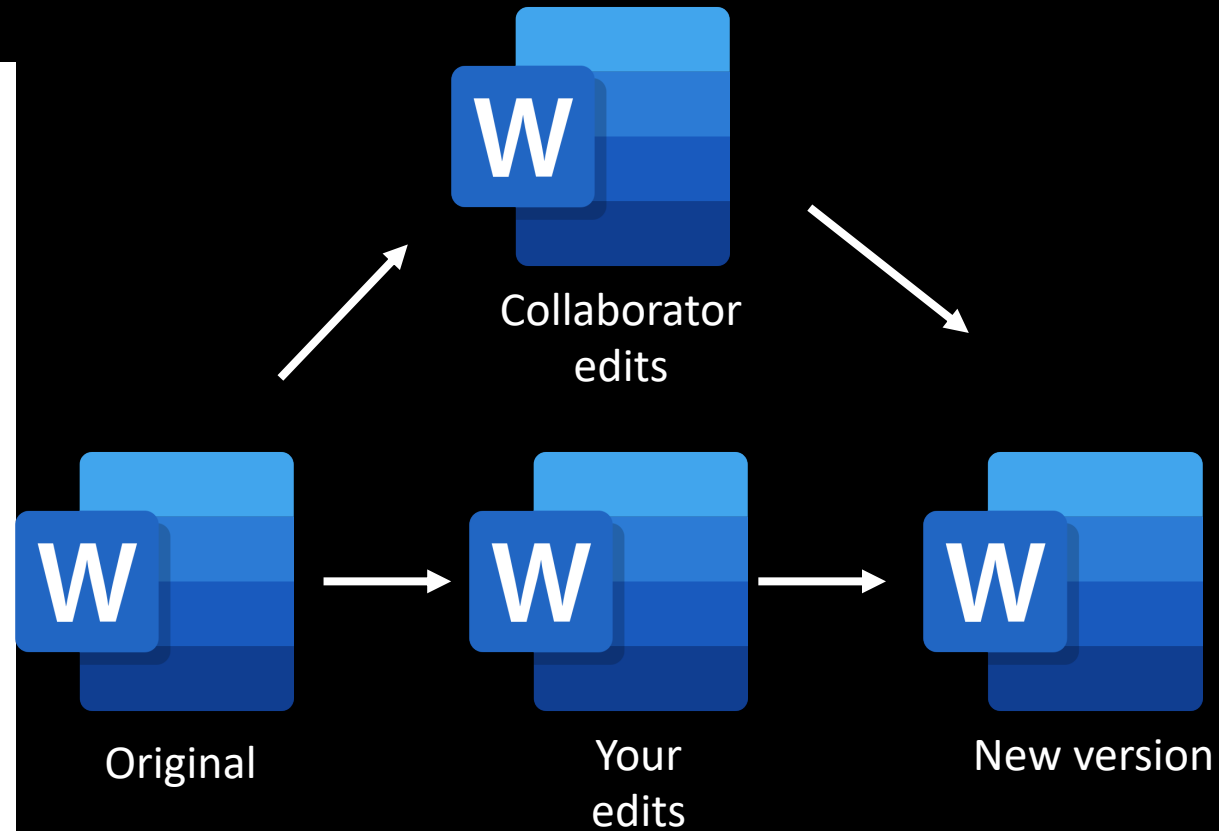
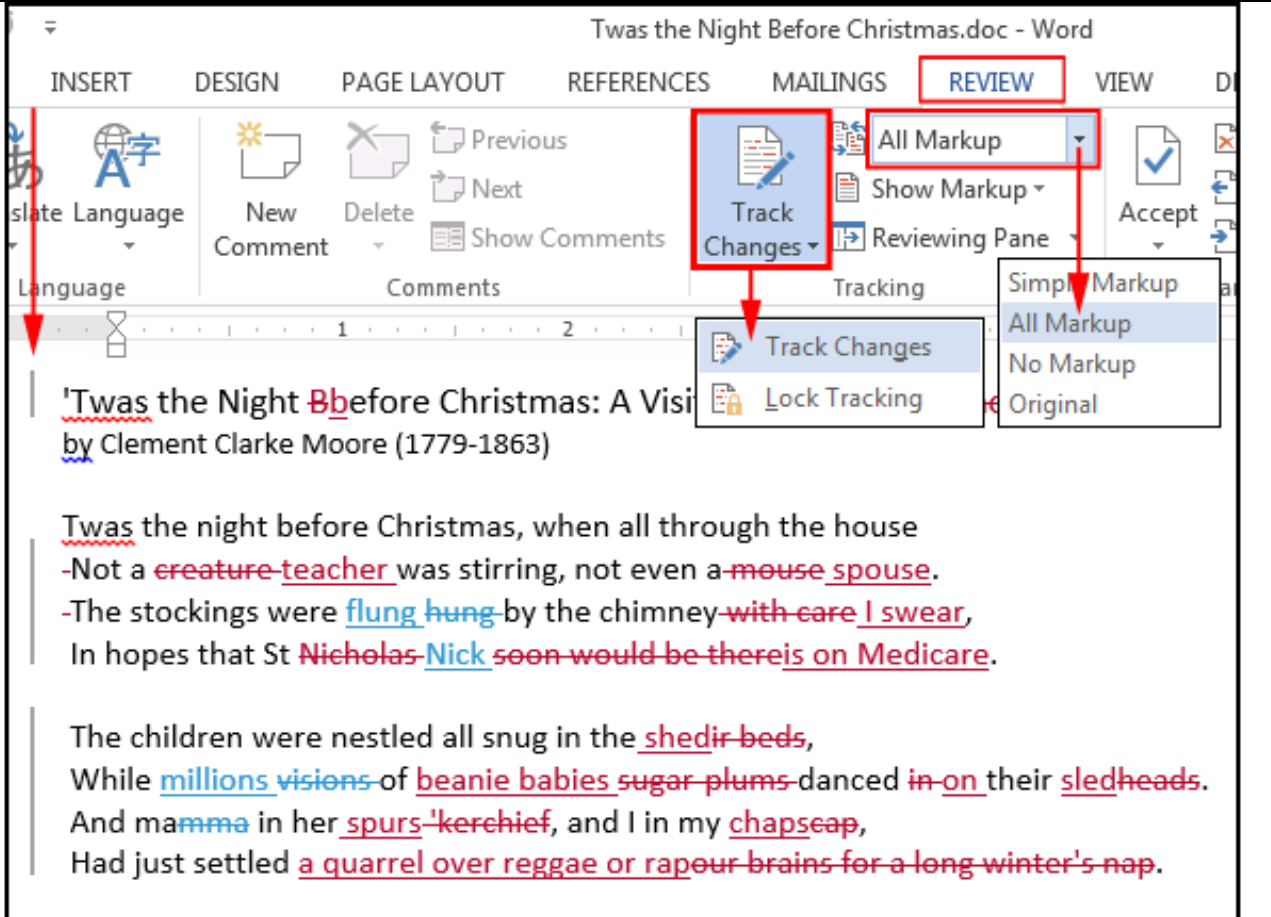
Welcome to the Onish Summer Computing Workshop 2022!

