

Training DevOps

Install Git from <https://git-scm.com/download>

Create an account for git

```
git config --global user.name "Fauzan"
```

Create a email for git

```
git config --global user.email apauaie@gmail.com
```

Create Default Branch

```
git config --global init.default branch main
```

Go to directory

```
cd ~/Documents/esp32iot/
```



Initialize Git

```
git init
```



Notice there will be a new folder `.git` with all versioning files

Check status of git

```
git status
```

Create `.gitignore` file to ignore certain file

```
touch .gitignore
```



Edit to include what to ignore

Add files to Git

```
git add . or git add "<filename>"
```



notice that files added to gitignore will not be added

Commit Files to Repo

```
git commit -m "First Commit"
```

Look for the difference

```
git diff
```

Restore deleted file - Delete a file

```
git status
```



check the deleted file

Restore a file

```
git restore "<filename>"
```

Commit again to keep the log

```
git commit -m "Restored files"
```

See the log to understand the commit history

```
git log or git log --oneline
```

Amend a commit

```
git commit -m "Restore File" - amend
```

Branch

```
git branch fixing
```

Check branch

```
git branch
```

Switch to fixing branch

```
git switch fixing
```

Change a file then commit

```
git commit -a -m "update fixed"
```

Switch to main branch

```
git switch main
```

Merge Branch

```
git merge -m "Merge with Main" fixing
```

Delete branch

```
git branch -d fixing
```

Check status of branch

```
git branch
```

Activity

- ☐ Make a new branch and edit a file
- ☐ Make a commit
- ☐ Go back to main branch and edit the same file with a different info
- ☐ Make a commit
- ☐ Merge both branch

Merge Conflicts

Fix the conflicts

```
git commit -a -m "fixed conflict"
```

