

Guide to Git and GitHub

by

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based on

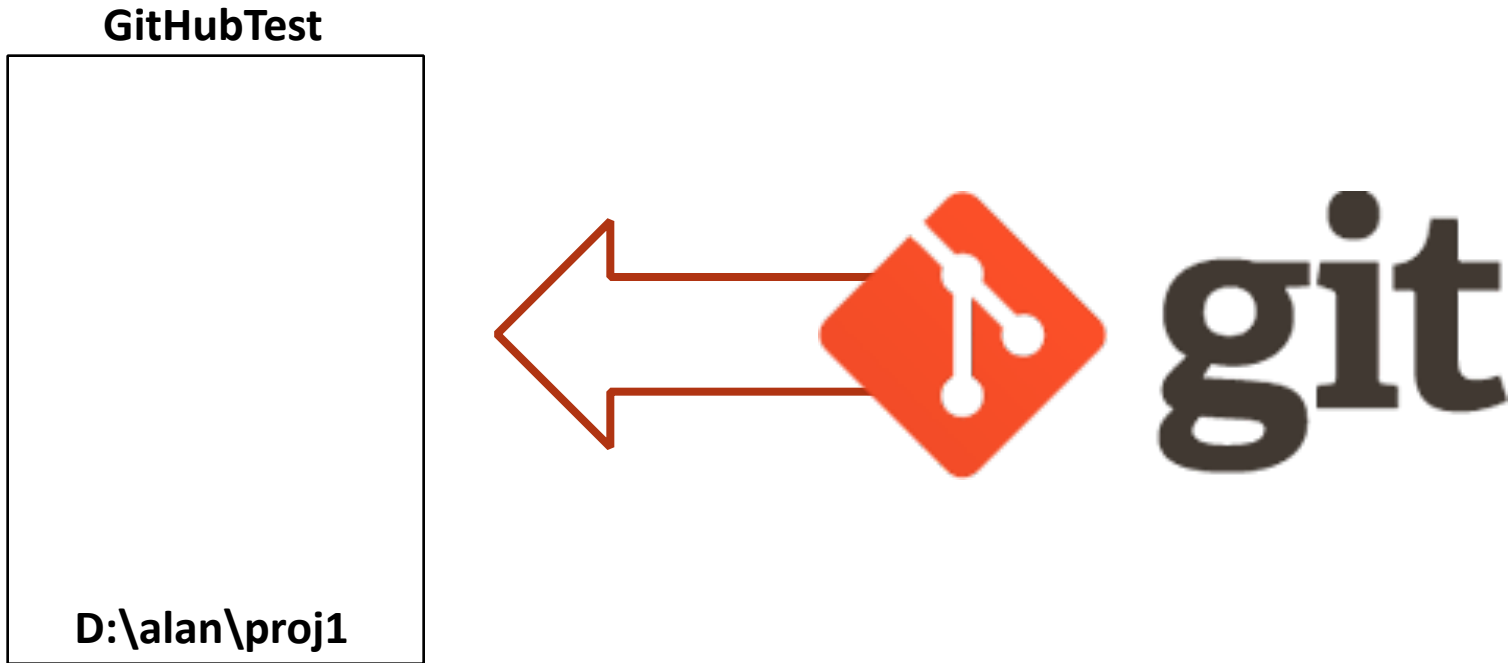
<http://git-scm.com/book/en/Getting-Started-Git-Basics>

Designate a *working directory* on your local disk for Git to monitor.

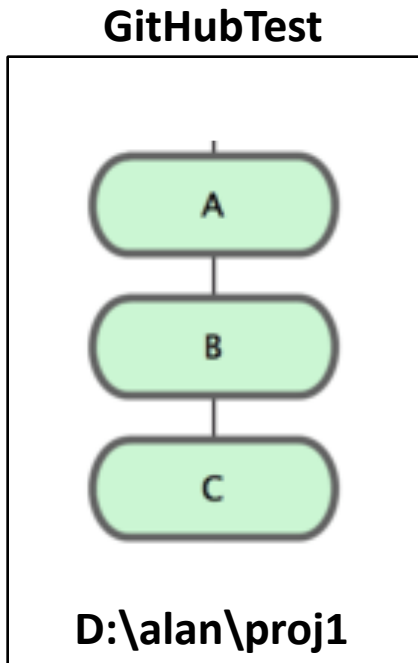
We'll use **D:\alan\proj1** in this example.