- 1 - 1:30 pm Jessica Hill - Intro Computing Systems and Hardware
- 1:30 - 2 pm Andrew Moore - Programming Languages and Their Usages
- 2 - 2:30 pm David King - Installation and Package Management
- 2:30 - 3 pm Robert Williams - Working on GitHub
- after 3pm Mixer – stay for light snacks!

Version control with Git, GitHub, and GitHub Desktop

Nishimura Lab Computational Workshop

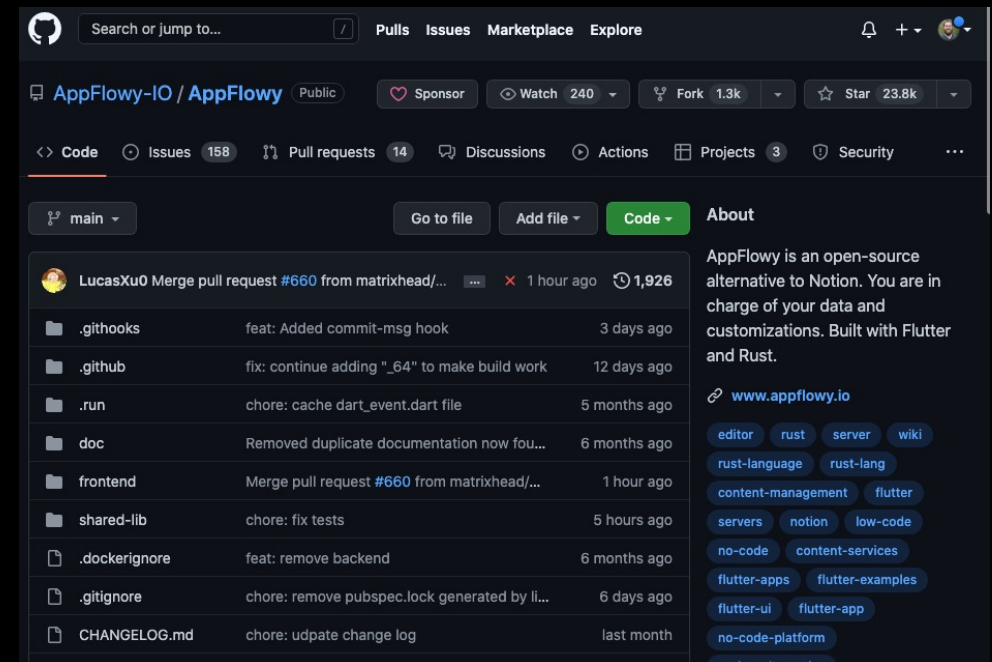
What is version control?



Git vs GitHub

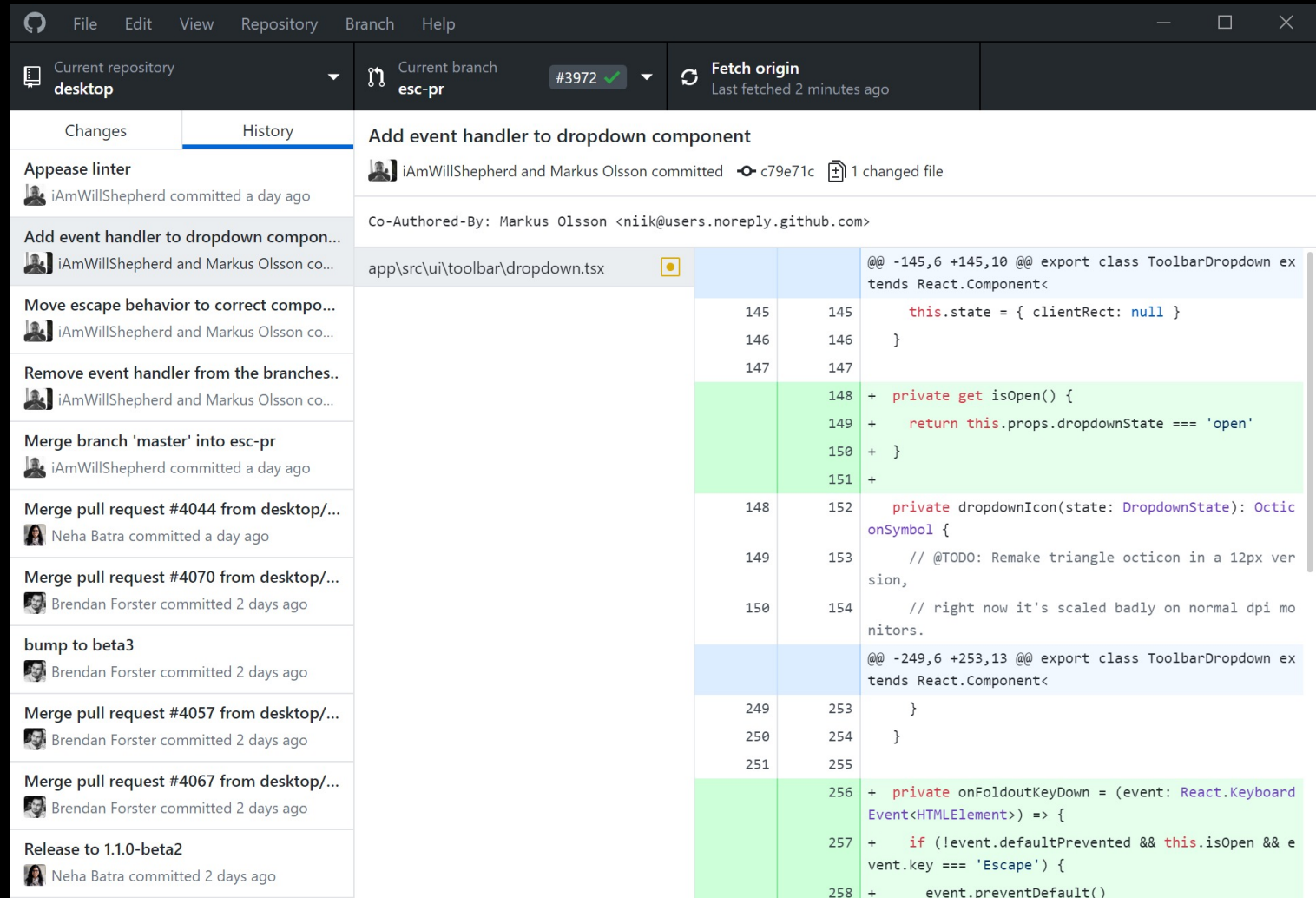
- <https://www.geeksforgeeks.org/difference-between-git-and-github/>
- Git is command line software, GitHub is a webservice + storage
- Git is for text file code, not for binary files like MS Word
- Alternatives like bitbucket and subversion

```
$ git init
Initialized empty Git repository in /tmp/tmp.IMBYSY7R8Y/.git/
$ cat > README << 'EOF'
> Git is a distributed revision control system.
> EOF
$ git add README
$ git commit
[master (root-commit) e4dcc69] You can edit locally and push
to any remote.
 1 file changed, 1 insertion(+)
 create mode 100644 README
$ git remote add origin git@github.com:cdown/thats.git
$ git push -u origin master
```



