

Git documentation

Git is a useful tool for team to work together and it could help team collaborate easily.

Git is used to tracking changes in the source code and the distributed version control tool is used for source code management.

It allows multiple developers in a team to work together and it supports non-linear development through its thousands of parallel branches.

It could make the version control which could help team member to collect the different version when modify the programming code of the project because it could provide a history of content changes.

Git is a fast and modern implementation of version control, and it could be easy for all the team members.

Git has two types of process; the first type is local git. It could track the history following:

```
$ git init myproject
```

```
$ cd myproject
```

```
$ git add .
```

```
$ git commit -m "update all code"
```

The second type is collaborative git. Collaboration happens naturally in a team so distributed git could make it into a history of who did what and who made this. It could make a collaborative history tracking. It always following:

```
$ git pull
```

 (this is a necessary step when members want to upload the code they modified)

```
$ git add .
```

```
$ git commit -m "the first time upload"
```

```
$ git push
```

This is the process of using git to collaborate with team members.

There are some commands using git:

1. Check the version of Git:

```
$ git --version
```

2. Create a test repository in the local system:

`$ mkdir test`

3. Move to that test repository:

`$ cd test`

4. Check the status of the repository:

`$ git status`

5. Commit the changes to the repository's history with a short message:

`$ git commit -m "content of commit"`

6. Compare difference:

`$ git diff`

7. print out all the commits:

`$ git log`

8. add the changes ready to the repository:

`$ git add .`

9. push the changes to the main repository:

`$ git push`

10. collect the changes of other users made before push:

`$ git pull`

Git is software that users can access via a command line (terminal), or a desktop app that has a GUI (graphical user interface) such as SourceTree.