

# Getting Started with Git

---

GET UP AND RUNNING WITH GIT



**Aaron Stewart**

SERVICES PROGRAM ARCHITECT

[www.github.com/a-a-ron](https://www.github.com/a-a-ron)







**git**

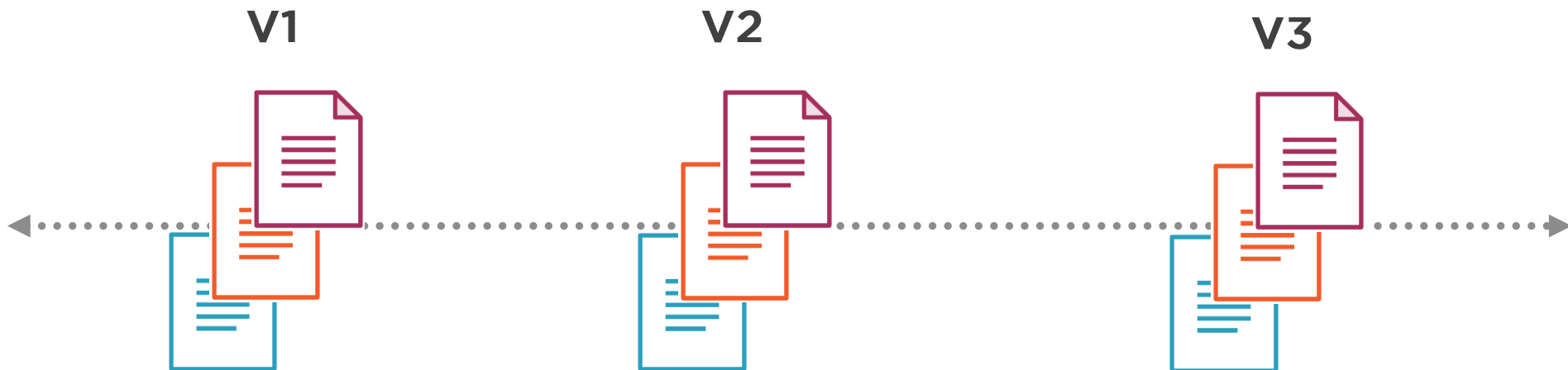


# git



# What is Git?

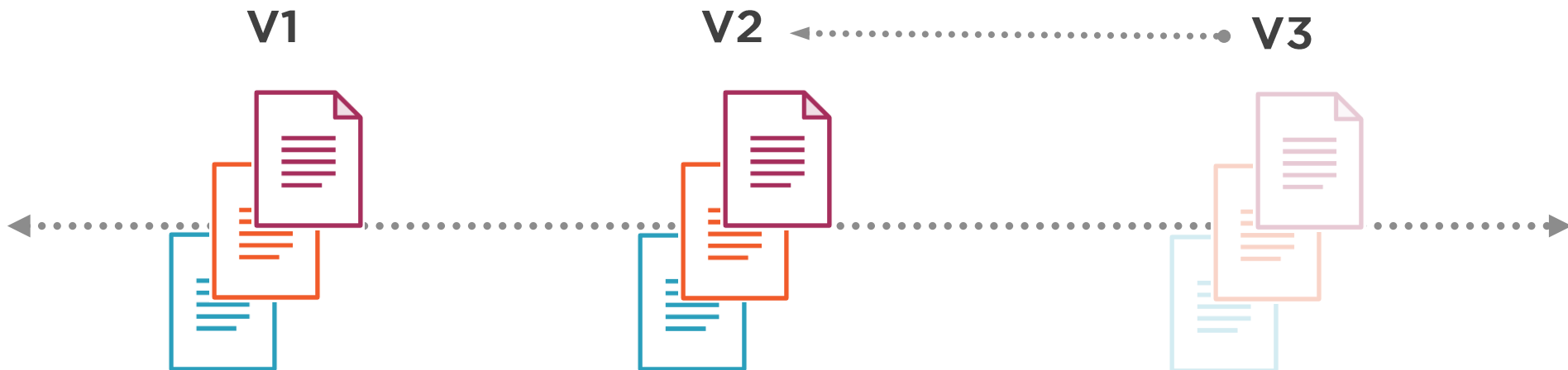
## Version Control System



# What is Git?

## Version Control System

- Software designed to record changes made to files over time
- Ability to revert back to a previous file version or project version



