Version control

Getting started with GIT

AGENDA

- What is version control
- What is GIT
- How to use it

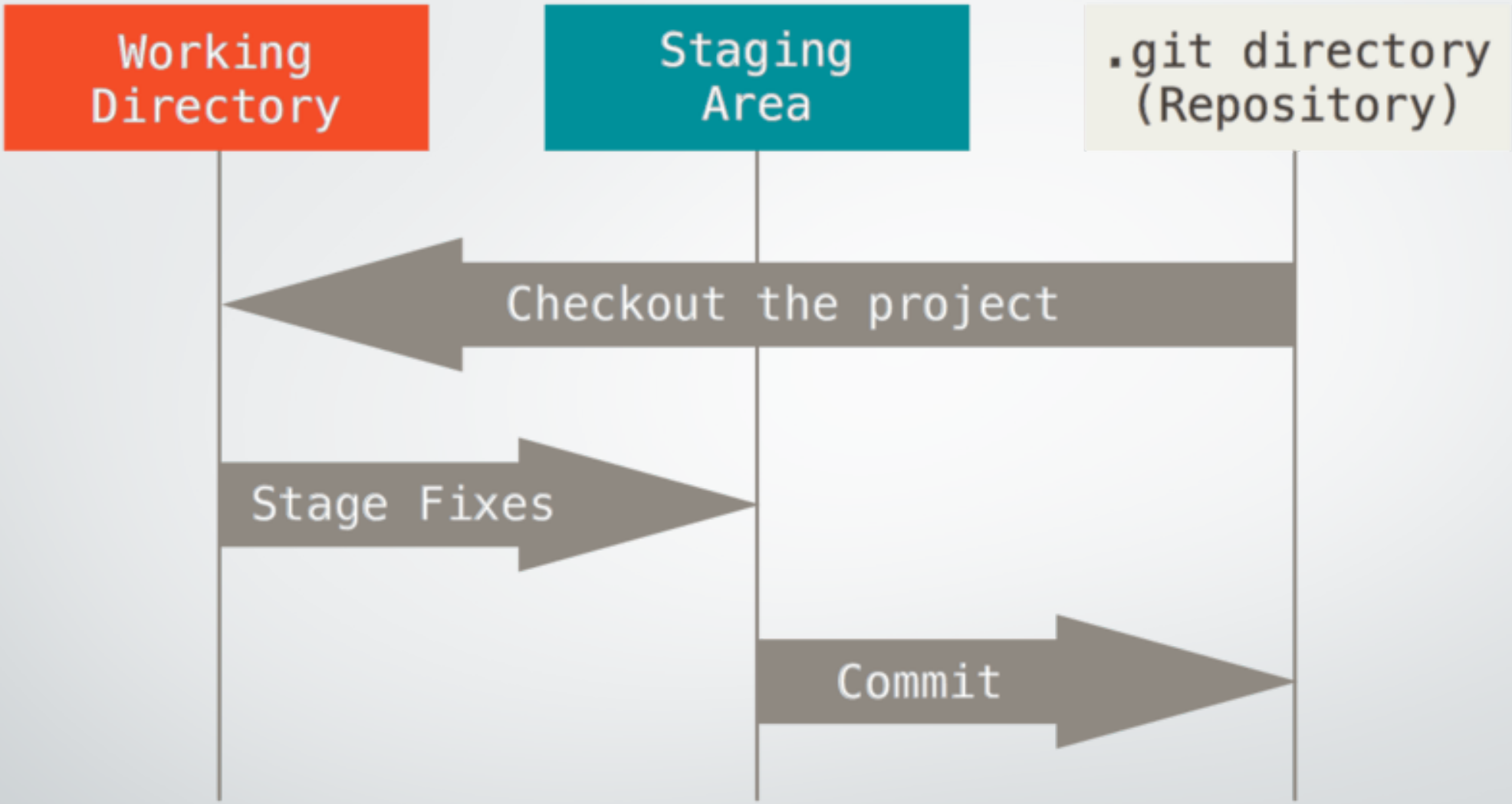
What is version control?

- Version control systems are a category of software tools that help a software team manage changes to source code over time.
- Version control software keeps track of every modification to the code in a special kind of database. If a mistake is made, developers can turn back the clock and compare earlier versions of the code to help fix the mistake while minimising disruption to all team members.

What is GIT?

- By far, the most widely used modern version control system in the world today is Git.
- A staggering number of software projects rely on Git for version control, including commercial projects as well as open source.

EVOZON



How GIT works

Installing GIT on Windows

1. Download GIT for Win
2. Run the installer
3. Open GitBash
4. Configure your Git:

```
$ git config --global user.name "Emma Paris"
 $ git config --global user.email "eparis@atlassian.com
```

Initialising a new repository: git init

- To create a new repo, you'll use the `git init` command. `git init` is a one-time command you use during the initial setup of a new repo. Executing this command will create a new `.git`subdirectory in your current working directory.

```
cd /path/to/your/existing/code
git init
```

Saving changes to the repository: git add and git commit

- Now that you have a repository cloned or initialised, you can commit file version changes to it. The following example assumes you have set up a project at `/path/to/project`. The steps being taken in this example are:

```
git add CommitTest.txt
git commit -m "added CommitTest.txt to the repo"
```

Configuration & set up: git config

- Once you have a remote repo setup, you will need to add a remote repo url to your local `git config`, and set an upstream branch for your local branches. The `git remote` command offers such utility.

```
$ git remote add origin https://github.com/user/repo.git
```

Pushing to remote repo

- Now you need to set the upstream branch and push the code

```
$ git push —set-upstream origin master
```

- The code is now on your remote repository

git-clone - Clone a repository into a new directory

- Clones a repository into a newly created directory, creates remote-tracking branches for each branch in the cloned repository, and creates and checks out an initial branch that is forked from the cloned repository's currently active branch

```
$ git clone https://github.com/user/repo
```