Introduction to Git

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Initial Setup

```
$ git config --global user.name "John Doe"

$ git config --global user.email johndoe@example.com
```

Clone

```
$ git clone repo_url
```

Stage, commit and push

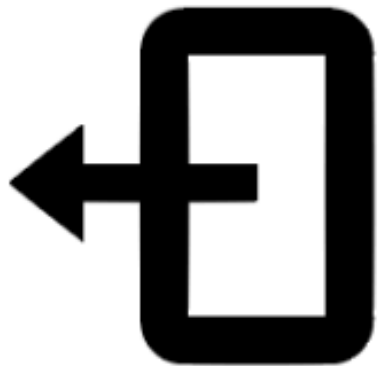| Stage	`git add repo/filename`
Commit	`git commit -m "commit message"`
Push	`git push`

In case of fire

1. git commit
2. git push
3. leave building

Gitignore (python example)

```
# Byte-compiled / optimized / DLL files
__pycache__/
*.py[cod]
*$py.class
```

Diff

```
$ git diff filename
```

Conflicts

Conflicts are solved

- automatically by git when they do not affect the same lines of code

- or manually by you when they affect the same line of code

Branch

Create a branch
```
$ git branch branch_name
```

Switch to that branch
```
$ git checkout branch_name
```

First commit on a branch
```
$ git push origin branch_name
$ git pull origin branch_name
```

GIT MERGE

Merge

Always merge the master into the dev branch first

- Step 1 : merge master into branch

  ```
  $ git merge master
  ```

- Step 2 : solve conflicts (if any)

- Step 3 : merge branch into master (no conflict this time)

  ```
  git checkout master
  git merge development
  ```