GitHub Desktop

- A convenient user interface ([dl here](#))
- Will not cover adding SSH key to your account ([info here](#))



The screenshot shows the GitHub Desktop application interface. The top menu bar includes File, Edit, View, Repository, Branch, and Help. The main area is divided into three sections:

- Current repository:** desktop
- Current branch:** esc-pr (commit #3972)
- Fetch origin:** Last fetched 2 minutes ago

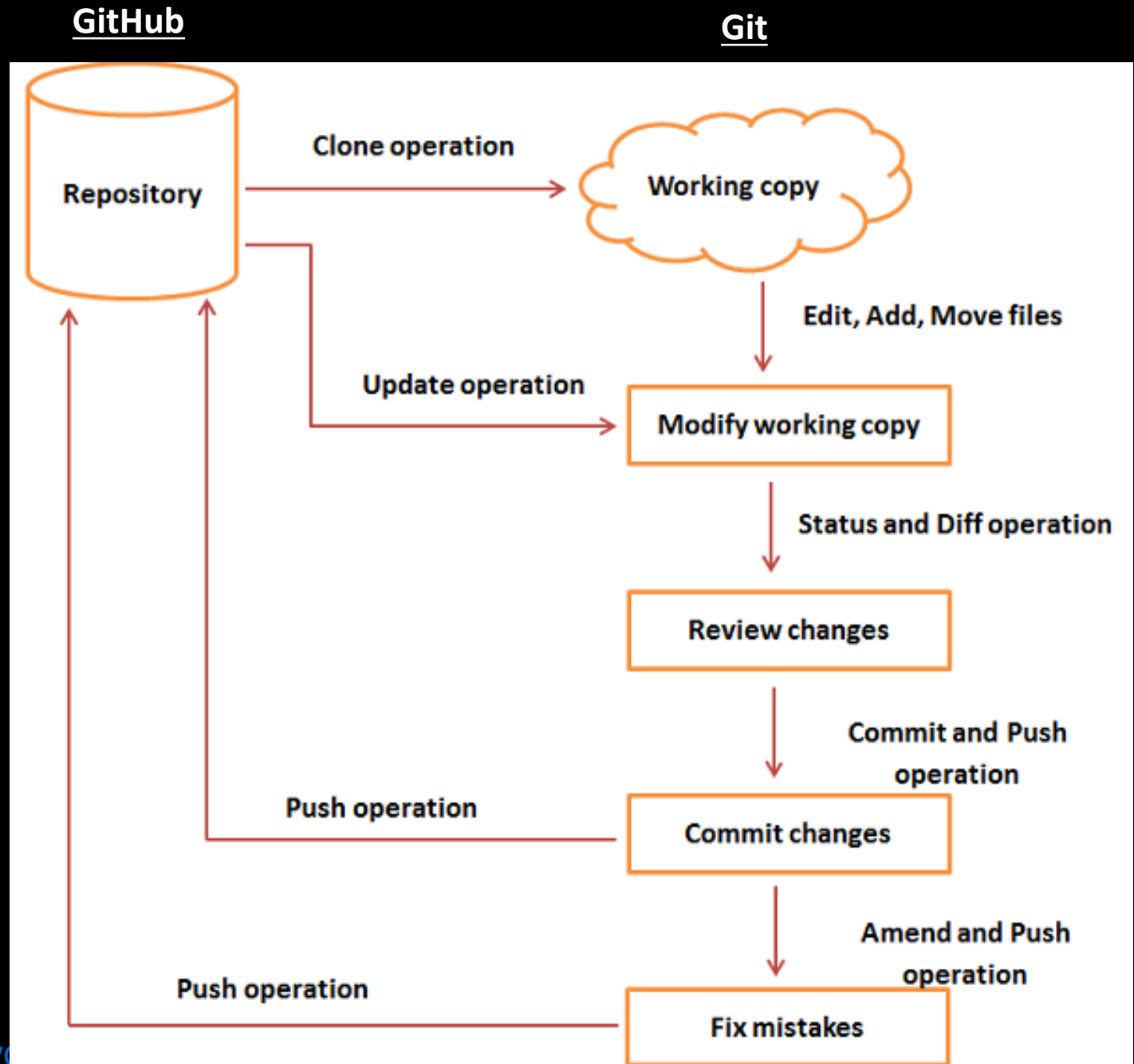
The left sidebar displays a list of changes and history items:

- Changes: Appease linter (iAmWillShepherd committed a day ago)
- History: Add event handler to dropdown compon... (iAmWillShepherd and Markus Olsson co...)
- Move escape behavior to correct compo... (iAmWillShepherd and Markus Olsson co...)
- Remove event handler from the branches.. (iAmWillShepherd and Markus Olsson co...)
- Merge branch 'master' into esc-pr (iAmWillShepherd committed a day ago)
- Merge pull request #4044 from desktop/... (Neha Batra committed a day ago)
- Merge pull request #4070 from desktop/... (Brendan Forster committed 2 days ago)
- bump to beta3 (Brendan Forster committed 2 days ago)
- Merge pull request #4057 from desktop/... (Brendan Forster committed 2 days ago)
- Merge pull request #4067 from desktop/... (Brendan Forster committed 2 days ago)
- Release to 1.1.0-beta2 (Neha Batra committed 2 days ago)

The main area shows a diff view for the file `app\src\ui\toolbar\dropdown.tsx`. The commit message is "Add event handler to dropdown component" by iAmWillShepherd and Markus Olsson. The diff shows changes to the `ToolbarDropdown` class, including a new `isOpen` state property and a corresponding `onFoldoutKeyDown` event handler.

```
@@ -145,6 +145,10 @@ export class ToolbarDropdown extends React.Component<
    this.state = { clientRect: null }
  }
+ private get isOpen() {
+   return this.props.dropdownState === 'open'
+ }
  private dropdownIcon(state: DropdownState): OcticonSymbol {
    // @TODO: Remake triangle octicon in a 12px version,
    // right now it's scaled badly on normal dpi monitors.
  }
@@ -249,6 +253,13 @@ export class ToolbarDropdown extends React.Component<
  }
  }
  }
+ private onFoldoutKeyDown = (event: React.KeyboardEvent<HTMLDivElement>) => {
+   if (!event.defaultPrevented && this.isOpen && event.key === 'Escape') {
+     event.preventDefault()
  }
```

Git lifecycle



Live Demo

- Making a repository with GitHub desktop
- Commit and push
- Reverting changes
- Collaboration and branches
- Pull requests

README Files



README

Curl is a command line tool for transferring data specified with URL syntax. Find out how to use curl by reading the curl.1 man page or the MANUAL document. Find out how to install Curl by reading the INSTALL document.

libcurl is the library curl is using to do its job. It is readily available to be used by your software. Read the libcurl.3 man page to learn how!

You find answers to the most frequent questions we get in the FAQ document.

Study the COPYING file for distribution terms.

Those documents and more can be found in the docs/ directory.

CONTACT

If you have problems, questions, ideas or suggestions, please contact us by posting to a suitable mailing list. See <https://curl.se/mail/>

All contributors to the project are listed in the THANKS document.

