

Lab 3: Git Version Control

CSE 2100-001

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1 Objective

Create a BitBucket account and import the course GitHub repository using the BitBucket web interface. Once you have the repository imported into BitBucket, clone it onto your Pi using the *git clone* command. Finally, modify the *hello world* program so that it instead prints "Hello UTA", and push the result to your BitBucket account. Demonstrate your work by running the modified program and displaying the source code on the BitBucket web interface.

1.1 Definitions

git clone : a git utility that downloads an existing Git repository from the cloud to a local directory on the computer.

git push : a git utility that adds any modifications made to the files or source code on the local repository to the existing source repository.

git pull : a git utility that fetches and downloads content from a source repository and updates the local repository to match the same content simultaneously.

git add : a git utility that tracks any change in the working directory and adds to the staging area for future commits.

git commit : a git utility that saves any updated versions of source code or files to the local repository.

local repository : a copy of the source repository on a physical machine on which updates and changes are made.

remote repository : the central code base of source files hosted on the server through which files are retrieved and any commits are added.

branching text : a lightweight movable pointer to any of the commits made to existing files or source code.

touch a command line utility that is used to create, change and modify timestamps of a file.

nano : a text editor on a UNIX system that provides basic functionality using a command line interface.

2 Question 1

What is the difference between a local repository and remote repository when using Git?

The local repository exists on a user's computer for any direct use while the remote repository is a central base of the source files hosted on a server for indirect use such as storing commits and updates.

3 Question 2

What is the main drawback to using GitHub vs BitBucket to host your own personal projects?

Using a free account, GitHub allows only creating public repositories and making changes to them. Whereas, BitBucket allows to maintain private repositories

4 Question 3

Name three basic text editors that operate solely via the Linux terminal

Nano, Emacs, VI