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## An Introduction

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# Introduction

## Why Python:



### “Hello, World”

- **C**

```
#include <stdio.h>

int main(int argc, char ** argv)
{
    printf("Hello, World!\n");
}
```
- **Java**

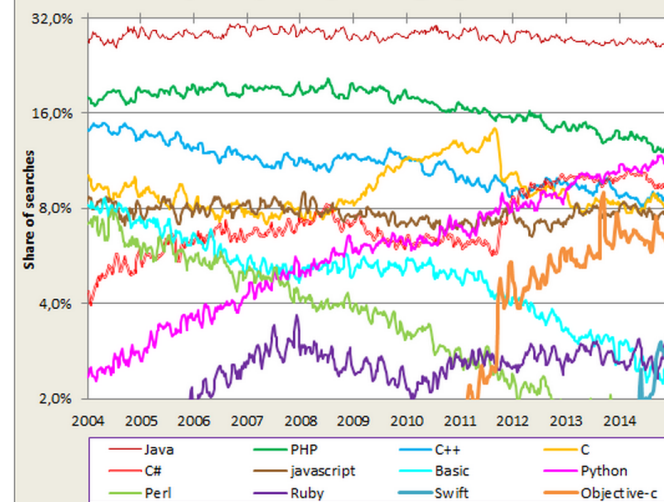
```
public class Hello
{
    public static void main(String argv[])
    {
        System.out.println("Hello, World!");
    }
}
```
- **now in Python**

```
print "Hello, World!"
```

Monday, June 14, 2010

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PyPL Popularity of Language Index



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## Why Linux:

- Because everyone cannot afford Windows or MacOS
- Its free, Open source
- No insane license restrictions
- Immune to Windows malware, and you don't need anti-malware software

## Why Git:

If you have been saving file like this all your life

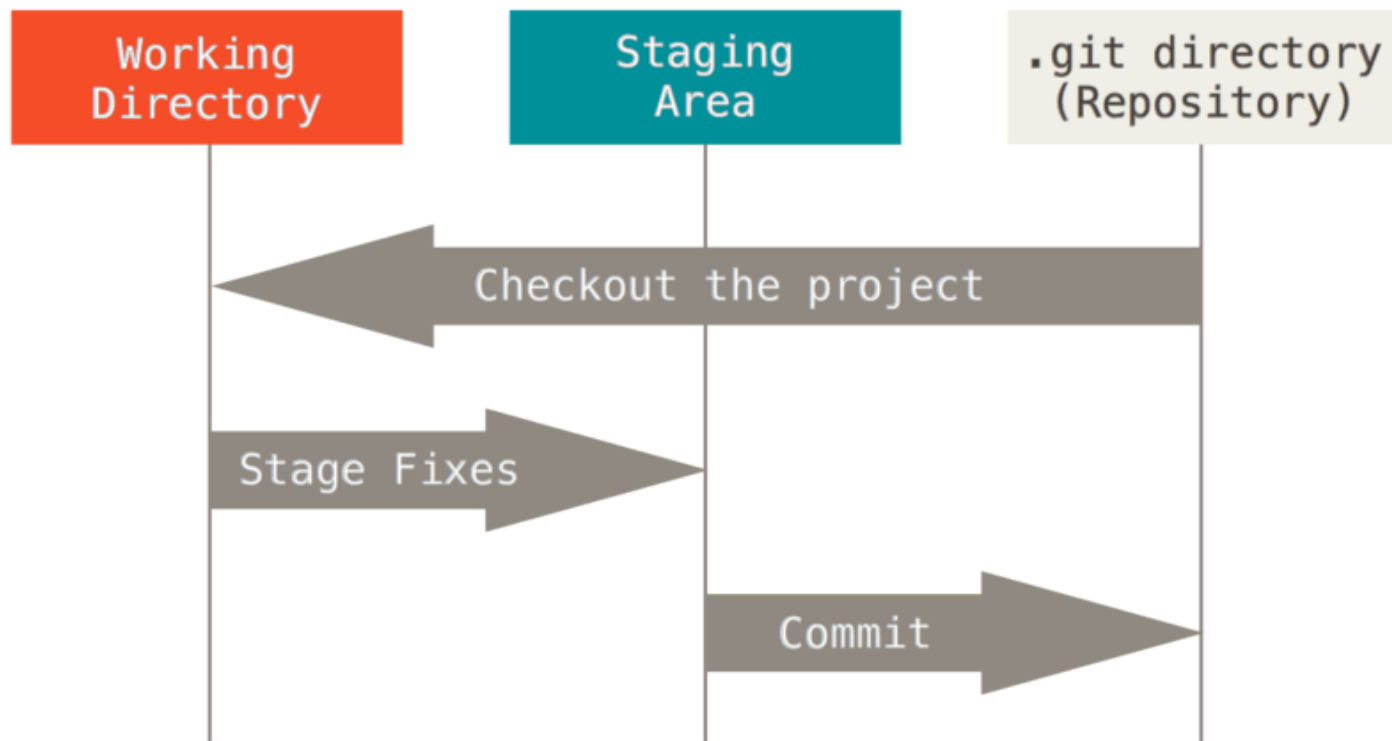
- myfile\_version1.txt
- myfile\_version2.txt
- myfile\_new.txt
- myfile\_wrong.txt
- myfile\_correct.txt
- myfile\_original.txt
- myfile\_I\_am\_running\_out\_of\_names.txt
- myfile\_I\_dont\_want\_to\_live\_anymore.txt
- myfile\_arghh\_version3.txt

then please embrace GIT.