WEBSITE

Visit the curl website for the latest news and downloads:

<https://curl.se/>

GIT

<https://en.wikipedia.org/wiki/README>

Markdown

```
<> Edit new file Preview
1 # Heading (h1)
2
3 ## Heading 2 (h2)
4
5 ### Heading 3 (h3)
6
7 #### Heading 4 (h4)
8
9 ##### Heading 5 (h5)
10
11 ##### Heading 6 (h6)
12
13 This is a text body. Lorem ipsum dolor sit amet, consectetur a
14 tempor incididunt ut labore et dolore magna aliqua.
15
16 - This is a list
17 - * or _ makes text italicized
18 - while ** or __ makes text bold
19
20 1. # start a ordered list
21 2. and backticks write `code`
22 3. you can write [links](https://www.mozilla.org/)
23
24 And images:
25
26 ![Mozilla](https://www.mozilla.org/media/img/sandstone/footer-
```

```
<> Edit new file Preview


# Heading (h1)



---



## Heading 2 (h2)



---



### Heading 3 (h3)



#### Heading 4 (h4)



##### Heading 5 (h5)



###### Heading 6 (h6)



This is a text body. Lorem ipsum dolor sit amet, co  
dolore magna aliqua.



- This is a list
- * or _ makes text italicized
- while ** or __ makes text bold


1. # start a ordered list
2. and backticks write code
3. you can write links



And images:

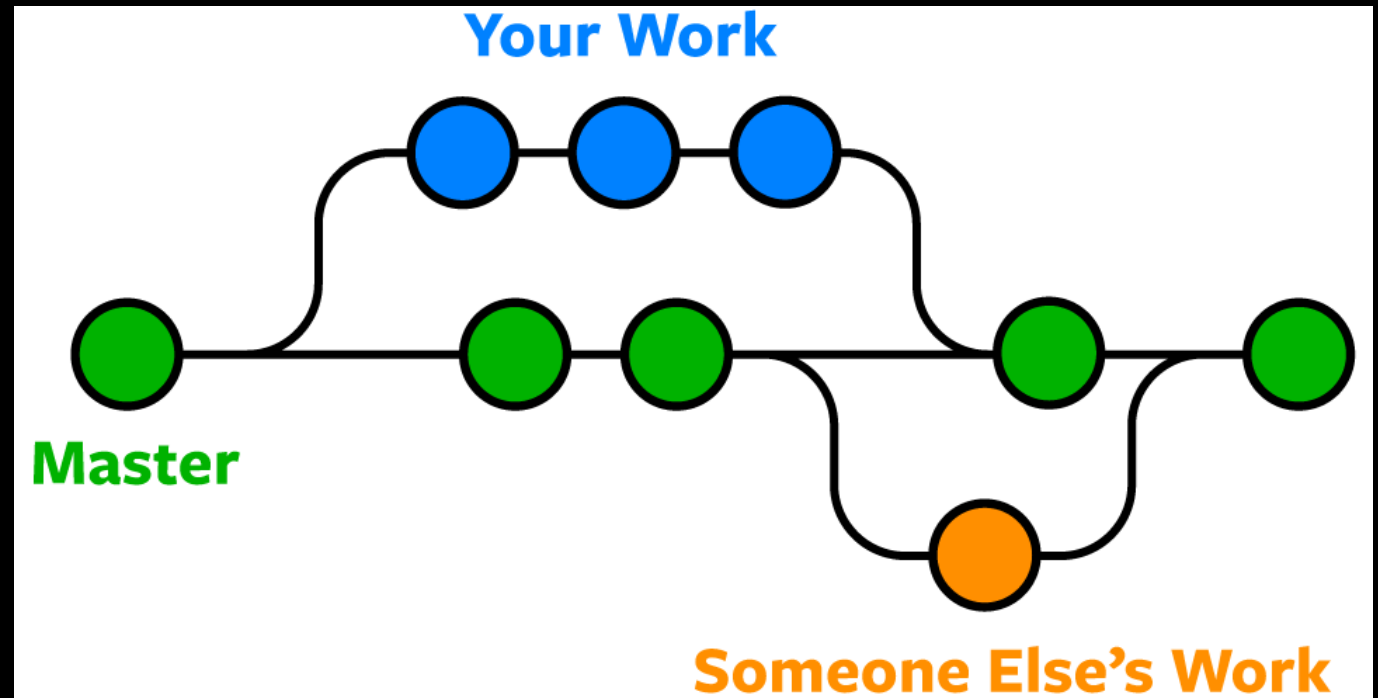