This is sometimes called *creating a repository*.

Give the repository a name (*GitHubTest* in this example.)



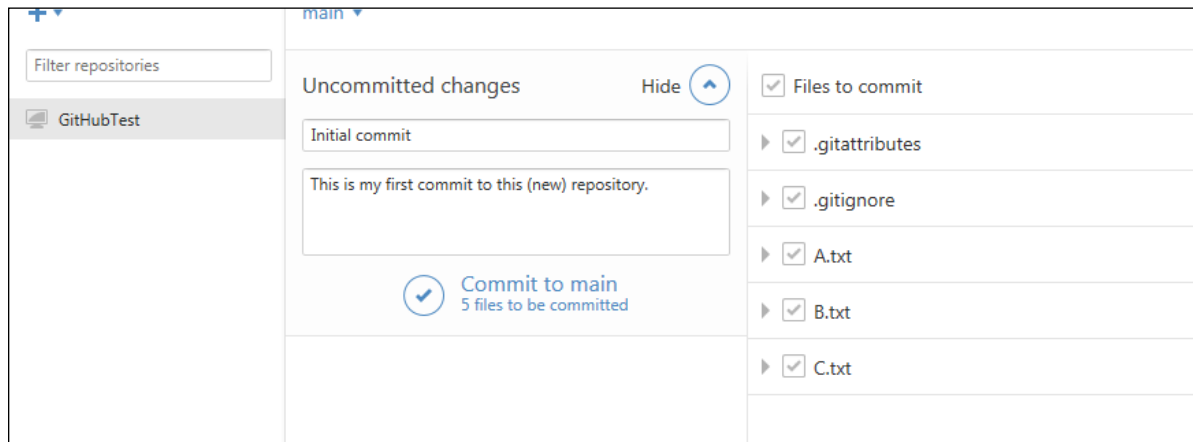
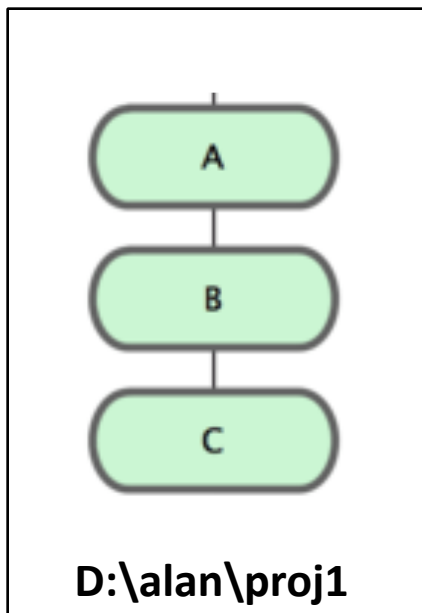
Create your project files (**A**, **B**, and **C** in this example) in this *working directory*.



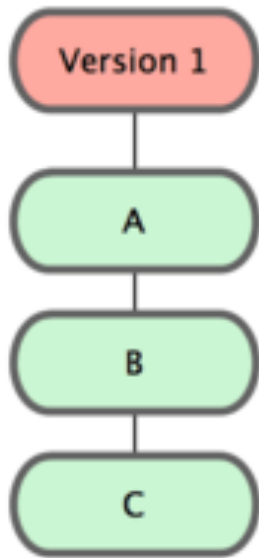
git

Add, stage, and commit the project files. This is sometimes called a *check-in*. Be sure to write interesting, helpful, and complete commit comments.

