# Lab Report

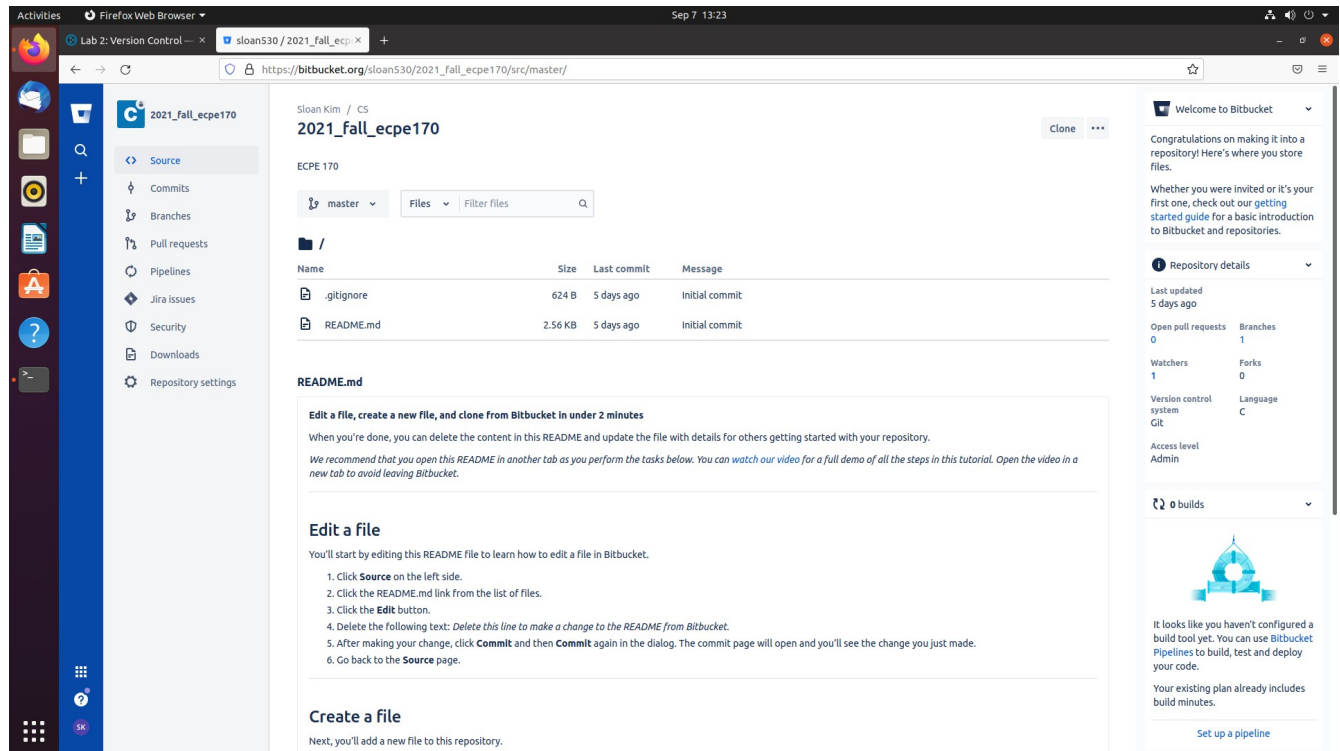## ECPE 170 – Computer Systems and Networks – Fall 2021

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**Lab Topic:**   Version Control  (Lab #: 2)

