

Lab Report

ECPE 170 – Computer Systems and Networks – Fall 2012

Name: Erich Viebrock

Lab Topic: Version Control (Lab # 2)

Lab

Question #1:

Take a Screenshot (using the Ubuntu Screenshot tool) showing what the BitBucket source view looks like at this point.

Answer:

The screenshot shows a web browser window displaying the Bitbucket source view for the repository 'eviebrock / 2012_fall_ecpe170'. The browser's address bar shows the URL 'https://bitbucket.org/eviebrock/2012_fall_ecpe170/source'. The Bitbucket interface includes a navigation bar with 'Explore', 'Dashboard', 'Repositories', and the user 'Erich Viebrock'. A green banner at the top of the repository page states: 'This account has an unconfirmed email address. If you haven't received a confirmation, visit the email page to manage them.' Below this, the repository name 'eviebrock / 2012_fall_ecpe170' is shown, along with 'ECPE 170'. A 'Clone this repository' section provides the size (551 bytes) and the clone URL: 'https://eviebrock@bitbucket.org/eviebrock/2012_fall_ecpe170'. The 'Source' tab is selected, showing a table with columns 'Filename', 'Size', 'Date modified', and 'Message'. The table is currently empty, with the message 'No files or folders added to 2012_fall_ecpe170 yet.' at the bottom. The footer of the page contains copyright information for 2012 Atlassian and links to various services.

eviebrock / 2012_fall_ecpe170 / source — Bitbucket - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Lab 2: Version Control — ECS N... x eviebrock / 2012_fall_ecpe170 / s... x ECPE 170 Pre Lab #2 - erich.vieb... x

Atlassian, Inc. (US) | https://bitbucket.org/eviebrock/2012_fall_ecpe170/source — Bitbucket

Atlassian Home Documentation Support Blog Forums

Explore Dashboard Repositories Erich Viebrock owner/repo

↑ This account has an unconfirmed email address. If you haven't received a confirmation, visit the email page to manage them.

Overview Downloads (0) Pull requests (0) Source Commits Admin Forks/queues (0) Followers (1)

Invite RSS fork patch queue following

eviebrock / 2012_fall_ecpe170 ECPE 170 compare create pull request

Clone this repository (size: 551 bytes): HTTPS / SSH
\$ hg clone https://eviebrock@bitbucket.org/eviebrock/2012_fall_ecpe170

2012_fall_ecpe170 Browse at revision

Filename	Size	Date modified	Message
No files or folders added to 2012_fall_ecpe170 yet.			

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We run Django 1.3.1 / Piston 0.3dev / Git 1.7.10.3 / Hg 2.2.2 / Python 2.7.3 / bitbucket23 / 1 active session(s)

Question #2:

Take a Screenshot (using the Ubuntu Screenshot tool) showing what the BitBucket source view looks like at this point.

Answer:

The screenshot shows a web browser window displaying the BitBucket source view for the repository 'eviebrock / 2012_fall_ecpe170'. The browser's address bar shows the URL 'https://bitbucket.org/eviebrock/2012_fall_ecpe170/src'. The BitBucket interface includes a top navigation bar with links for 'Atlassian Home', 'Documentation', 'Support', 'Blog', and 'Forums'. Below this, a green banner indicates that the account's email address is unconfirmed. The repository page features tabs for 'Overview', 'Downloads (0)', 'Pull requests (0)', 'Source', 'Commits', and 'Admin'. The 'Source' tab is active, showing the repository name 'eviebrock / 2012_fall_ecpe170' and 'ECPE 170'. It provides cloning instructions for HTTPS and SSH, with the SSH command being '\$ hg clone https://eviebrock@bitbucket.org/eviebrock/2012_fall_ecpe170'. Below the cloning instructions, there is a section for the repository name '2012_fall_ecpe170' and a 'Browse at revision' button. A table with columns 'Filename', 'Size', 'Date modified', and 'Message' is shown, but it contains no files or folders. At the bottom of the page, there is a footer with copyright information for 2012 Atlassian, links to 'Terms of Service', 'Privacy', 'Report a Bug to Bitbucket', 'API', and 'Server Status', and social media links for 'Bitbucket Blog' and 'Twitter'.

eviebrock / 2012_fall_ecpe170 / source — Bitbucket - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Lab 2: Version Control — ECS N... x eviebrock / 2012_fall_ecpe170 / s... x ECPE 170 Pre Lab #2 - erich.vieb... x

Atlassian, Inc. (US) | https://bitbucket.org/eviebrock/2012_fall_ecpe170/src

Atlassian Home Documentation Support Blog Forums

Explore Dashboard Repositories Erich Viebrock owner/repo

This account has an unconfirmed email address. If you haven't received a confirmation, visit the [email page](#) to manage them.