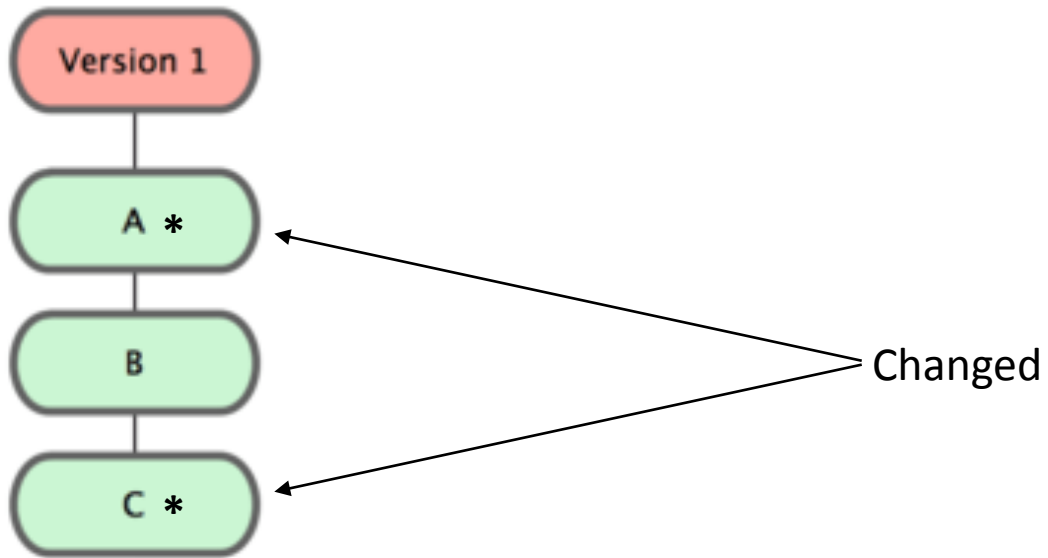
GitHubTest



This is “Version 1” of our project, consisting of three (3) files: A, B, and C.



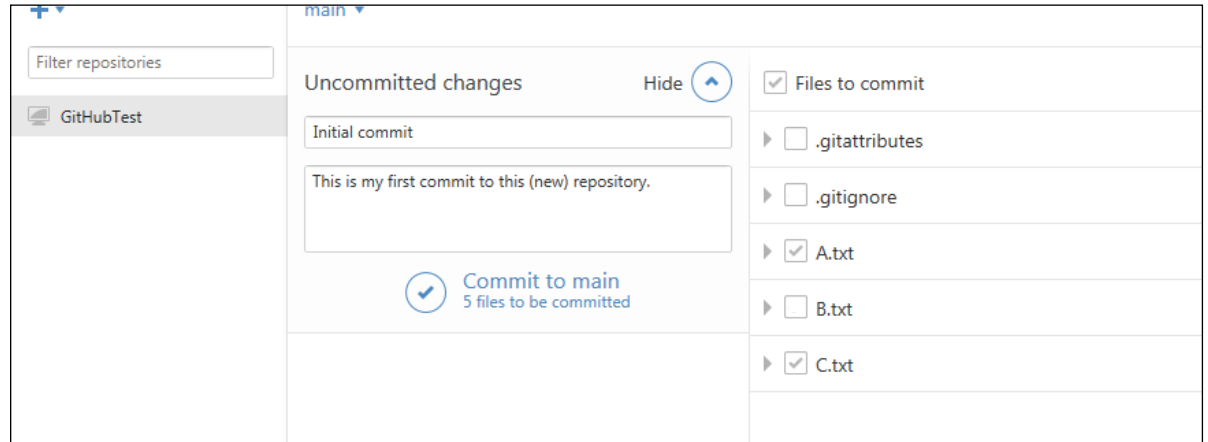
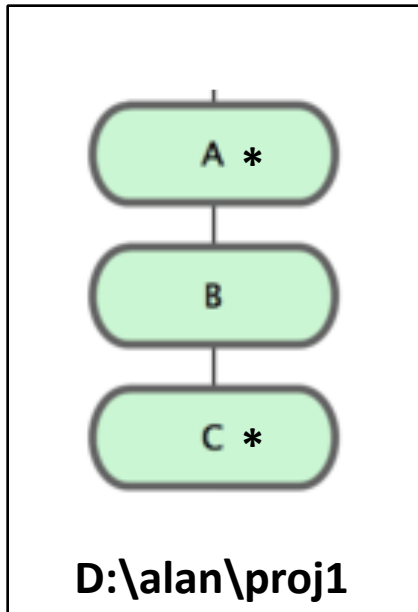
As we continue working on our project, we change some files.
Let's say we change files **A** and **C**.