**Question #1:**
Take a Screenshot (using the Ubuntu Screenshot tool) showing what the BitBucket source view looks like at this point.
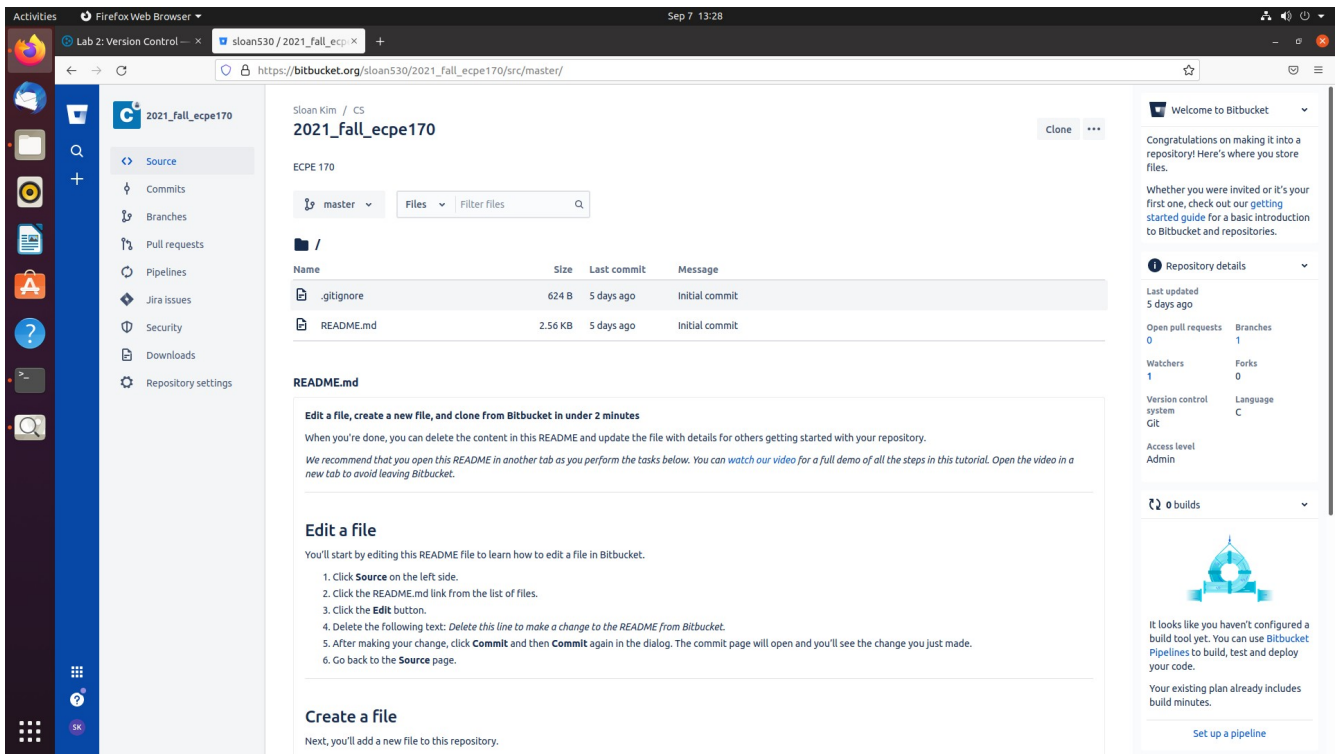**Answer:**



**Question #2:**
Take a Screenshot (using the Ubuntu Screenshot tool) showing what the BitBucket source view looks like at this point.
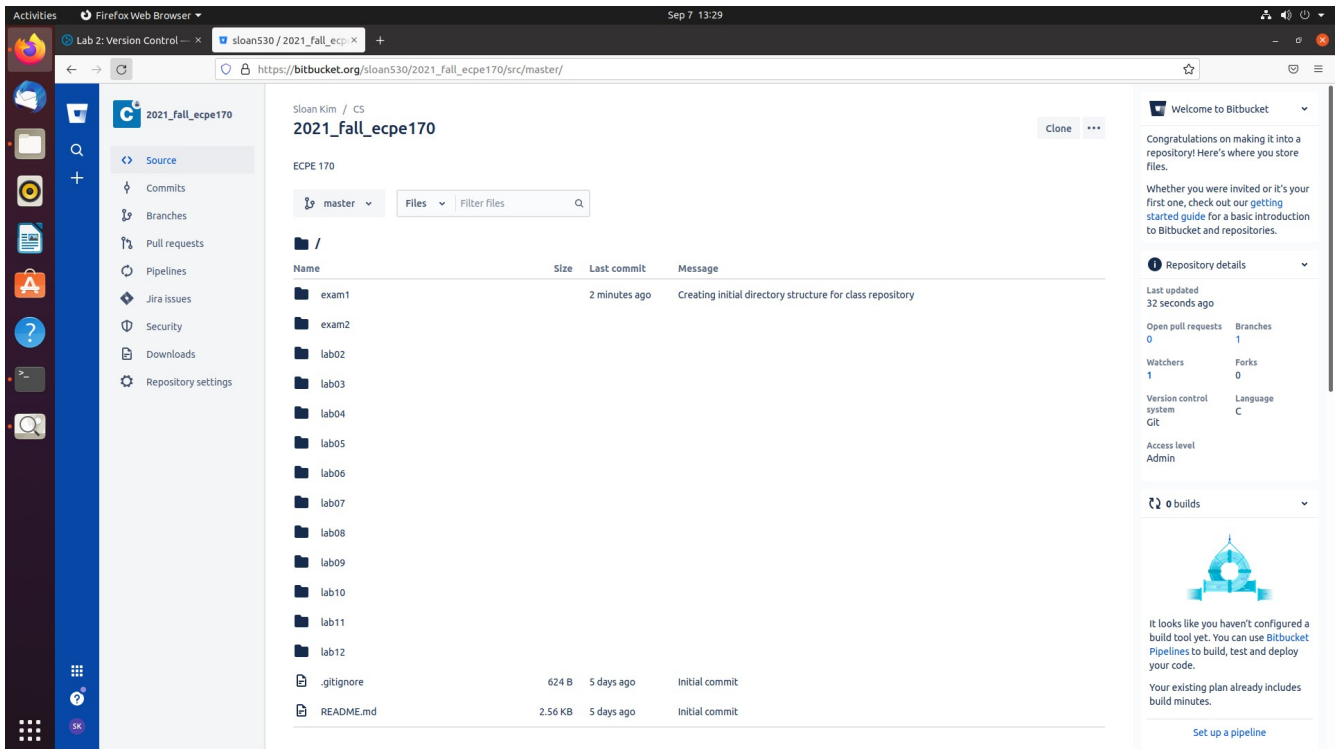**Answer:**

