

Tea Time @ Case Western Reserve University

by the [Solar Durability and Lifetime Extension Center](#)

Jack Mousseau

Git

[git-scm docs](#)

Version Control System

Version Database

Version 1

Version 2

Version 3

Version Database

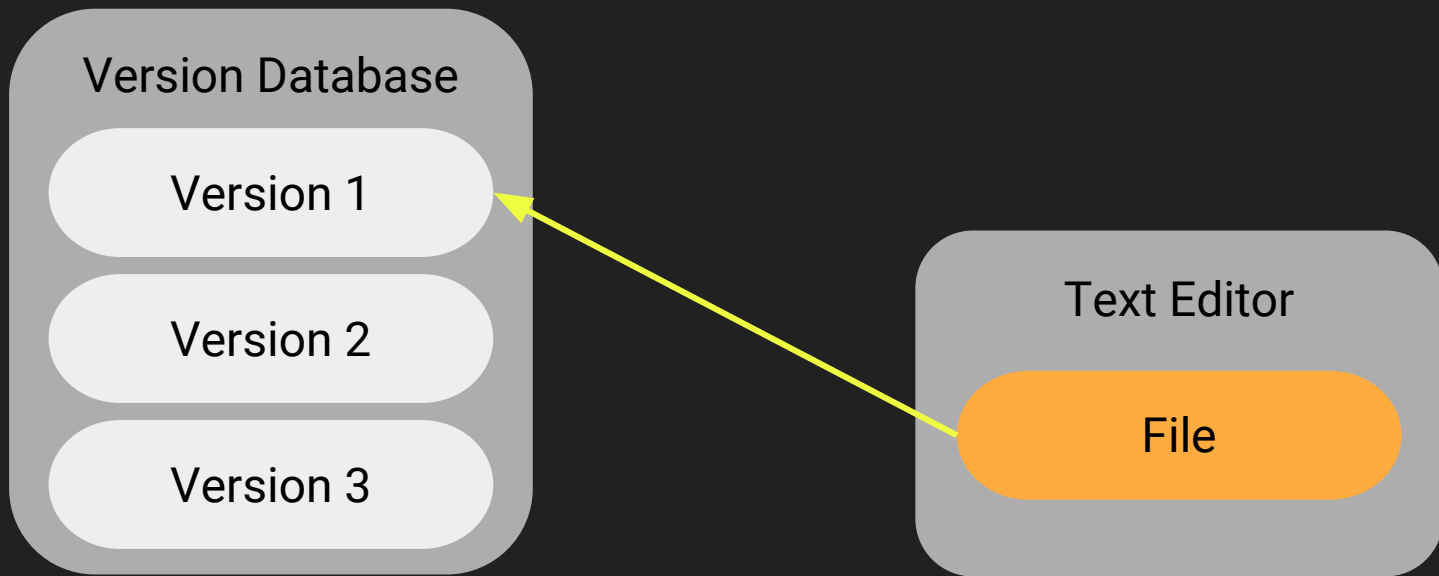
Version 1

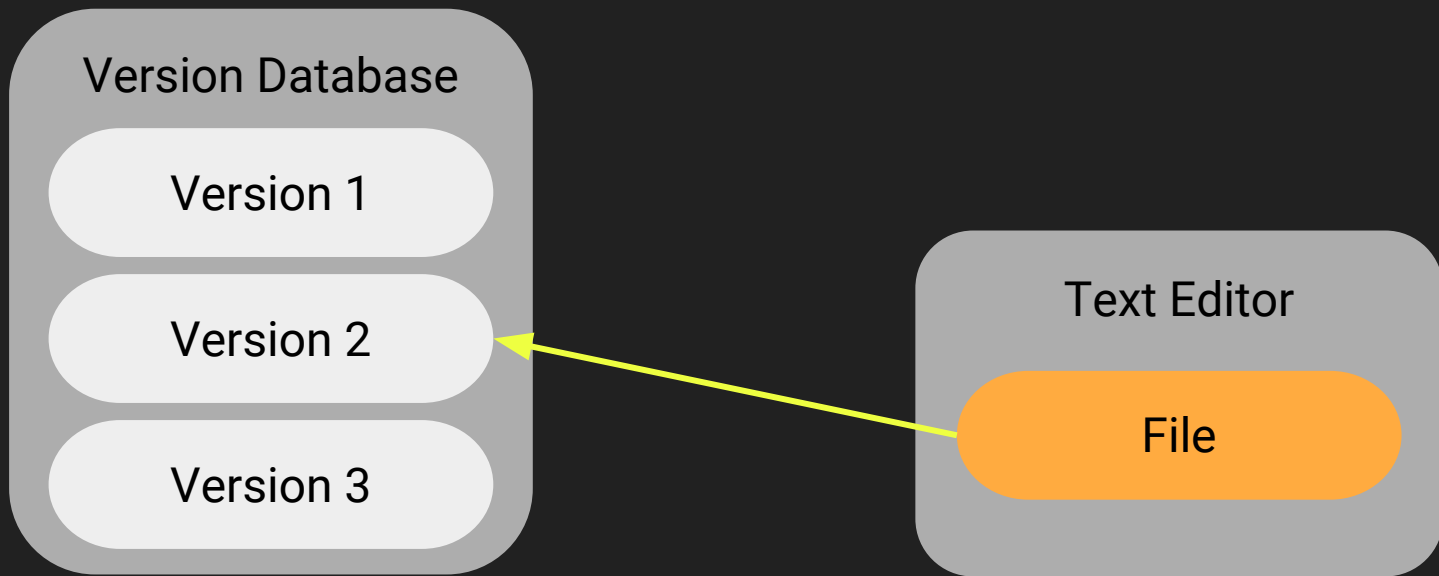
Version 2

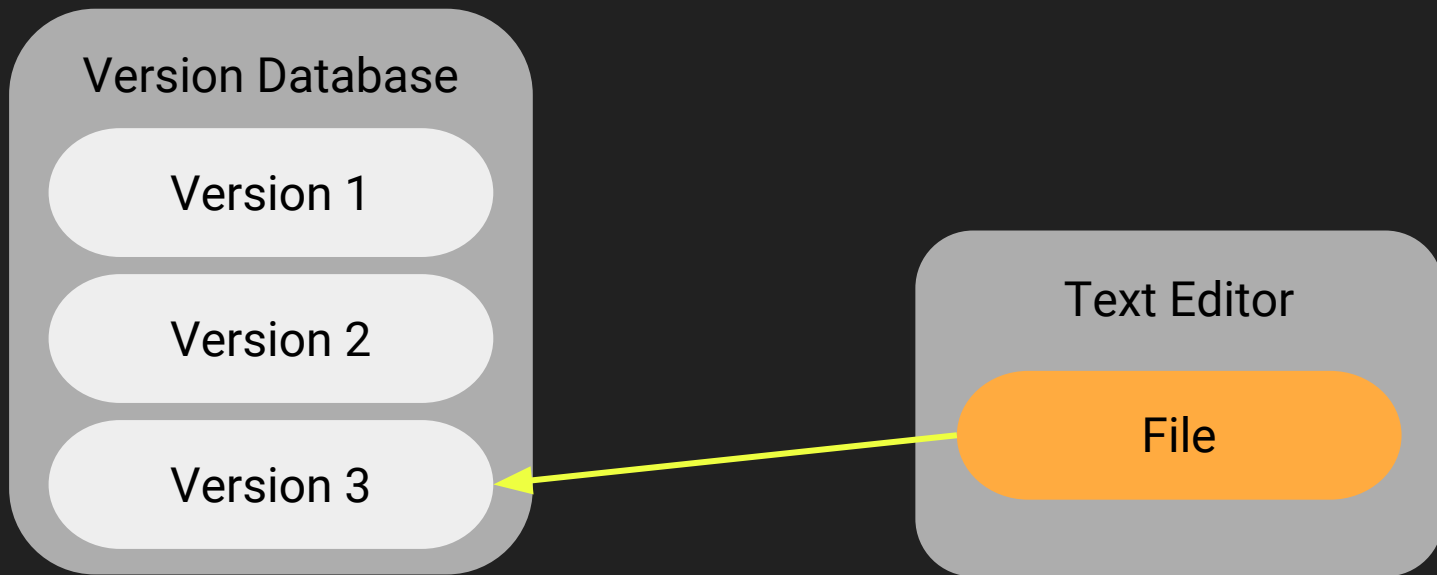
Version 3

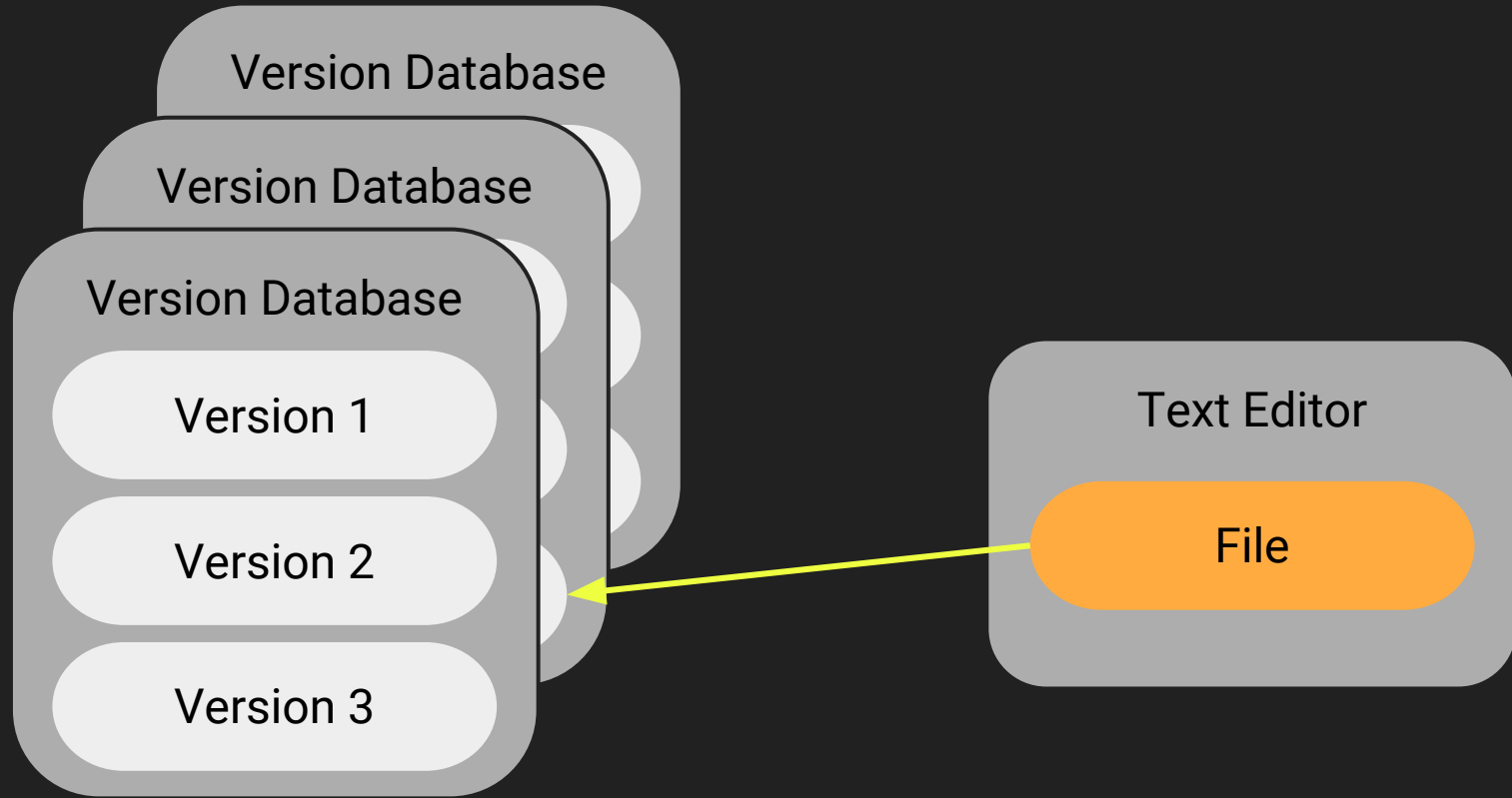
Text Editor

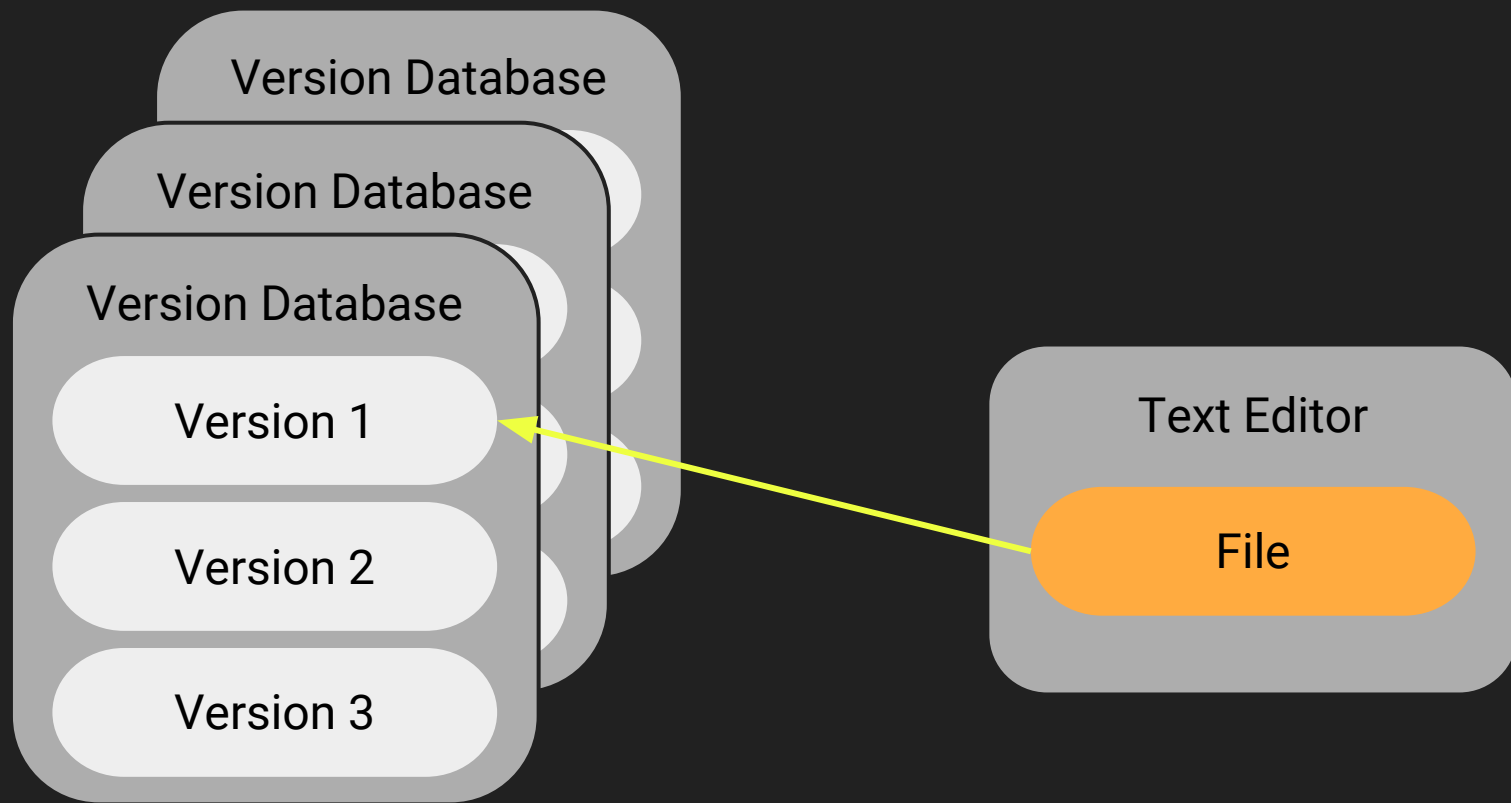
File

