Viewing the Commit History

coursera.org/learn/git-distributed-development/supplement/5feAU/viewing-the-commit-history

It is easy to display the history of commits with git using the command **git log**. For example, consider the following script which sets up a repository and then adds some files, modifies them and introduces four commits along the way:

```
#!/bin/bash
rm -rf git-test
mkdir git-test
cd git-test
git init
git config user.name "A Smart Guy"
git config user.email "asmartguy@linux.com"
echo file1 > file1
git add file1
git commit file1 -m "This is the first commit"
echo file2 > file2
git add file2
git commit . -m "This is the second commit"
echo file3 > file3
echo another line for file3 >> file3
git add.
git commit . -m "This is the third commit"
echo another line for file2 >> file2
git add.
git commit -a -m "This is the fourth commit"
```

If we then ask to see the log, we see:

\$ git log

commit 4b4bf2c5aa95b6746f56f9dfce0e4ec6bddad407

Author: A Smart Guy <asmartguy@linux.com>

Date: Thu Dec 31 13:50:15 2009 -0600

This is the fourth commit

commit 55eceacc9ab2b4fc1c806b26e79eca4429d8b52a

Author: A Smart Guy <asmartguy@linux.com>

Date: Thu Dec 31 13:50:15 2009 -0600

This is the third commit

commit f60c0c21764676beca75b7edc2f5f5e51b5dd404

Author: A Smart Guy <asmartguy@linux.com>

Date: Thu Dec 31 13:50:15 2009 -0600

This is the second commit

commit 712cbafa7ee0aaef03861b049ddc7865220b4e2c

Author: A Smart Guy <asmartguy@linux.com>

Date: Thu Dec 31 13:50:15 2009 -0600

This is the first commit

The commits are shown in reverse order of introduction. Even shorter, you can do:

\$ git log --pretty=oneline

4b4bf2c5aa95b6746f56f9dfce0e4ec6bddad407 This is the fourth commit

55eceacc9ab2b4fc1c806b26e79eca4429d8b52a This is the third commit

f60c0c21764676beca75b7edc2f5f5e51b5dd404 This is the second commit

712cbafa7ee0aaef03861b049ddc7865220b4e2c This is the first commit

You can also see the actual patches made with the **-p** option and can view only part of the history by specifying a particular commit, as in:

\$ git log -p f60c

commit f60c0c21764676beca75b7edc2f5f5e51b5dd404

Author: A Smart Guy <asmartguy@linux.com>

Date: Thu Dec 31 13:50:15 2009 -0600

This is the second commit

diff --git a/file2 b/file2

new file mode 100644

index 0000000..6c493ff

--- /dev/null

+++ b/file2

@@ -0,0 +1 @@

+file2

commit 712cbafa7ee0aaef03861b049ddc7865220b4e2c

Author: A Smart Guy <asmartguy@linux.com>

Date: Thu Dec 31 13:50:15 2009 -0600

This is the first commit

diff --git a/file1 b/file1

new file mode 100644

index 0000000..e212970

--- /dev/null

+++ b/file1

@@ -0,0 +1 @@

+file1

There are a lot of other options to **git log** which you can view by doing either **git help** log or **man git log**.