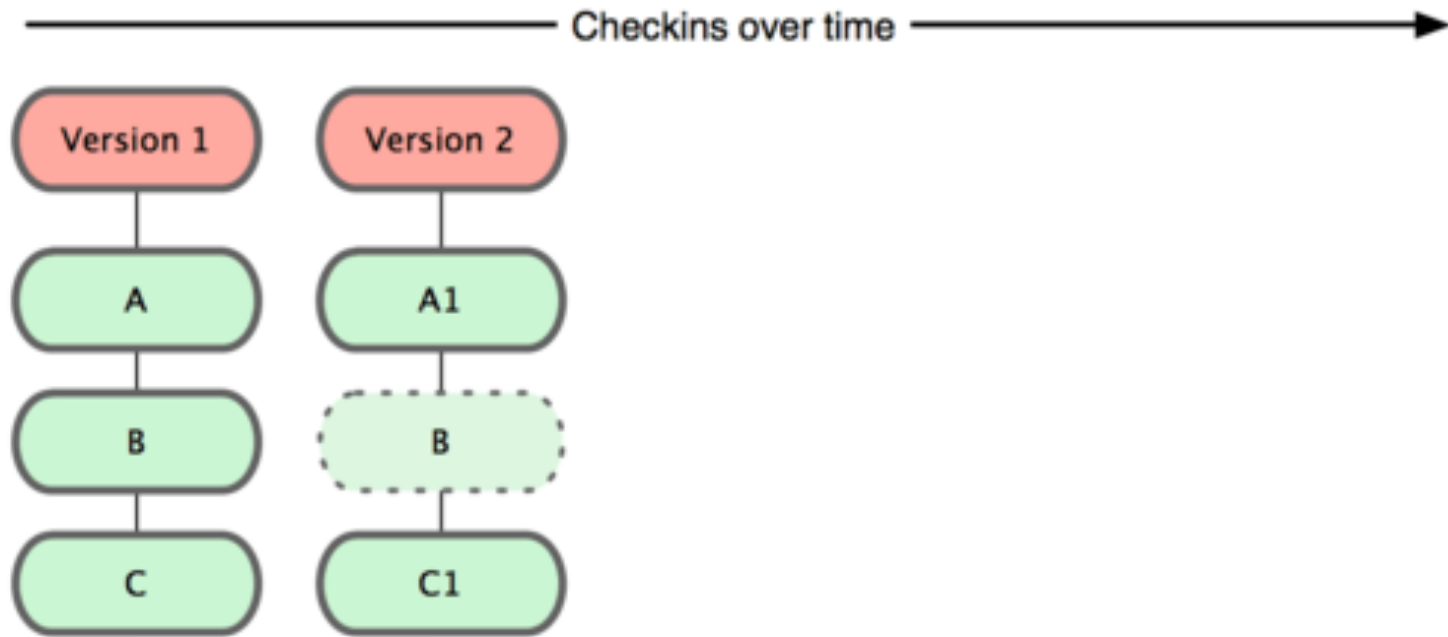
Check-in again. *Stage* and *commit* the changed project files.

Be sure to continue to write interesting, helpful, and complete commit comments.