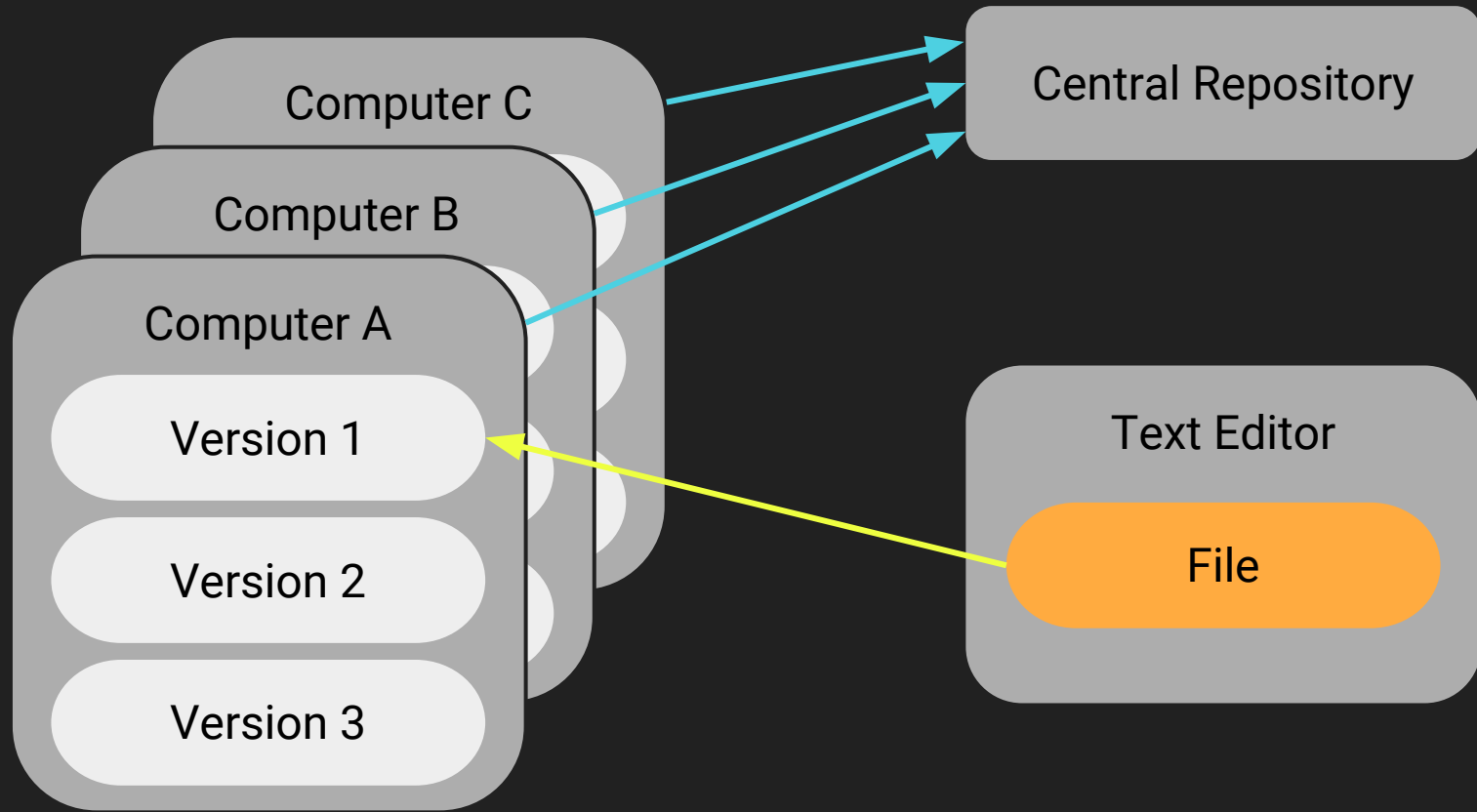












Git Snapshots

File A

A1

File B

B1

File C

C1

File A

A1

File B

B1

File C

C1

Time



File A

A1

A2

File B

B1

File C

C1

Time →

File A

A1

A2

File B

B1

B1

File C

C1

Time →

File A

A1

A2

