Git commands

Git is an open source, distributed version control system designed for speed and efficiency

Agenda

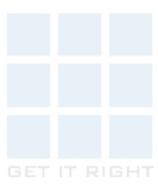
- Git Basic Commands
- Git ignore
- Sublime Integration
- Notepad++ Integration



Git config: One time setup

- git-config Get and set repository or global options
- Being a distributed version control system, need to identify current user through config:

```
$ git config --global user.name "username"
$ git config --global user.email "email"
$ git --help
$ git --version
```



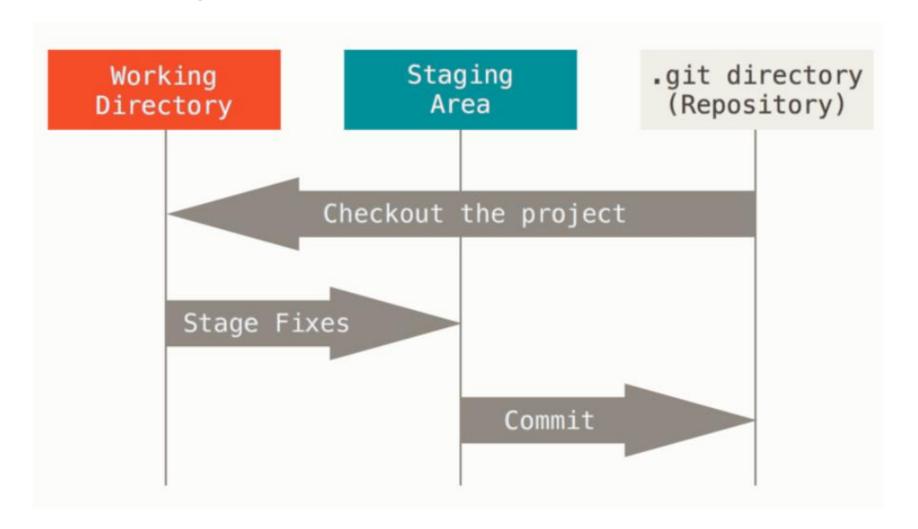
Git Working with Local Repository

- Create new directory
 - \$ mkdir gitbasics
- Create a new empty repository

\$ git init - Create an empty Git repository or reinitialize an
existing one

| Name | Date modified | Туре | Size |
|----------------|------------------|-------------|------|
| hooks | 29-01-2021 07:01 | File folder | |
| info | 29-01-2021 07:01 | File folder | |
| logs | 29-01-2021 07:08 | File folder | |
| objects | 29-01-2021 07:14 | File folder | |
| refs refs | 29-01-2021 07:01 | File folder | |
| COMMIT_EDITMSG | 29-01-2021 07:11 | File | 1 KB |
| config | 29-01-2021 07:01 | File | 1 KB |
| description | 29-01-2021 07:01 | File | 1 KB |
| ☐ HEAD | 29-01-2021 07:01 | File | 1 KB |
| index | 29-01-2021 07:17 | File | 1 KB |

Git: Workspace





Git Working with Local Repository

Add files

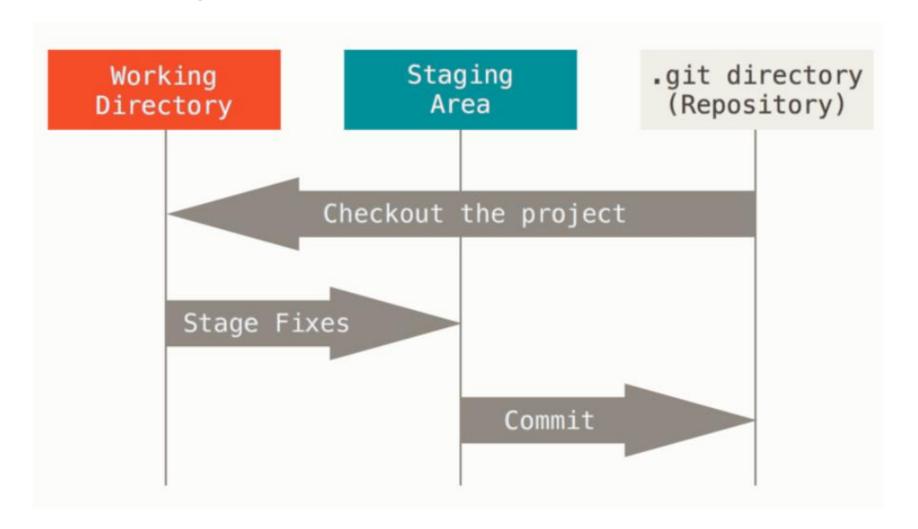
Create files using favourite editor and save in current directory

```
$ touch File1.html
```

```
$ "File 2 created">File2.html
```



Git: Workspace





Git Working with Local Repository

• Stage / Index files - Add file contents to the index, enable tracking of file contents