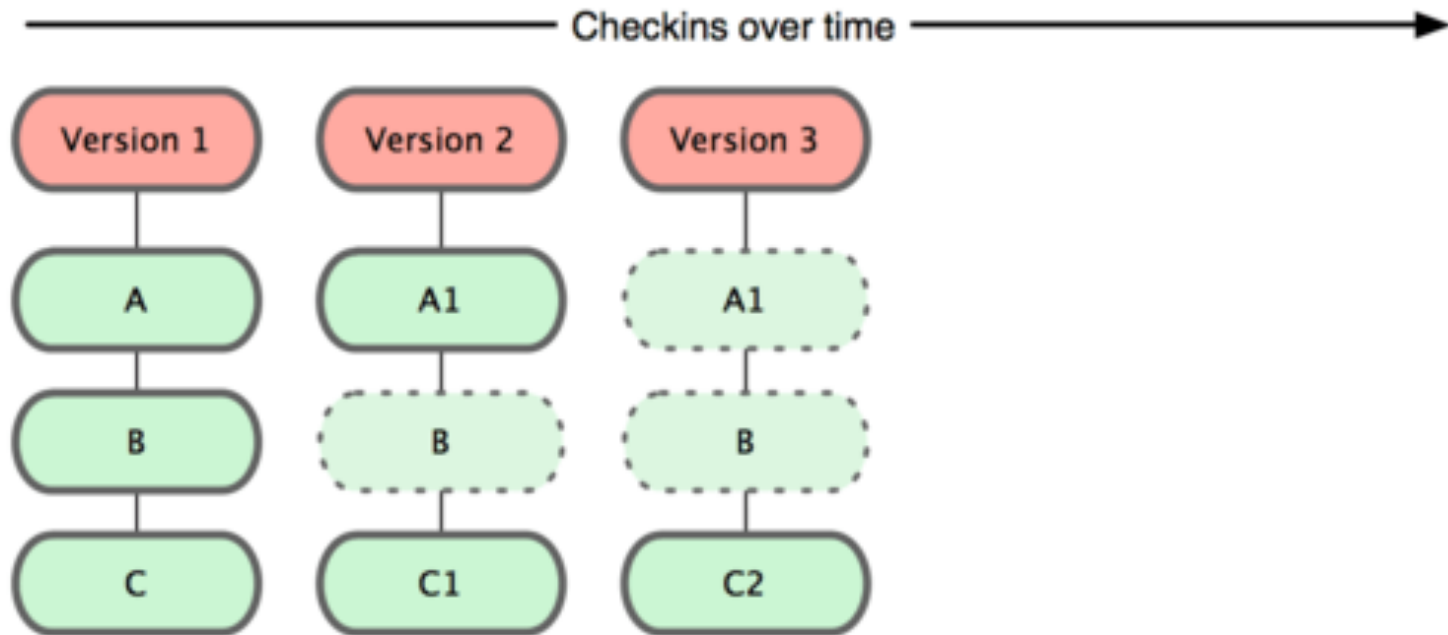
GitHubTest



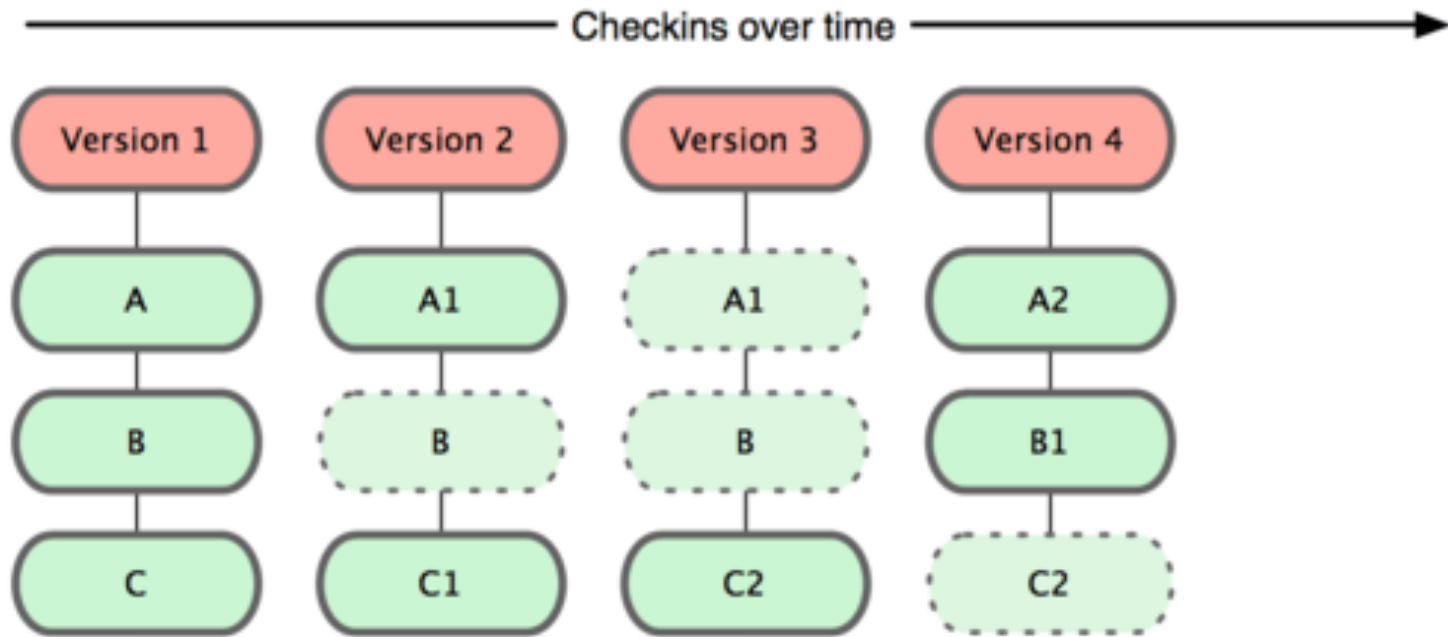
This is “Version 2” of our project, still consisting of three (3) files — **A**, **B**, and **C** — but with new versions of only files **A** and **C** (because we did not change **B**).