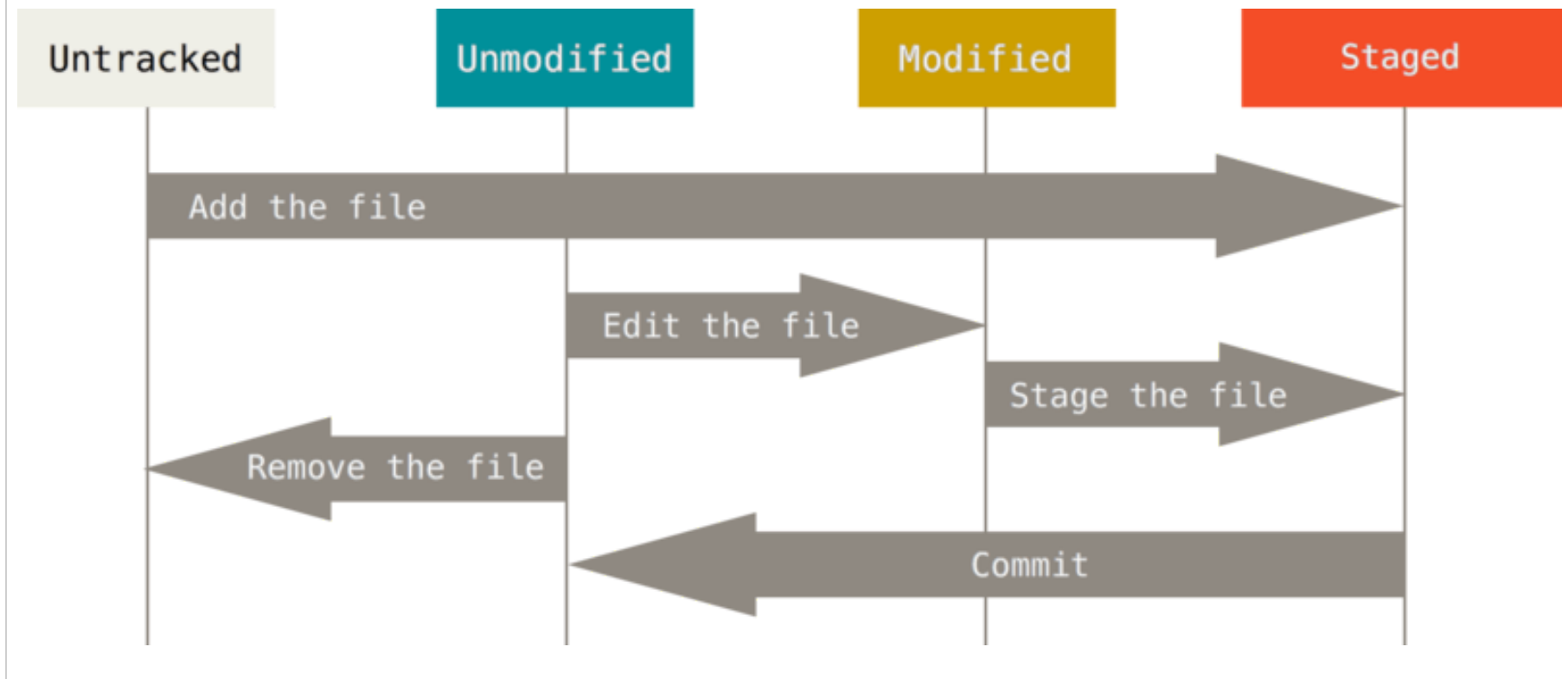
## What is Git?

- Git is a **version control** system for tracking changes in computer files and coordinating work on those files among multiple people.
- It is primarily used for **source code management** in software development, but it can be used to keep track of changes in any set of files.

## The three States in Git



## Recording Changes to the Repository



## Let's get started!

First things first! Git needs to know you.

```
git config --global user.name "Your Name"
git config --global user.email "your_email@whatever.com"
```

Customary "Hello, World!" program. Execute the command

```
mkdir hello
cd hello
```

Open a file, type the following in it, and save it as "hello.py".

```
print "Hello, World!"
```

Check Git status

```
git status
```

The output should be:

On branch master

No commits yet

Untracked files: (use "git add ..." to include in what will be committed)

```
hello.py
```

nothing added to commit but untracked files present (use "git add" to track)

```
<script>
  var link = document.createElement( 'link' );
  link.rel = 'stylesheet';
  link.type = 'text/css';
  link.href = window.location.search.match( /print-pdf/gi ) ? 'css/print/pdf.css' : 'css/print/paper.css';
  document.getElementsByTagName( 'head' )[0].appendChild( link );
</script>
```