File B

B1

B1

File C

C1

C2

Time →

File A

A1

A2

A3

File B

B1

B1

B1

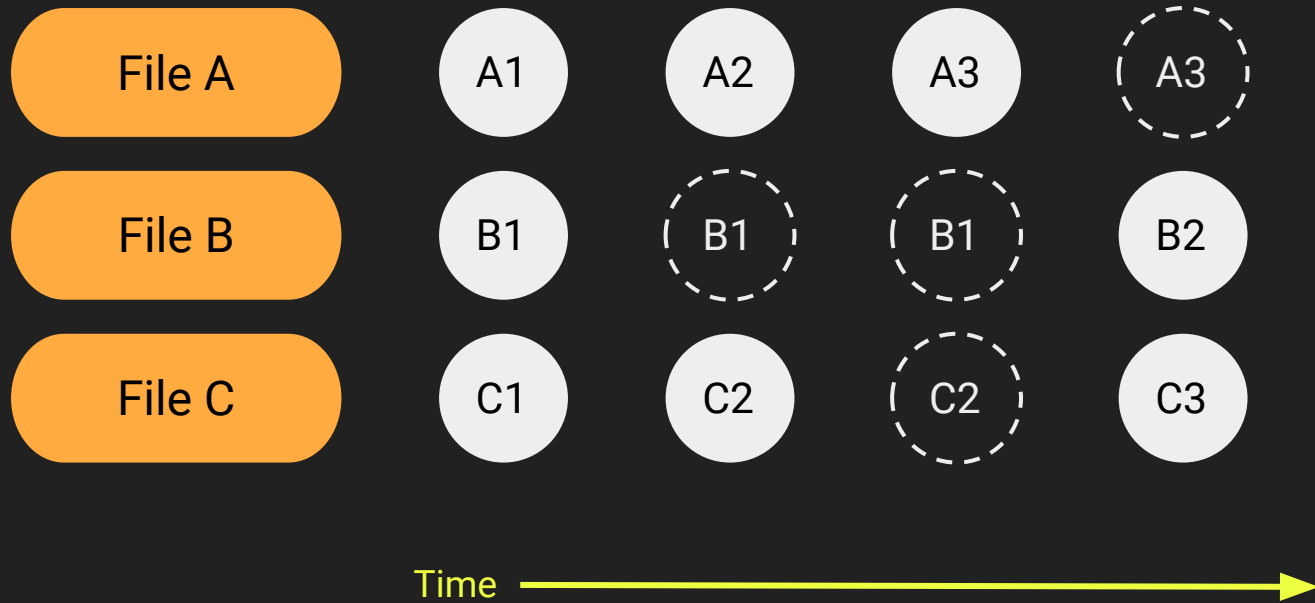
File C

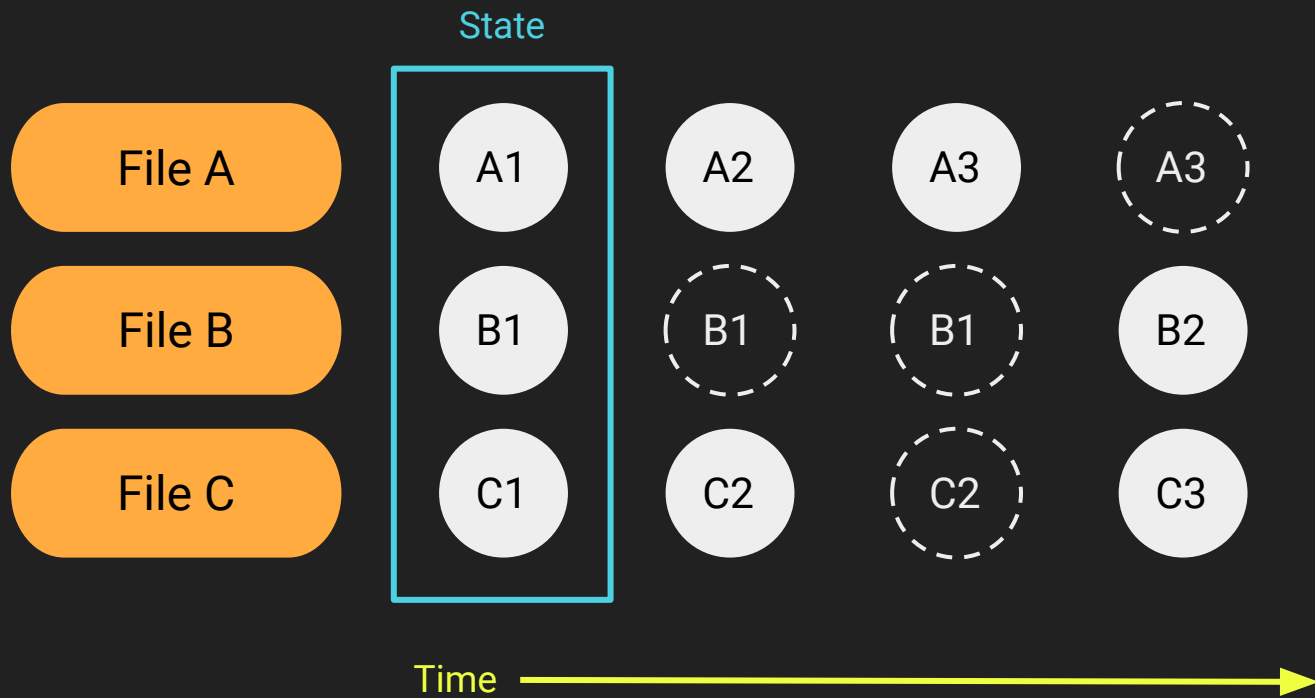
C1

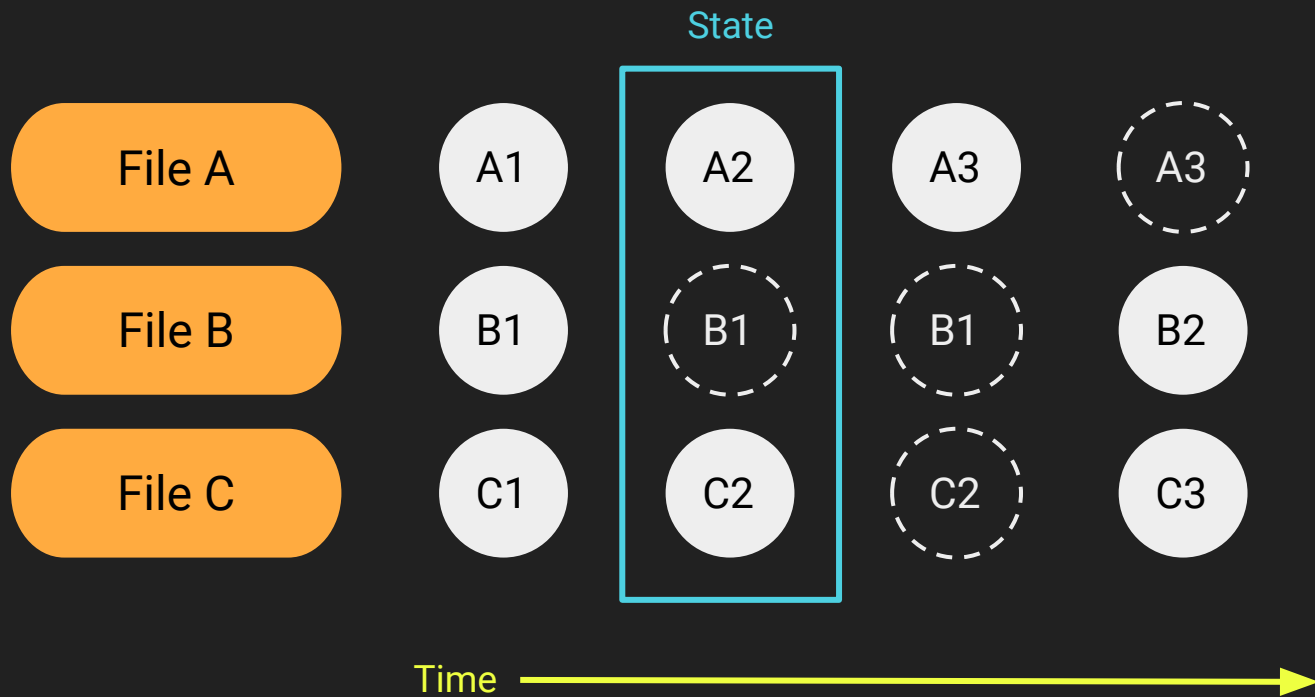
C2

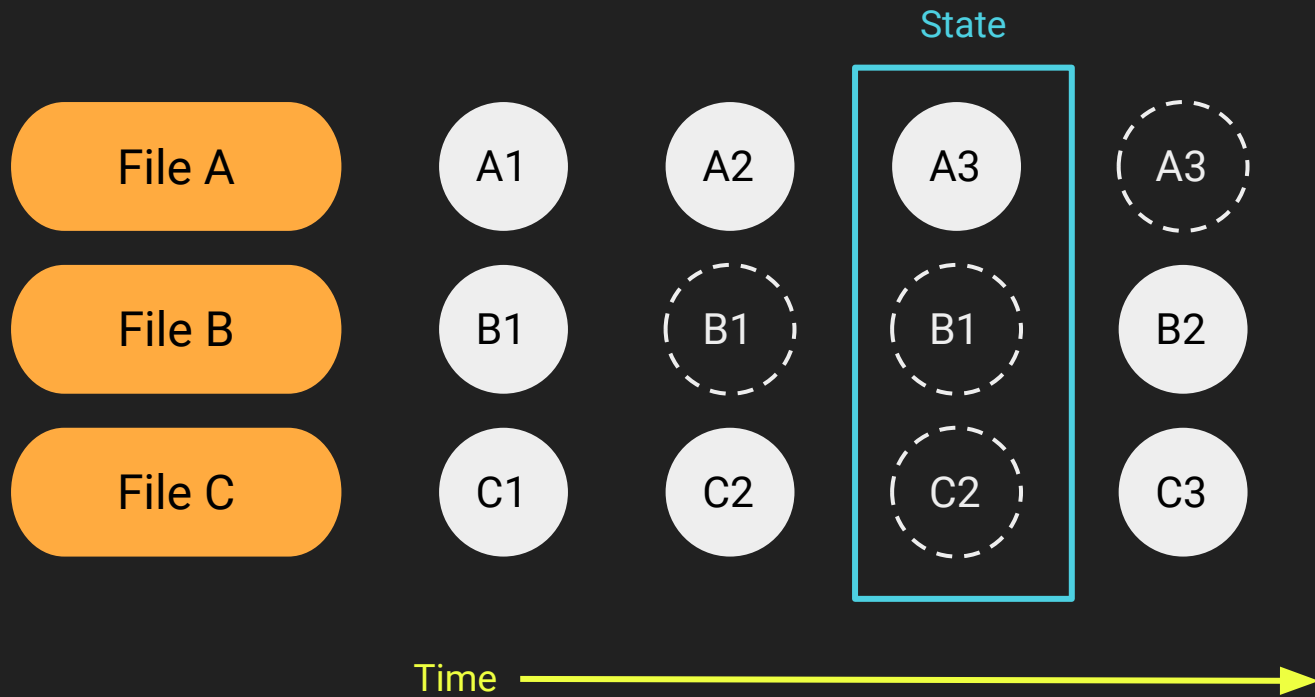