“Version 3” results from our changing file C and committing.

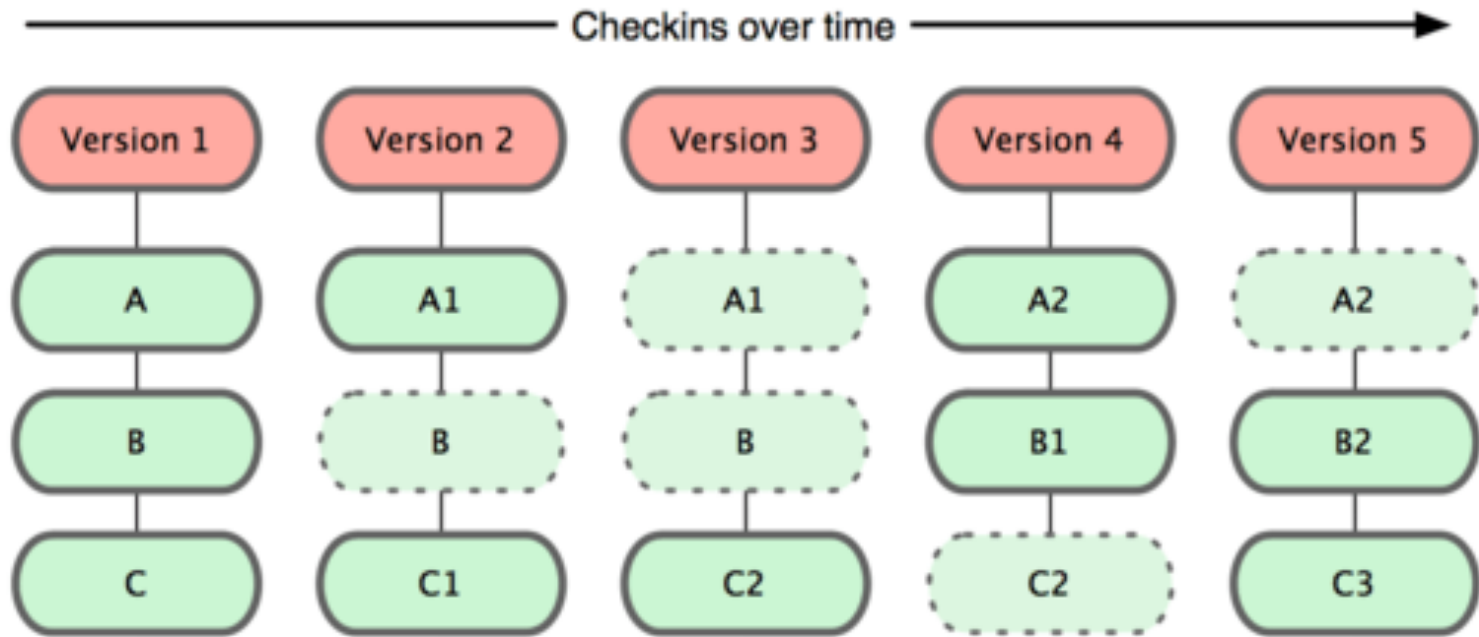


“Version 4” results from our changing files **A** and **B** and committing.

