Git for Humans

Repo is any folder

Commit is a snapshot of the folder.

Hash (an id) for each commit. You can go back in time to previous commits

Check out means to getting files from a commit in the past. It means going back in time to previous file and you pass the hash to git to go back in time (to check out).

Git helps you experiment. This is done with **branches**. A branch is a "movable label", that points to a commit. A branch is NOT a whole list of commits. It points to a SINGLE commit.

Default branch is called **master**, but you can add new branches (I guess this points to a particular commit (snapshot). You can move between (check out) either branch. (the new branch doesn't have to be different than the master but of course it would seem unnecessary to have two in that case). More typically, a developer would do new work on a branch, each time, making a commit to that branch

A merge commit would take a branch you are working on and merge it to the master branch (master commit). A merge is a "combination" of two or more branches.

A **remote** is just a computer where files can be backed up (or stored). Github is such a remote. Github is a website that has Git running in it but also has "social features" like commit graphs, other features that help people collaborate that Git does not have natively.

To get some work from a remote for the <u>first</u> time, you must **clone** it.

After working on a file in her home folder, someone wants to get it back to the remote and so she uploads it by doing a **push**.

If someone else wants to get that new code in the push, he would do a **pull**, which gets new commits to the repo (his repo) from the remote.

Committing helps you tell other people the story of your project

- 1. Tell the story of your project
- Travel back in time
- 3. Experiment with changes
- 4. Back up your work
- Collaborate on projects

(12) Git for Humans – Alice Bartlett at UX Brighton 2016 - YouTube How to Use Git/GitHub with R (rfortherestofus.com)