

# Getting Started with GIT



# Objectives

- Configure GIT
- Find help, basic operations
- Create a Repository
- Clone existing Repository



\$ git

The most commonly used git commands are:

add  
bisect  
branch  
checkout  
clone  
commit  
diff  
fetch  
grep  
init  
log  
merge  
mv  
pull  
push  
rebase  
reset  
rm  
show  
status  
tag

Add file contents to the index

Find by binary search the change that in

List, create, or delete branches

Checkout a branch or paths to the workin

Clone a repository into a new directory

Record changes to the repository

Show changes between commits, commit and

Download objects and refs from another r

git commands

Create an empty Git repository or reinit

Show commit logs

Join two or more development histories t

Move or rename a file, a directory, or a

Fetch from and integrate with another re

Update remote refs along with associated

Forward-port to local commits to the update

Reset current HEAD to the specified stat

Remove files from the working tree and f

Show various types of objects

Show the working tree status

Create, list, delete or verify a tag obj



# Finding Help

Syntax:

```
git <command> --help
```

example

```
$ git commit -help
```

```
$ git commit -h
```



# Configuring GIT

```
$ git config -h  
$ git config -l
```

The very first thing you would do is set global options for your git installation. This includes letting git know who you are



# Setting Global Configs

```
$ git config --global user.name "First Last"
$ git config --global user.email "abc@xyz.com"
$ git config --global color.ui auto
$ git config --global core.editor vim
```

Write to  
global config  
Instead of  
repo specific





# Setting up the learning paths

```
$ cd learn
```

```
$ mkdir git
```

```
$ cd git
```



# Creating a repository

Lets create a empty git repository from scratch

```
$ git init --bare myapp.git
```



# --bare

- No working tree
- Can not edit, add files etc.
- No .git dir, everything under the main dir
- Servers as a central repository
- Used to share code with others



# Importing Existing Code to GIT

If you have existing code which you would like to version control, import it to git without using `--bare` option

```
$ git init myapp
```



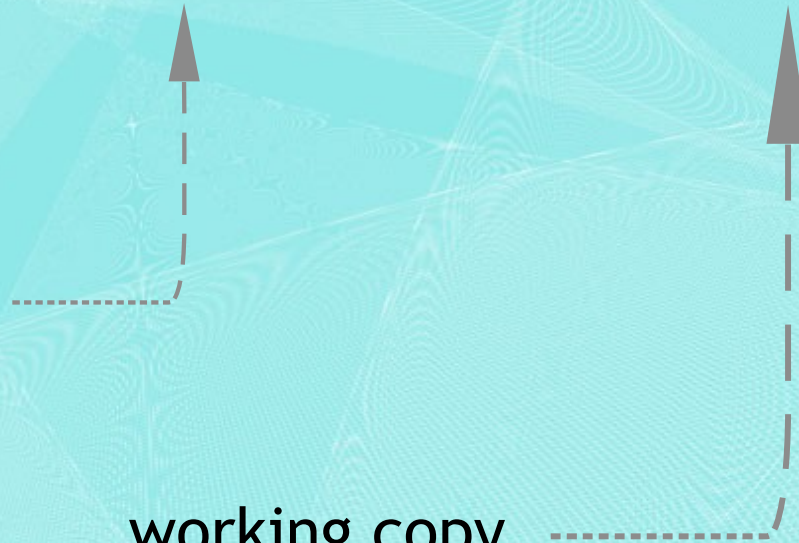
# Creating a working copy

```
$ cd learn/git
```

```
$ git clone --local myapp.git myapp
```

Local  
path

working copy





# Examine Working Copy

```
$ cd myapp  
$ ls -a .git/
```

```
Gouravs-MacBook-Pro:myapp gouravshah$ ls -a .git/  
.  
..  
HEAD  
branches  
config  
description  
hooks  
info  
objects  
refs
```