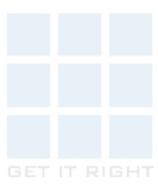
```
$ git add.
```

Show the working tree status

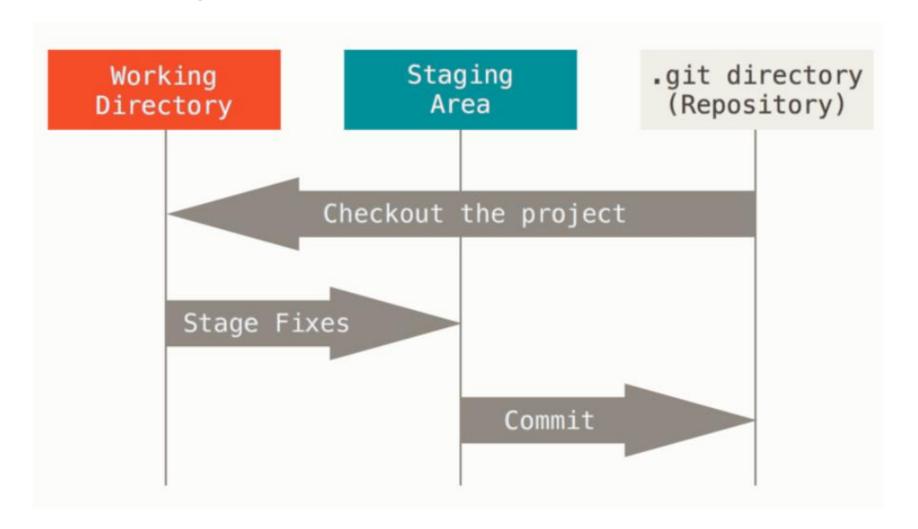
```
$ git status
```

Commit changes and Record changes to the repository

```
$ git commit -m "Initial change!"
```



Git: Workspace





Understanding History - Commits

• Every change in the history of a project is represented by a commit. The git-show(1) command shows the most recent commit on the current branch:

\$ git show

\$ git log

• Every commit (except the very first commit in a project) also has a parent commit which shows what happened before this commit. Following the chain of parents will eventually take you back to the beginning of the project.



Tracking Changes

- git add File2.html
- "File 2 changes">>File2.html
- git restore
- git diff
- git commit -a -m "commit multiple files"



Ignoring files

- Update .gitignore
- *.class
- git log

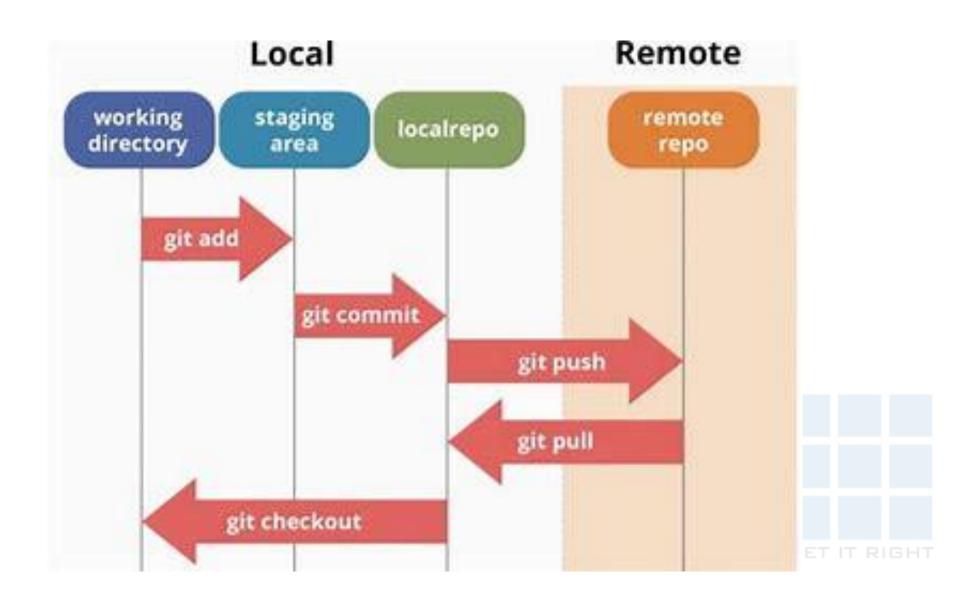


Git Hub Registration - Remote Repositories

- A hosted service for remote git repositories.
- Unlimited PUBLIC repositories for Open source projects.
- Widely popular with Open Source community.
 - Even Linus Torvalds has complete Linux Kernel source on GitHub!
- Visit https://github.com

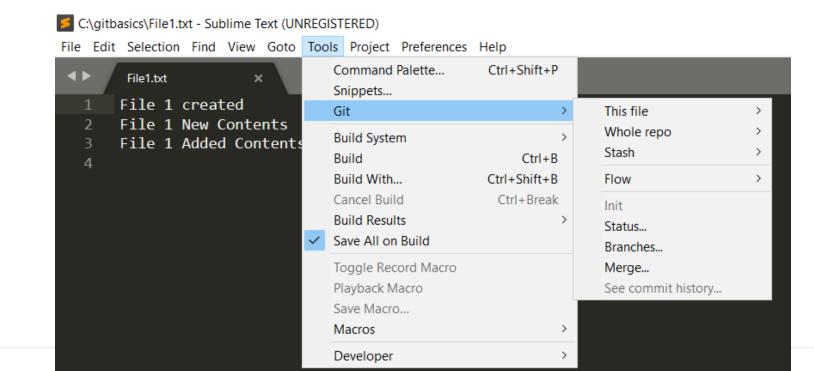


Git File Workflow



Sublime Text Download

- Sublime Text Download
 - https://www.sublimetext.com/3
- Tools-> Command Palette
 - Install Package git
- Sublime Merge Download
 - https://www.sublimemerge.com/download



Notepad++ Download

- Notepad++ Download
 - https://notepad-plus-plus.org/downloads/
- Adding Git Plugin
 - Plugins -> Plugins Admin -> Git SCM
- Note Works only with Tortoise Git