Overview Downloads (0) Pull requests (0) Source Commits Admin Forks/queues (0) Followers (1)

invite RSS fork patch queue following

eviebrock / 2012_fall_ecpe170 ECPE 170

Clone this repository (size: 551 bytes): **HTTPS / SSH**

\$ hg clone https://eviebrock@bitbucket.org/eviebrock/2012_fall_ecpe170

2012_fall_ecpe170 Browse at revision

Filename	Size	Date modified	Message
No files or folders added to 2012_fall_ecpe170 yet.			

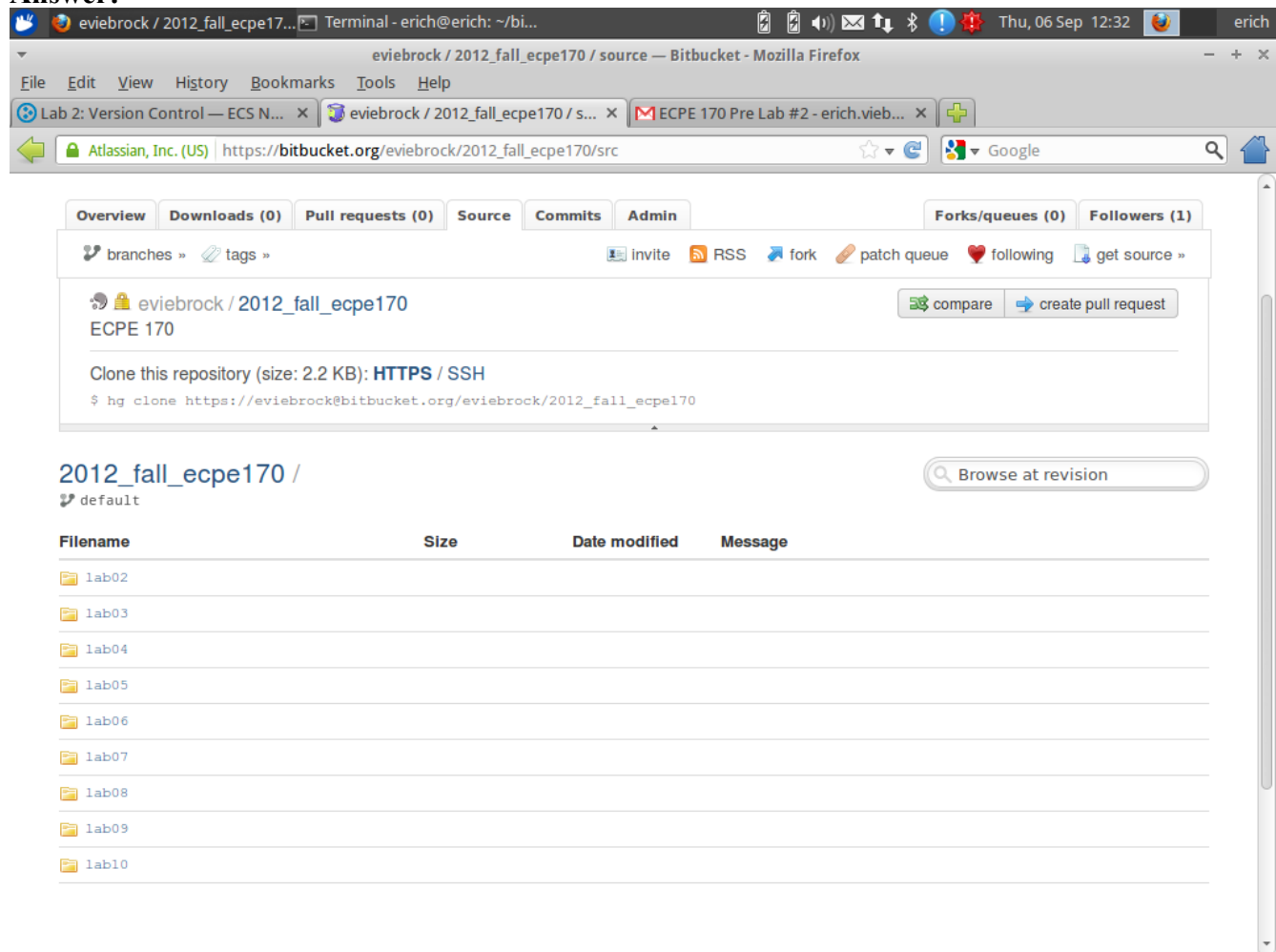
Copyright © 2012 Atlassian | [Terms of Service](#) | [Privacy](#) | [Report a Bug to Bitbucket](#) | [API](#) | [Server Status](#) [Bitbucket Blog](#) [Twitter](#)