**Question #3:**
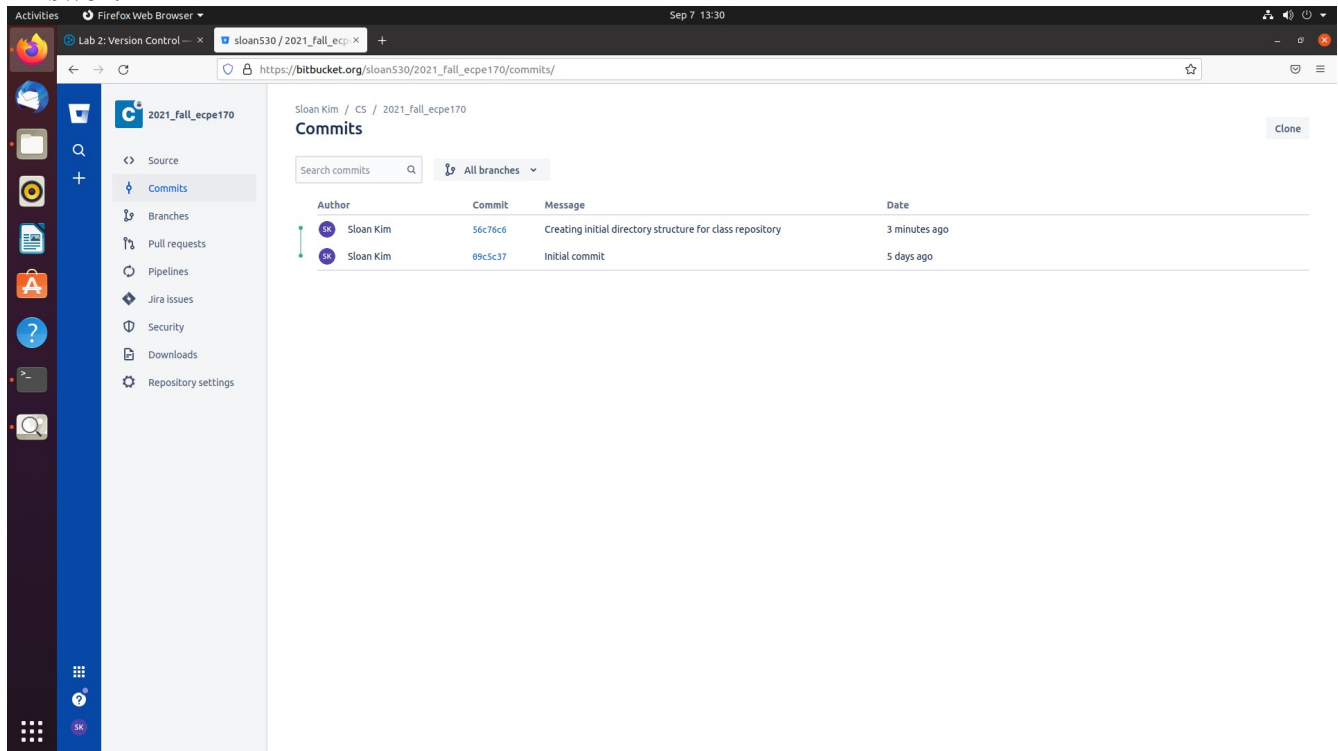Take a Screenshot showing what the BitBucket source view looks like at this point.
**Answer:**