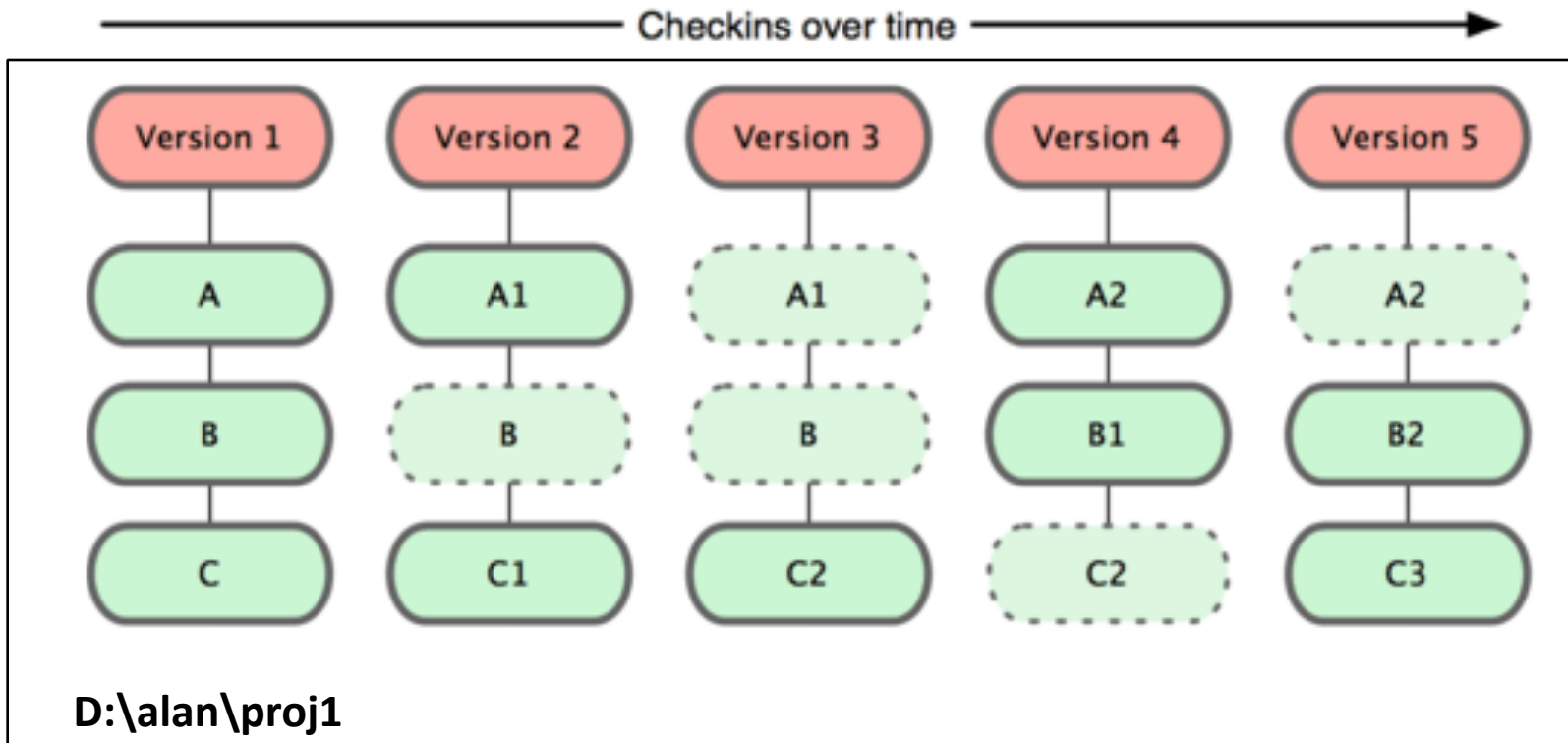


“Version 5” results from our changing files **B** and **C** and committing.