C2

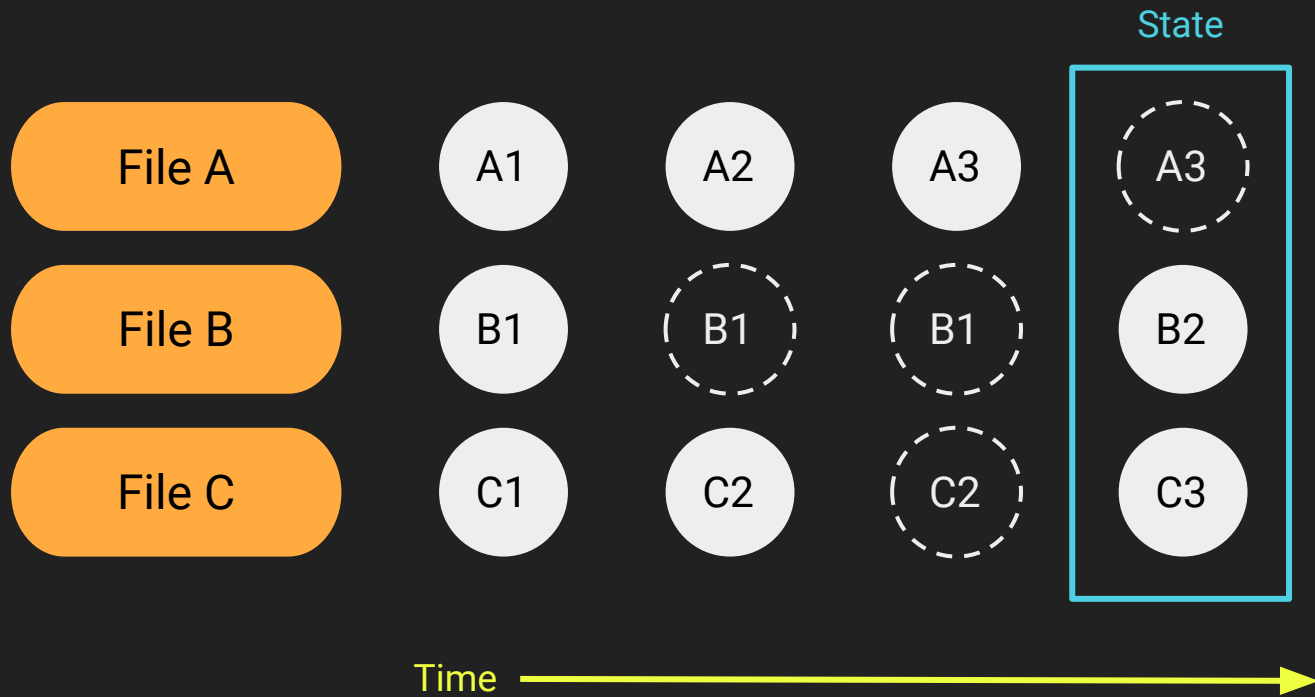
Time →











States are stored in `.git/`

5712daa89138b8d3d68edf10eade954941f8ff5e

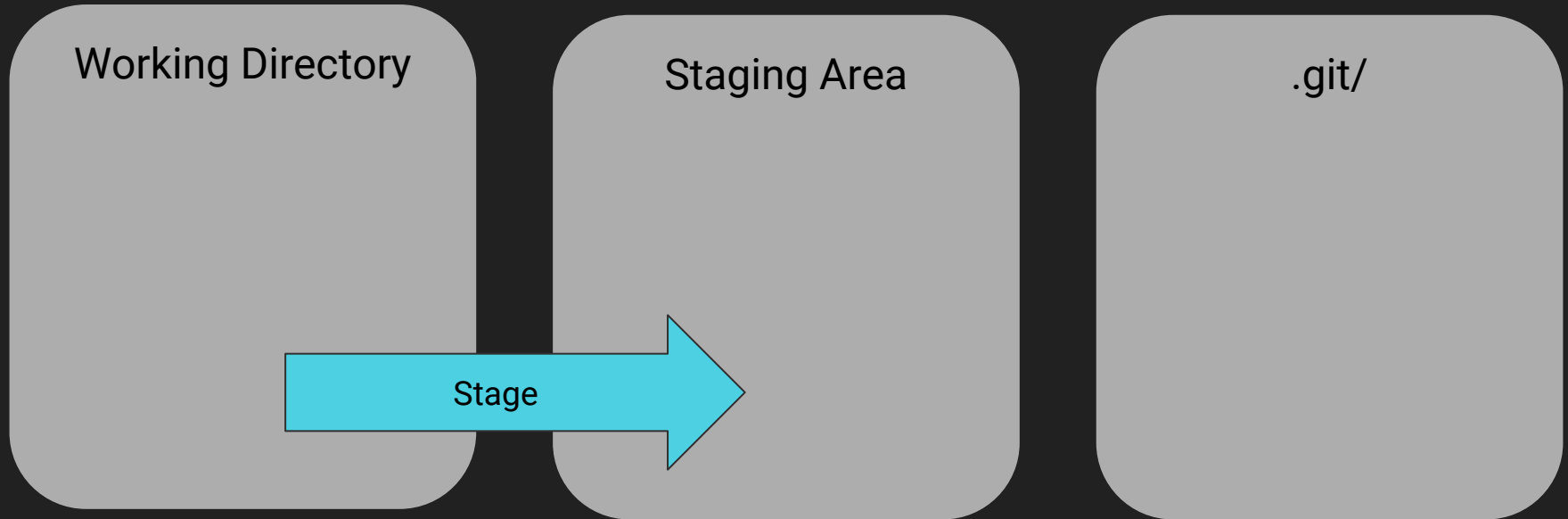
Git workflow

Working Directory

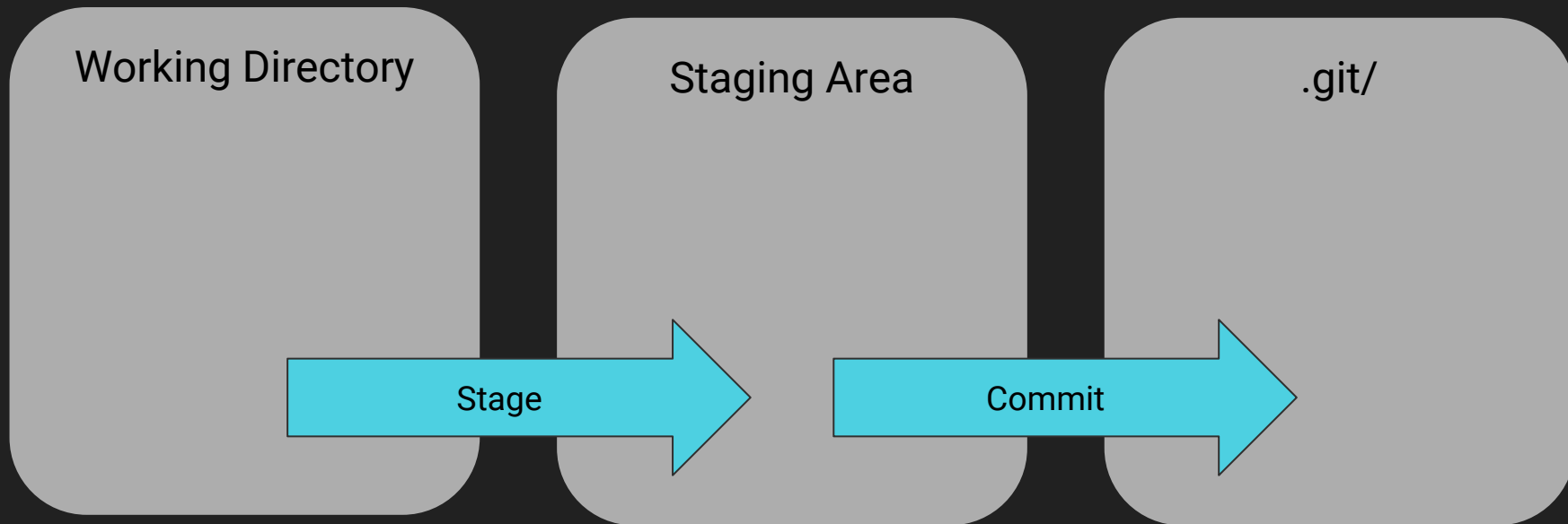