We run Django 1.3.1 / Piston 0.3dev / Git 1.7.10.3 / Hg 2.2.2 / Python 2.7.3 / | bitbucket01 / 1 active session(s)

Question #3:

Take a Screenshot showing what the BitBucket source view looks like at this point.

Answer:



Question #4:

Take a Screenshot showing what the BitBucket version history looks like at this point (under the Commits tab).

Answer:

The screenshot shows a web browser window displaying the BitBucket interface. The address bar shows the URL https://bitbucket.org/eviebrock/2012_fall_ecpe170/changesets. The page title is "eviebrock / 2012_fall_ecpe170 / changesets — Bitbucket - Mozilla Firefox". The BitBucket logo is in the top left, and navigation links like "Explore", "Dashboard", and "Repositories" are in the top right. A green banner message states: "This account has an unconfirmed email address. If you haven't received a confirmation, visit the email page to manage them." Below this, the repository name "eviebrock / 2012_fall_ecpe170" and "ECPE 170" are shown. A "Clone this repository" section provides the size (2.2 KB) and links for "HTTPS" and "SSH". The "Commits" tab is selected, showing "Commits 1-1 of 1". A search bar "Find commits" is present. The commit list has columns for "Author", "Revision", "Message", and "Date". One commit is listed: Author "Erich Viebrock", Revision "2e6b45125297", Message "Creating initial directory structure for class repository", and Date "7 minutes ago". The footer contains copyright information for 2012 Atlassian, links to Terms of Service, Privacy, Report a Bug, API, and Server Status, and social media links for Bitbucket Blog and Twitter.

eviebrock / 2012_fall_ecpe170 / changesets — Bitbucket - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Lab 2: Version Control — ECS N... x eviebrock / 2012_fall_ecpe170 / c... x ECPE 170 Pre Lab #2 - erich.vieb... x

Atlassian, Inc. (US) https://bitbucket.org/eviebrock/2012_fall_ecpe170/changesets Google

bitbucket Explore Dashboard Repositories Erich Viebrock owner/repo

This account has an unconfirmed email address. If you haven't received a confirmation, visit the email page to manage them.

Overview Downloads (0) Pull requests (0) Source Commits Admin Forks/queues (0) Followers (1)

branches » tags » invite RSS fork patch queue following get source »

eviebrock / 2012_fall_ecpe170 ECPE 170 compare create pull request

Clone this repository (size: 2.2 KB): [HTTPS](#) / [SSH](#)

\$ hg clone https://eviebrock@bitbucket.org/eviebrock/2012_fall_ecpe170

Commits 1-1 of 1 Find commits

Author	Revision	Message	Date
Erich Viebrock	2e6b45125297	Creating initial directory structure for class repository	7 minutes ago

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We run Django 1.3.1 / Piston 0.3dev / Git 1.7.10.3 / Hg 2.2.2 / Python 2.7.3 / | bitbucket24 / 1 active session(s)

Question #5:

Take a Screenshot showing what the BitBucket version history looks like at this point.