```

Live Demo

- Making a repository with GitHub desktop
- Commit and push
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Live Demo

- Making a repository with GitHub desktop
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Merge conflicts



beginning of conflict marker <<<<<< HEAD identifies you

text you wrote

conflict divider =====

text in version of file on GitHub

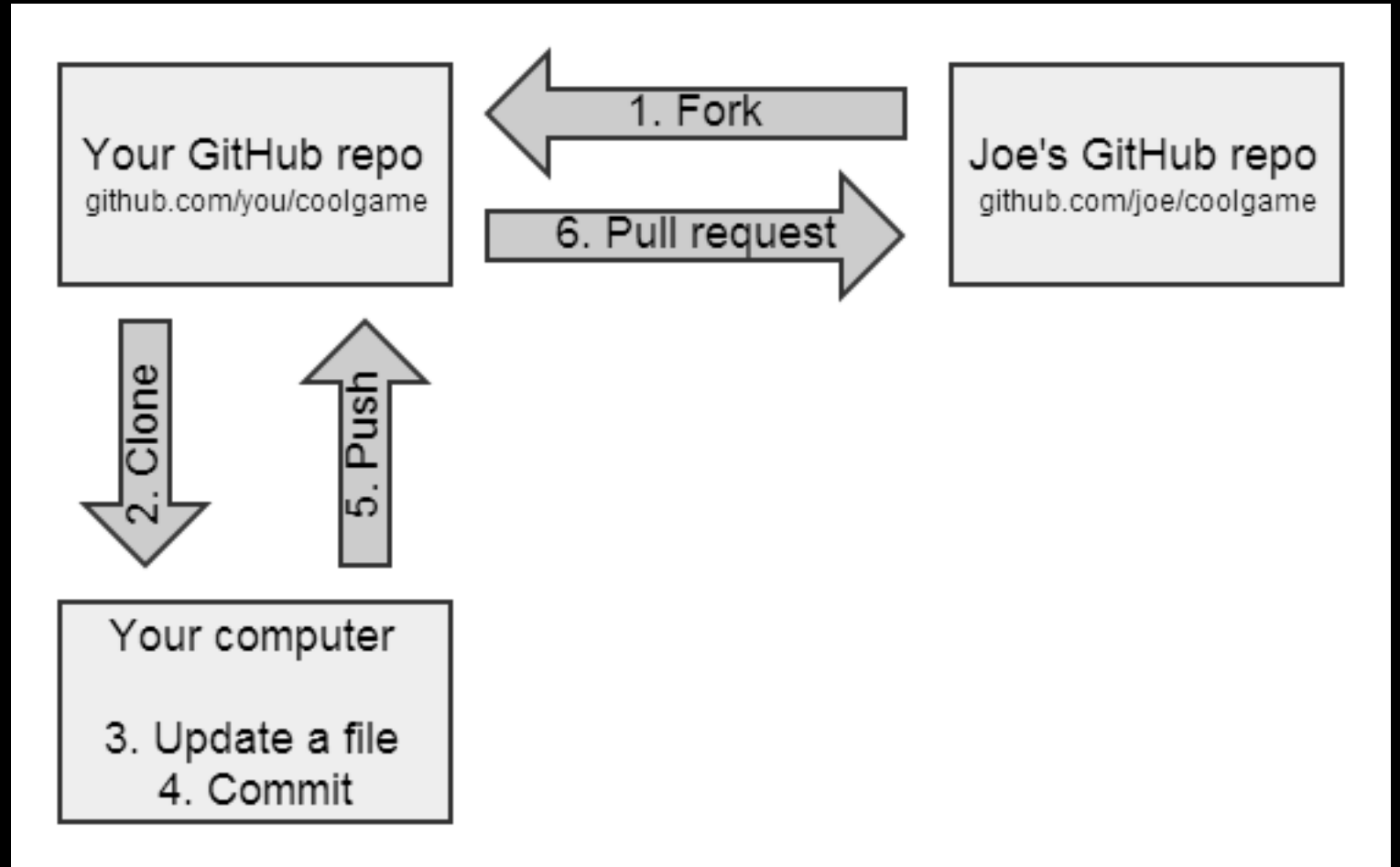
end of conflict divider >>>>>> alphanumeric hash identifies the commit associated with text on GitHub