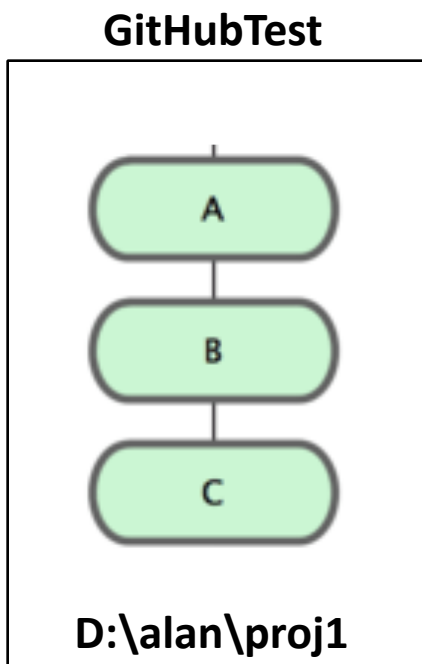
You can see the pattern; you get the idea.



All of this is happening thanks to Git watching your **local working directory**.

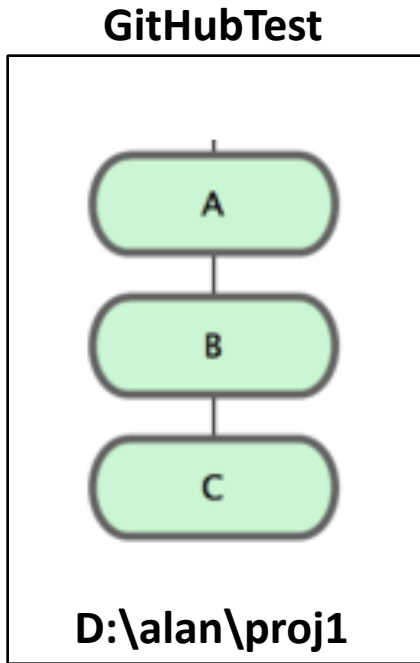


All of this is happening thanks to Git watching your **local working directory**.
We need to get this online and accessible from the web.



git

That's where GitHub comes in.

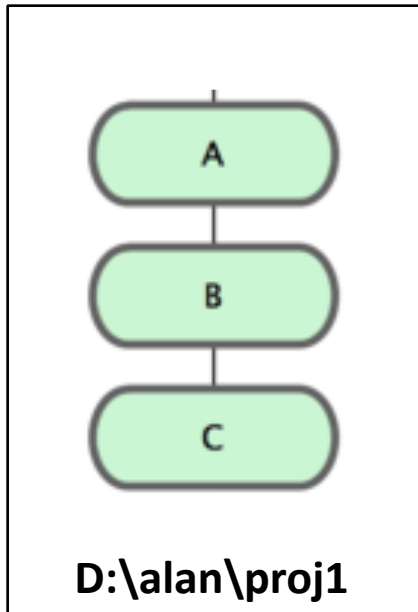


git

We *publish* from our **local** Git repository to our **global** (online, in the cloud, Internet-based) GitHub repository so that our code is accessible from the web.



GitHubTest



We *publish* from our **local** Git repository to our **global** (online, in the cloud, Internet-based) GitHub repository, which is accessible from the web.



GitHub repository interface for `labouseur / GitHubTest`. The page includes a search bar, navigation links (Explore, Gist, Blog, Help), and user profile information (labouseur). The repository statistics show 2 commits, 1 branch, 0 releases, and 1 contributor. The current branch is `master`, with a `test` branch available. A recent commit titled "just a little update" is shown, authored by labouseur on Jan 30. The commit details include a `README.txt` file with the following content:

```
This is read me. So read.
Reading is fundamental.

Wait! Here is more to read.
```

The right sidebar contains navigation links for Code, Issues (0), Pull Requests (0), Wiki, Pulse, Graphs, and Settings. The HTTPS clone URL is `https://github.com/.`, and there are buttons for "Clone in Desktop" and "Download ZIP".

Overview and Workflow



GitHubTest