# What is Git?

## Version Control System

- Software designed to record changes made to files over time
- Ability to revert back to a previous file version or project version
- Compare changes made to files from one version to another

V1



++++++  
Date:  
Author:  
Message:



++++++  
Date:  
Author:  
Message:



+++++++  
Date:  
Author:  
Message:

V  
2



++-----  
Date:  
Author:  
Message:



+++++++-----  
Date:  
Author:  
Message:



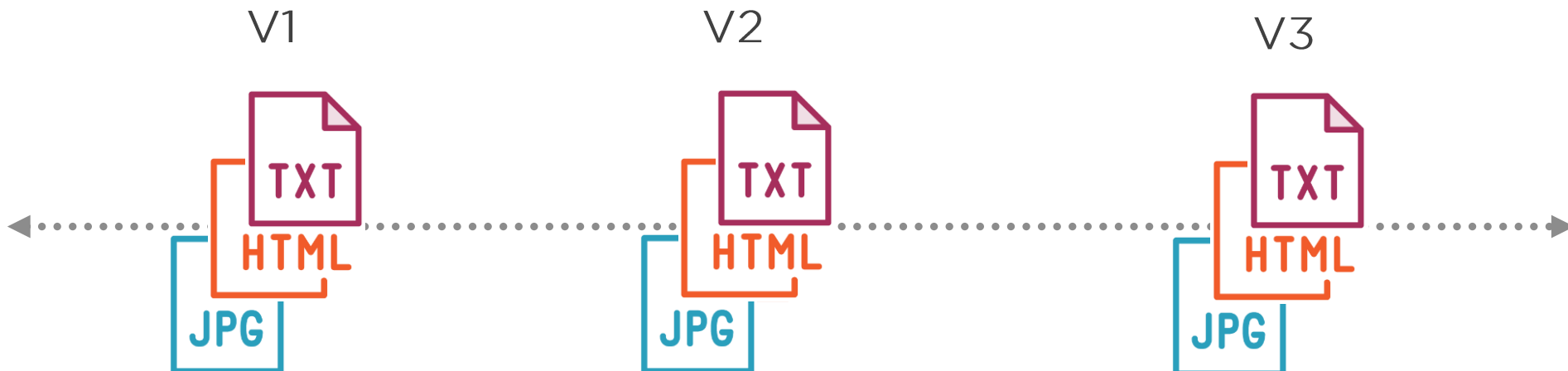
+-----  
Date:  
Author:  
Message:



# What is Git?

## Version Control System

- Software designed to record changes made to files over time
- Ability to revert back to a previous file version or project version
- Compare changes made to files from one version to another
- Version control any plain text file, not just source code.





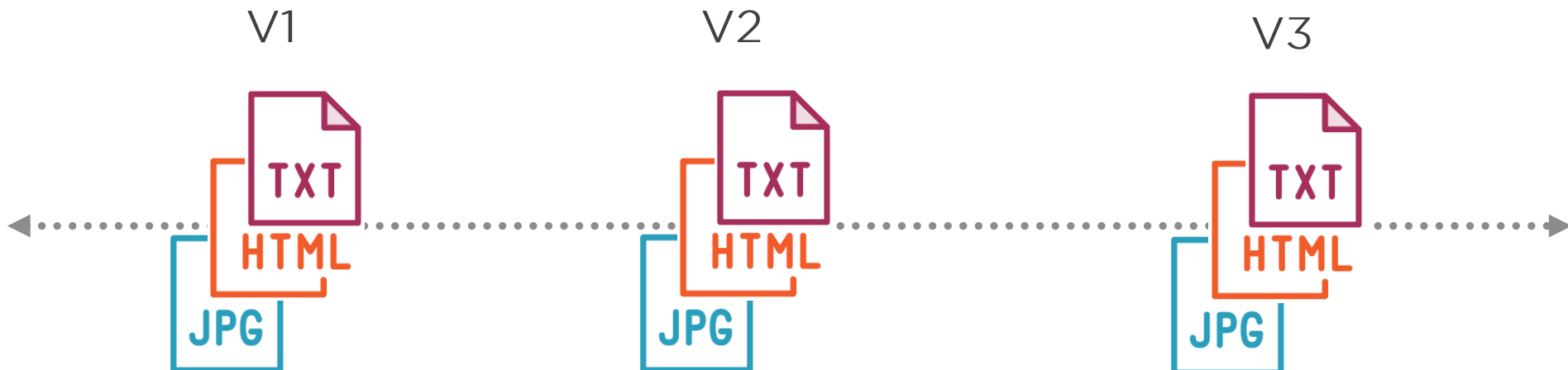
# What is Git?