Staging Area

.git/

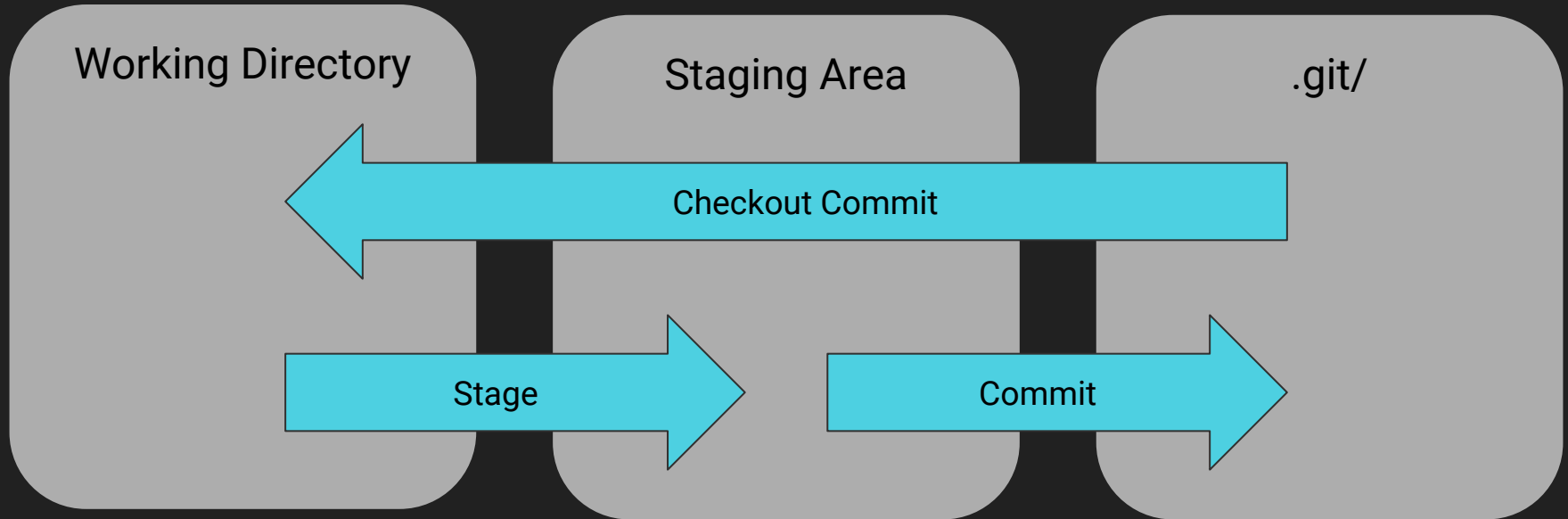
Changed a file



Commit the state



Go back to older version



Git in the command line

Command Line Intro

Initialize git

```
cd MyProject
```

```
git init
```

```
ls -a
```


View the status

```
git status
```

1. Add files to track,
2. Commit them and add commit message
3. Push you files to Bitbucket/Github/Gitlab

```
git add --all :/
```

```
git commit -m 'explain in this commit message'
```

```
git push
```

Routine Process working with git

```
git pull    # get new files from cloud  
  
# edit files as you want  
  
git add --all :/  
  
git commit -m 'commit message'  
  
git push
```

Ignore certain files

```
vi .gitignore
```

```
# visit www.gitignore.io
```