**Question #4:**
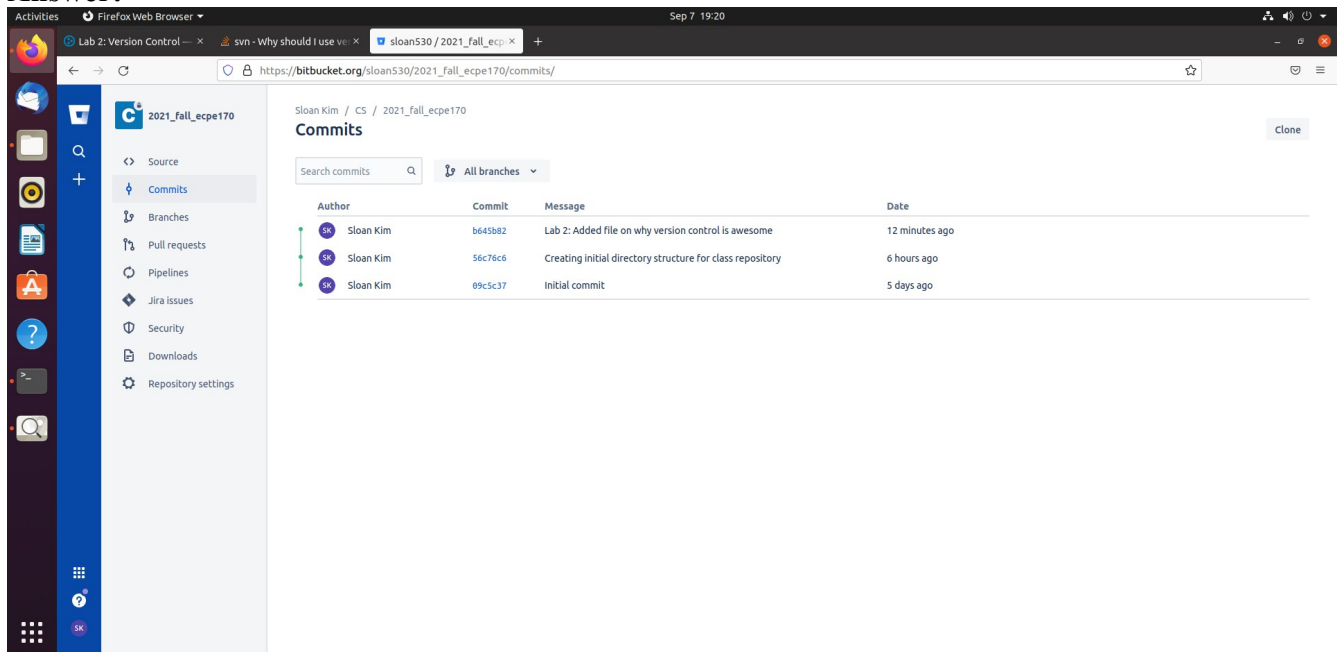Take a Screenshot showing what the BitBucket version history looks like at this point (under the Commits tab)

**Answer:**



**Question #5:**
Take a Screenshot showing what the BitBucket version history looks like at this point (under the Commits tab)

**Answer:**



**Question #6:**
What does the line starting in --- represent?

**Answer:**
It assigns symbol - to diff input source which are changes from a/lab02/reasons_to_use_vcs.txt.

**Question #7:**
What does the line starting in +++ represent?
**Answer:**
It assigns symbol + to diff input source which are changes from b/lab02/reasons_to_use_vcs.txt.

**Question #8:**
What do the lines starting in + represent?
**Answer:**
The line after + is from b/lab02/reasons_to_use_vcs.txt.

**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 line after – is from a/lab02/reasons_to_use_vcs.txt.

**Question #10:**
What benefits would a large team of developers get from version control? Identify at least two.
**Answer:**
It is easier to see who wrote the code for certain part.
It allows to branch and merge the differences created by multiple developers.

**Question #11:**
What benefits would a single developer (working alone) get from version control? Identify at least two.
**Answer:**
It allows you to experiment with codes.
It allows you to revert the mistakes and broken code.

**Question #12:**
What kind of files should you put in version control?
**Answer:**
Program source code, verilog /VHDL, matlab, html, server configuration files

**Question #13:**
What kind of files should you **not** put in version control? Why?
**Answer:**
Binary data, executables, anything auto generated by compiler, text editor temp files.
You cannot see the changes made in the binary data. Auto-generated files create noise that makes it harder to focus on the real changes.

**Question #14:**
What is the difference between an add, commit and a push?
**Answer:**
*add* adds your modified files to the queue to be committed later.
*commit* commits the file that has been added and creates a new revision with a log. You can do both add and commit by git commit -a.
*push* pushes your changes to the remote repository.

**Question #15:**
Why is it better to use git mv instead of plain-old regular mv to copy a file within the repository?
**Answer:**
Because git mv preserve version history meaning you can see the changes and history of the file.