**Version Control System**

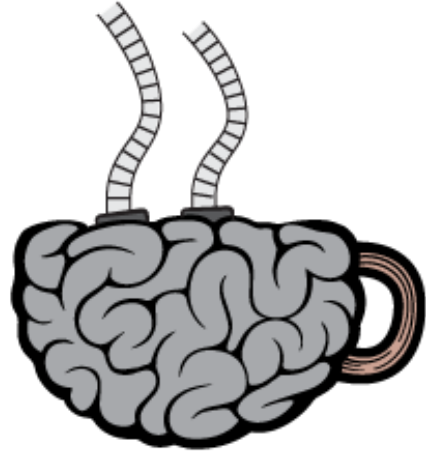
=



+

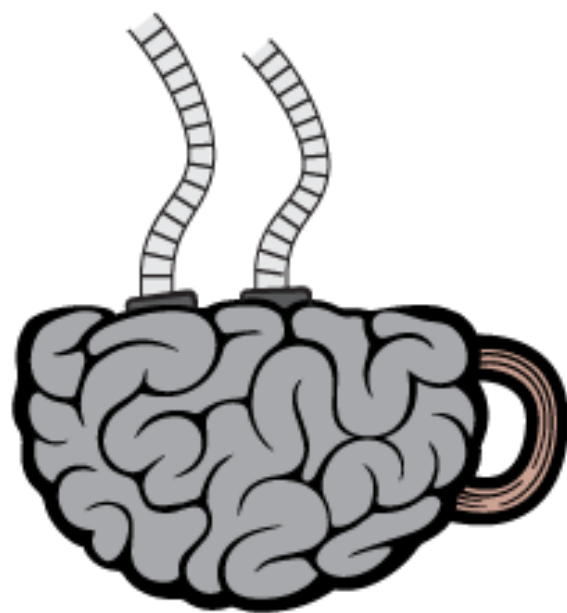






**WIRED BRAIN**  
— COFFEE —



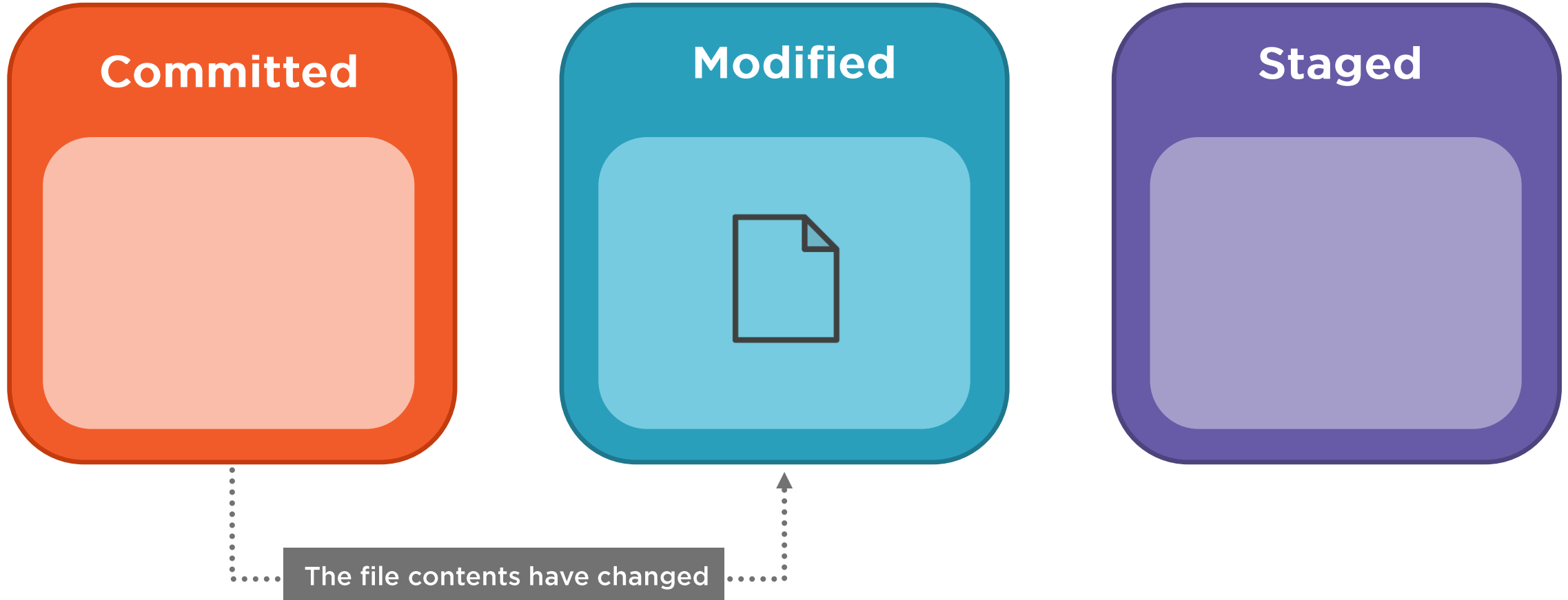


**WIRED BRAIN**

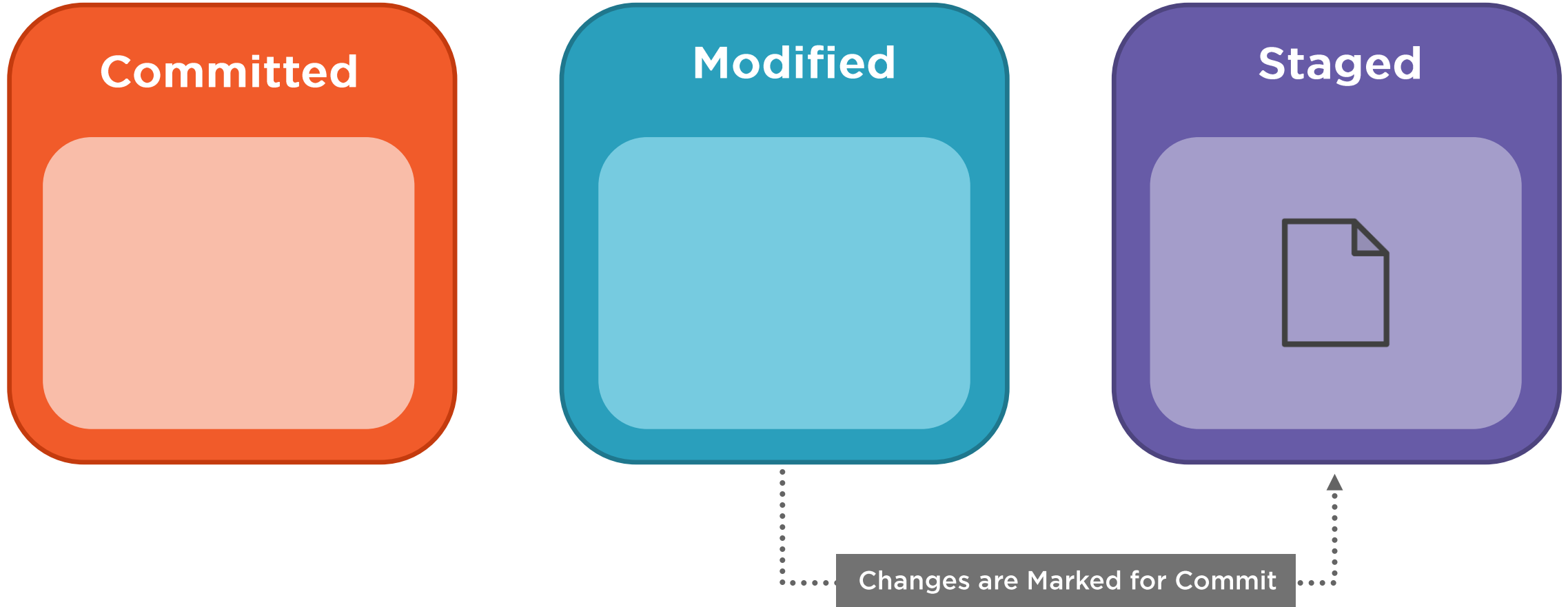
— COFFEE —