Answer:

The screenshot shows a web browser window displaying the BitBucket repository page for 'eviebrock / 2012_fall_ecpe170'. The browser's address bar shows the URL 'https://bitbucket.org/eviebrock/2012_fall_ecpe170/changesets'. The page header includes the BitBucket logo and navigation links like 'Explore', 'Dashboard', and 'Repositories'. A green banner at the top of the repository page states: 'This account has an unconfirmed email address. If you haven't received a confirmation, visit the email page to manage them.'

The repository overview section shows the repository name 'eviebrock / 2012_fall_ecpe170' and 'ECPE 170'. It includes a 'Clone this repository' section with the size '2.7 KB' and links for 'HTTPS' and 'SSH'. The SSH command is: `$ hg clone https://eviebrock@bitbucket.org/eviebrock/2012_fall_ecpe170`.

The 'Commits' tab is selected, showing a list of commits. The list is titled 'Commits 1-2 of 2' and includes a search bar 'Find commits'. The commit history is as follows:

Author	Revision	Message	Date
Erich Viebrock	ccb2570fc74a	Lab 2: Added file on why version control is awesome	46 seconds ago
Erich Viebrock	2e6b45125297	Creating initial directory structure for class repository	18 minutes ago

The footer of the page contains copyright information for 2012 Atlassian, links to 'Terms of Service', 'Privacy', 'Report a Bug to Bitbucket', 'API', and 'Server Status', and links to 'Bitbucket Blog' and 'Twitter'. It also mentions the software stack: 'We run Django 1.3.1 / Piston 0.3dev / Git 1.7.10.3 / Hg 2.2.2 / Python 2.7.3 / bitbucket22 / 1 active session(s)'.

Question #6:

What does the line starting in --- represent?

Answer:

The line starting in “---” represents the version saved to Mecerual.

Question #7:

What does the line starting in +++ represent?

Answer:

The line starting in “+++” represents the version saved locally.

Question #8:

What do the lines starting in + represent?

Answer:

The lines starting in “+” represent the newly added lines to the file.

Question #9:

Can you guess what a line starting in - would represent? (Depending on the edits you made, you might have a few of these lines too).

Answer:

The lines starting in “-” represent the newly deleted lines to the file.

Question #10:

What benefits would a large team of developers get from version control? Identify at least two.

Answer:

1. Back ups
2. Multiple people working on the same files simultaneously

Question #11:

What benefits would a single developer (working alone) get from version control? Identify at least two.

Answer:

1. Back ups
2. Have multiple revisions

Question #12:

What kind of files should you put in version control?

Answer:

1. Source code files
2. VHDL and Verilog files
3. Matlab script files

Question #13:

What kind of files should you **not** put in version control? Why?

Answer:

1. Binary data
 2. Anything auto-generated by the compiler
 3. Text editor temp files
- They take up space, and can be auto-generated in a split second.

Question #14:

Make a table that briefly summarizes the following fundamental hg commands:

hg help, hg add, hg commit, hg push, hg pull, hg update, hg status, hg diff, hg merge

Answer:

Command	Description
hg help	Displays a list of commands and uses for them.
hg add	Schedule files to be added to the version control repository.
hg commit	Commit changes to files to the given repository.
hg push	Push changes from local repository to cloud repository.
hg pull	Pull changes from cloud repository to local repository.
hg update	Update repository's working directory with specified changeset.
hg status	Show status of files in repository.
hg diff	Show differences between revisions and previous files.
hg merge	Current working directory is updated with all changes made in requested revision.

Question #15:

What is the difference between a commit and a push?

Answer:

The difference between a commit and push is a commit is used for commenting on changes, whereas a push sends changes to a different repository.

Question #16:

Why is it better to use hg cp instead of plain-old regular cp to copy a file within the repository?

Answer:

It is better to use "hg cp" instead of "cp", because hg cp preserves version history.

Lab Report - Wrapup

Question #1

What was the best aspect of this lab?

Answer:

The best part about this lab was easy workflow from directions to command prompt.

Question #2

What was the worst aspect of this lab?

Answer:

The worst part about this lab was finding a difference between hg commit and hg push.

Question #3

How would you suggest improving this lab in future semesters?

Answer:

To improve this lab for future semesters, I would recommend extending this lab to two class periods. Working with new software is always challenging.