A version control system keeps a record of every change made to a file that is “pushed” to the repository. The benefits include allowing multiple people to make changes to the same file and recording who made each change and when. It also allows the merging of each of the changes into a single file and alerts when the changes are in conflict.

An example of version control:

Celeste does a commit and push of the following code to a file in a repository.

 Console.Write("What is your first name? ");

Afterwards, Seth makes a change to the same file, merging his changes with Celeste’s code by doing another commit and push.

 Console.Write("What is your first name? My name is Seth.");

Now the repository has copies of both versions, who pushed those versions, and when those versions were pushed, with the final version being the code Seth committed.