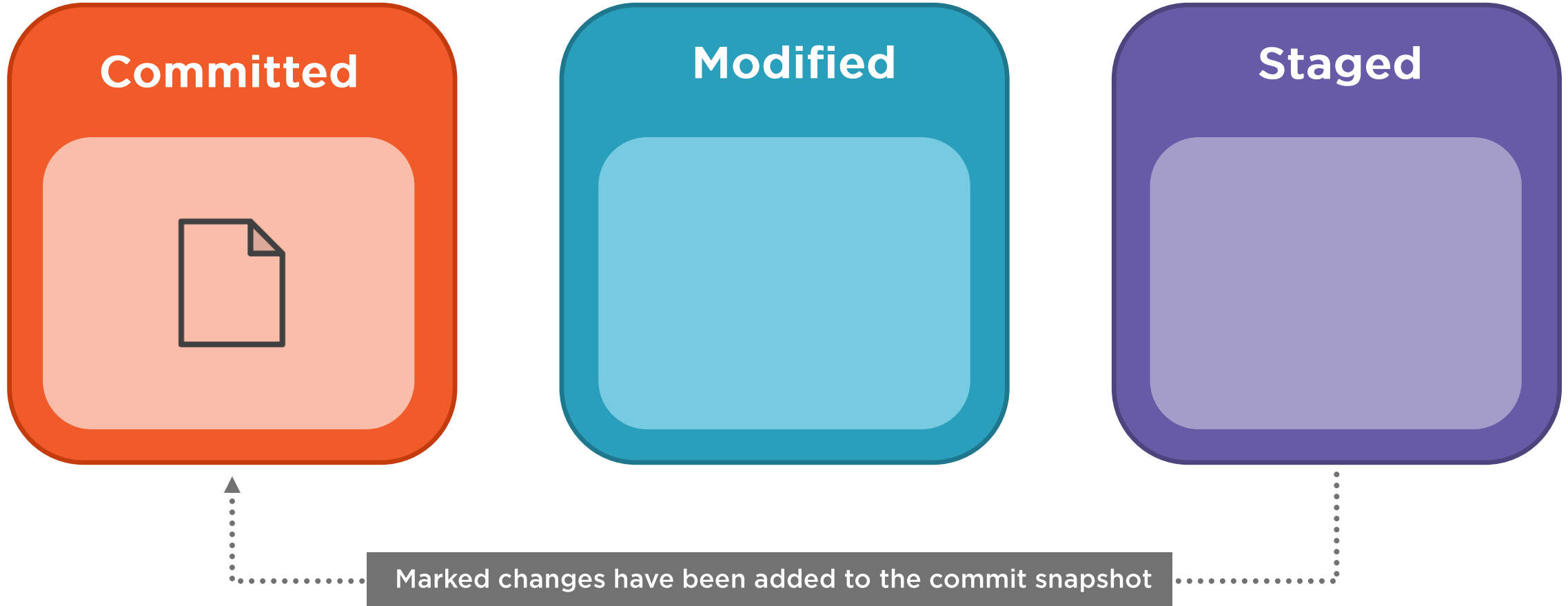
# The Three Stages of a File



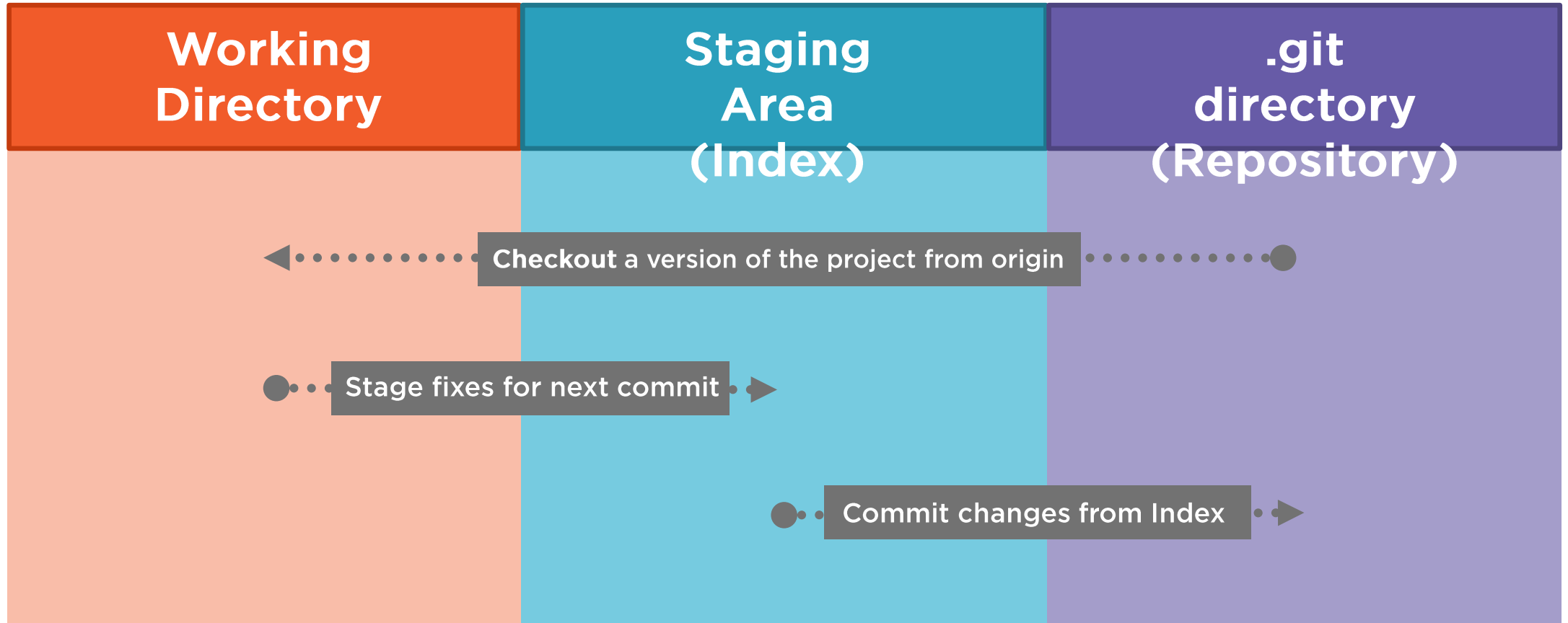
# The Three Stages of a File



# The Three Stages of a File



# The Three States of a Git Project

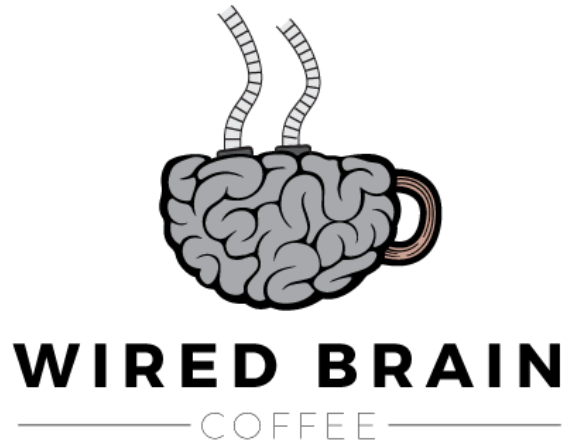




# The Three States of a Git Project

Working Directory	Staging Area (Index)	.git directory (Repository)
Changes to files since the last checkout have not yet been added to the staging area for commit	Files in this state have been modified and added to be staged in the next commit snapshot	Files in this state are committed and recorded to the project as version snapshots





- Install Git on Linux, Windows and Mac systems
- Configure Git
- Initialize a new Git project
- Code hosting providers
- Create an account
- Push our Git project to a code hosting provider



