

# Merging

## Introduction

What is merging?

- merging joins the **HISTORY** of branches together
- so any changes in one branch are reflected in another

```
feature-1  E---F---G
           /
main      A---B---C---D
```

You *merge* INTO the branch you have currently checked out

```
git checkout main
```

```
git merge feature-1
```

```
feature-1  E---F---G
           /         \
main      A---B---C---D---H
```

## Merge Conflicts

When merging you can encounter conflicts.

These happen when:

- more than one person has edited the same line in a file
- if a line that was in use has been removed
- if a file that is in use has been deleted

The conflict **ONLY** affects the person doing the merge

If a merge conflict occurs... Git will

- **pause** the merge
- show the files that are conflicting
- ask the developer to **resolve** the conflict
- then complete the merge