# version control

“Version control” is a technique in software engineering for working on large projects. A separate application is used to automatically save backup copies of all the project files. Additionally, it can help people work together on the project by sharing files and keeping the files organized. A detailed log of all changes allows everyone to see every change to every file and easily retrieve older versions.

Below is common vocabulary that we will use:

* *Repository*: A collection of project files on a single computer. Often called a “repo” for short.
* *Revision*: A saved snapshot of all the files in the project.
* *Commit*: The act of saving a revision. This could be one change to one file or many changes to many files. It is a single step, and the user can type comments into a log in order to keep notes for everyone to read.
* *Clone*: To make a copy of a another repository. Each user will have a single repository on her/his own computer. For a group project, there is usually a single master repository on a server as shown below:
* *Push* or *pull*: Send or receive revisions from another repo. For example, if the student makes a new revision in her repo (**green**), she would *push* this revision to the master repo (**blue**), and Chris can *pull* the same revision to his own repo (**red**) when desired.