Open source collaboration

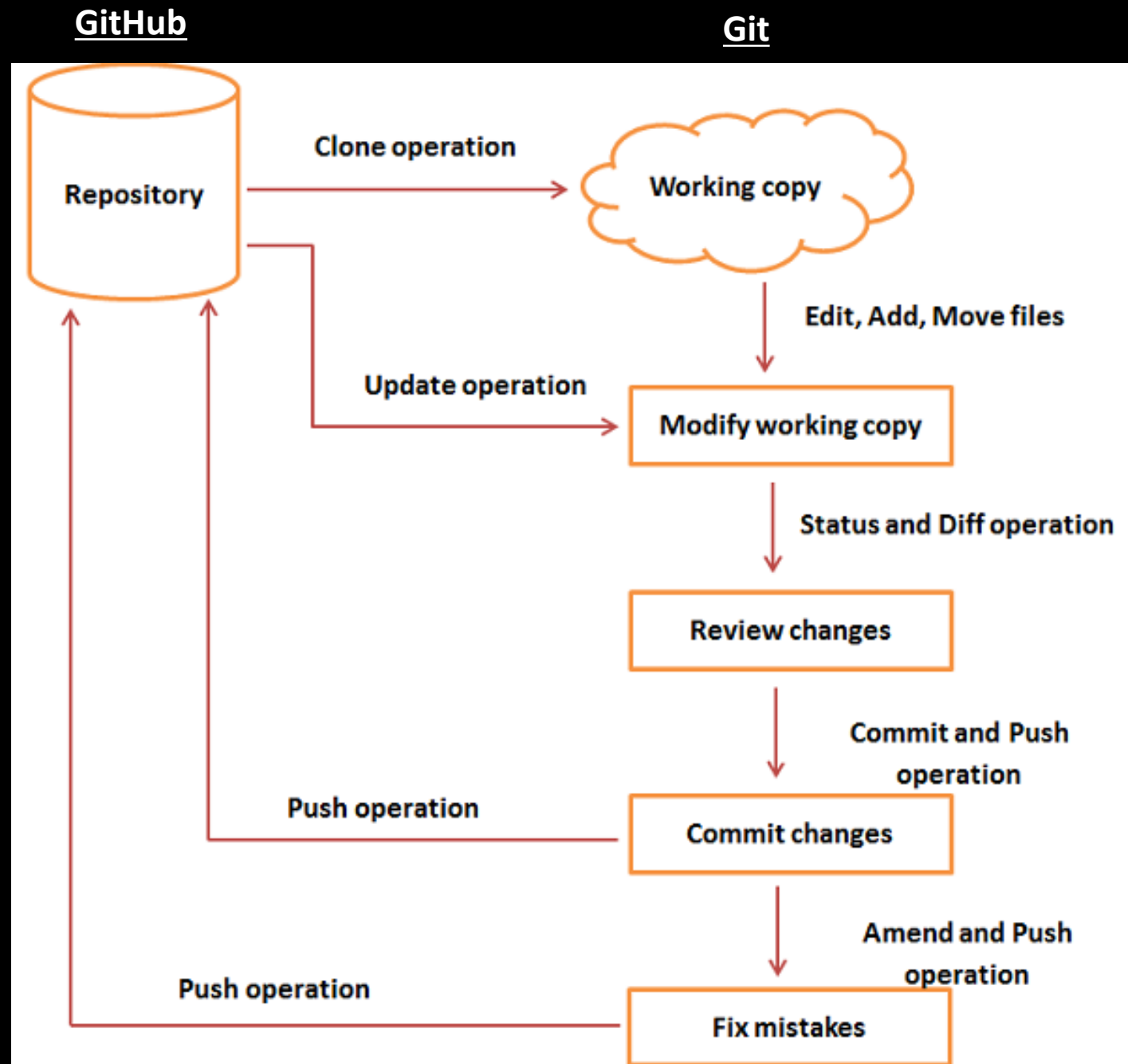
- Issue tracking ([example](#))
- Releases
- Forking a repository

Open source collaboration

- Issue tracking
- Releases
- Forking a repository



Questions?



Thank you for attending the Onish Summer
Computing Workshop 2022!