# Using the Command Line

## Run Commands

Type a specific command and then hit ENTER to execute

## Windows

Command prompt or Powershell

## Mac and Linux

Terminal



# Using the Command Line

pwd

**Print working directory**

cd

**Change working directory ( cd .. or cd ~)**

ls

**List files in a directory ( dir for windows users)**

mkdir

**Create a new empty folder**



# Using the Command Line

pwd

**Print working directory**

cd

**Change working directory ( cd .. or cd ~)**

ls

**List files in a directory ( dir for windows users)**

touch

**Create a new empty file (copy con for windows users)**



# Install Git on Linux

## Debian

```
sudo apt-get install git
```

## Fedora

```
sudo yum install git
```



# Install Git on Windows

<https://git-scm.com/download/win>



# Install Git on Mac

`https://git-scm.com/download/mac`

**Homebrew**

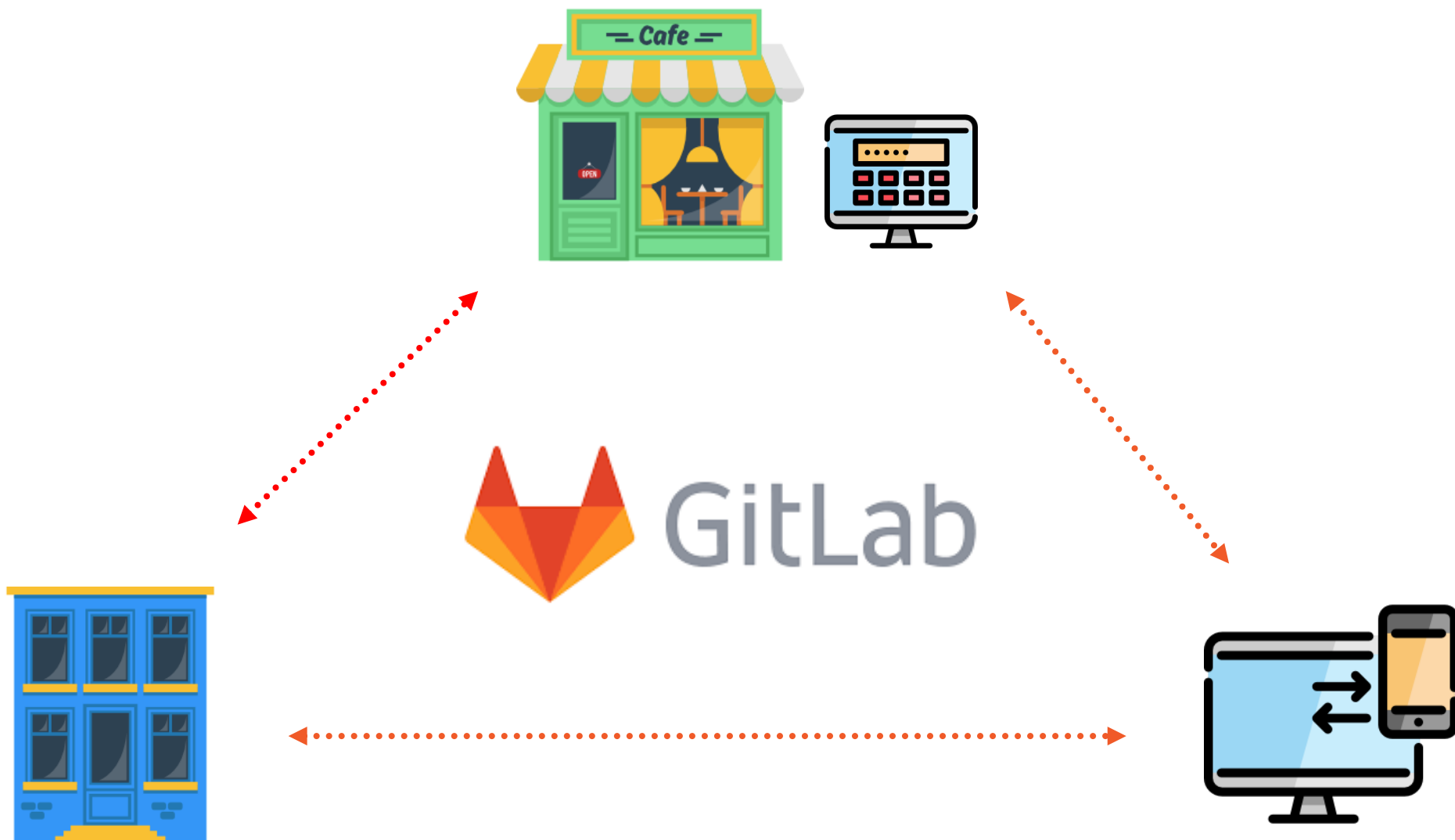
`brew install git`

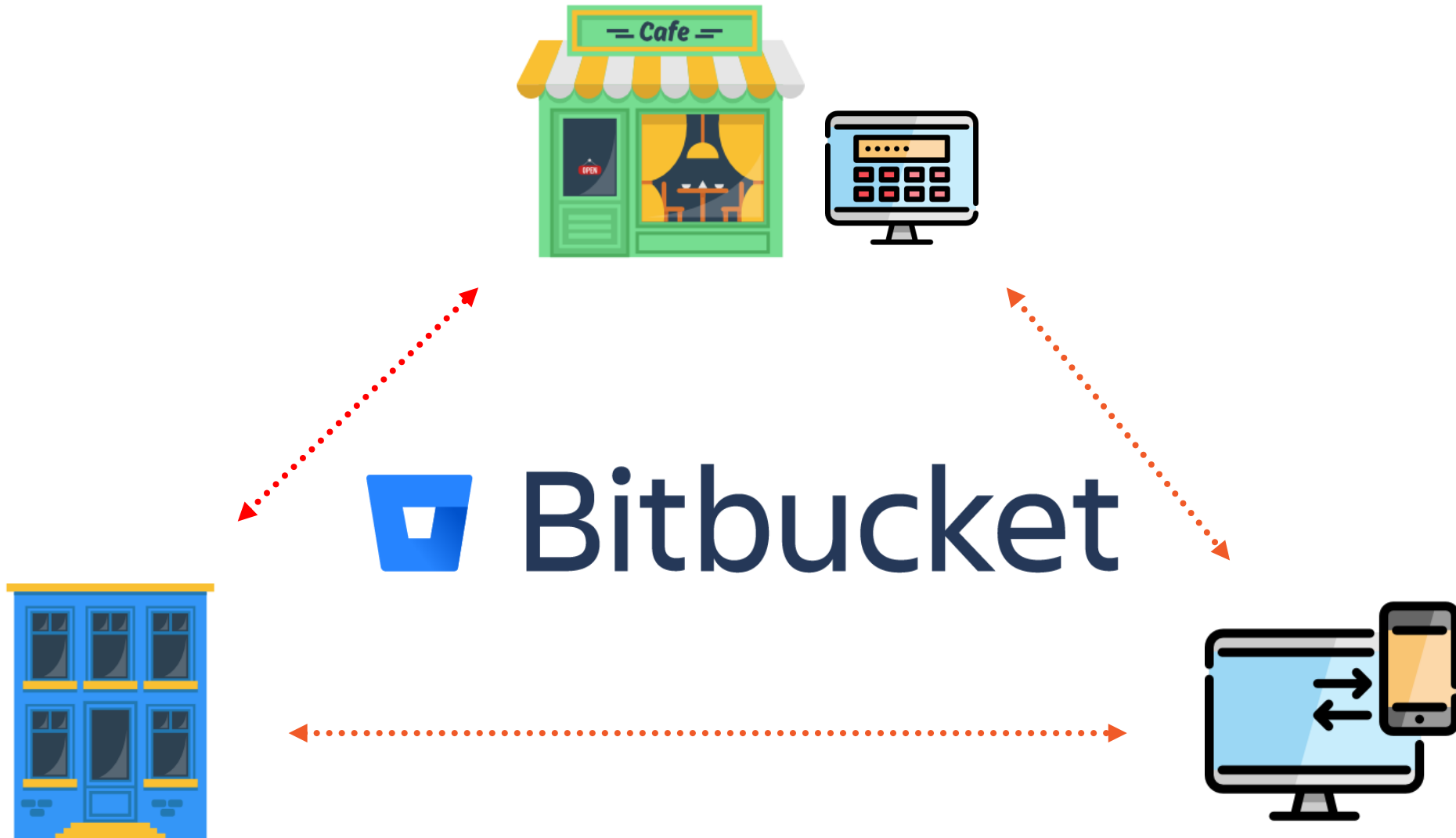
















# Summary



Install Git on Linux, Windows, and Mac

Configure Git

Initialize a Git repository

Git helper guides

Introduction to code hosting providers  
(GitHub, GitLab, Bitbucket, etc.)

Push our local repository to a code  
hosting provider

