

Version Control and Publishing a Website with Git SCM & GitHub

CSE 224

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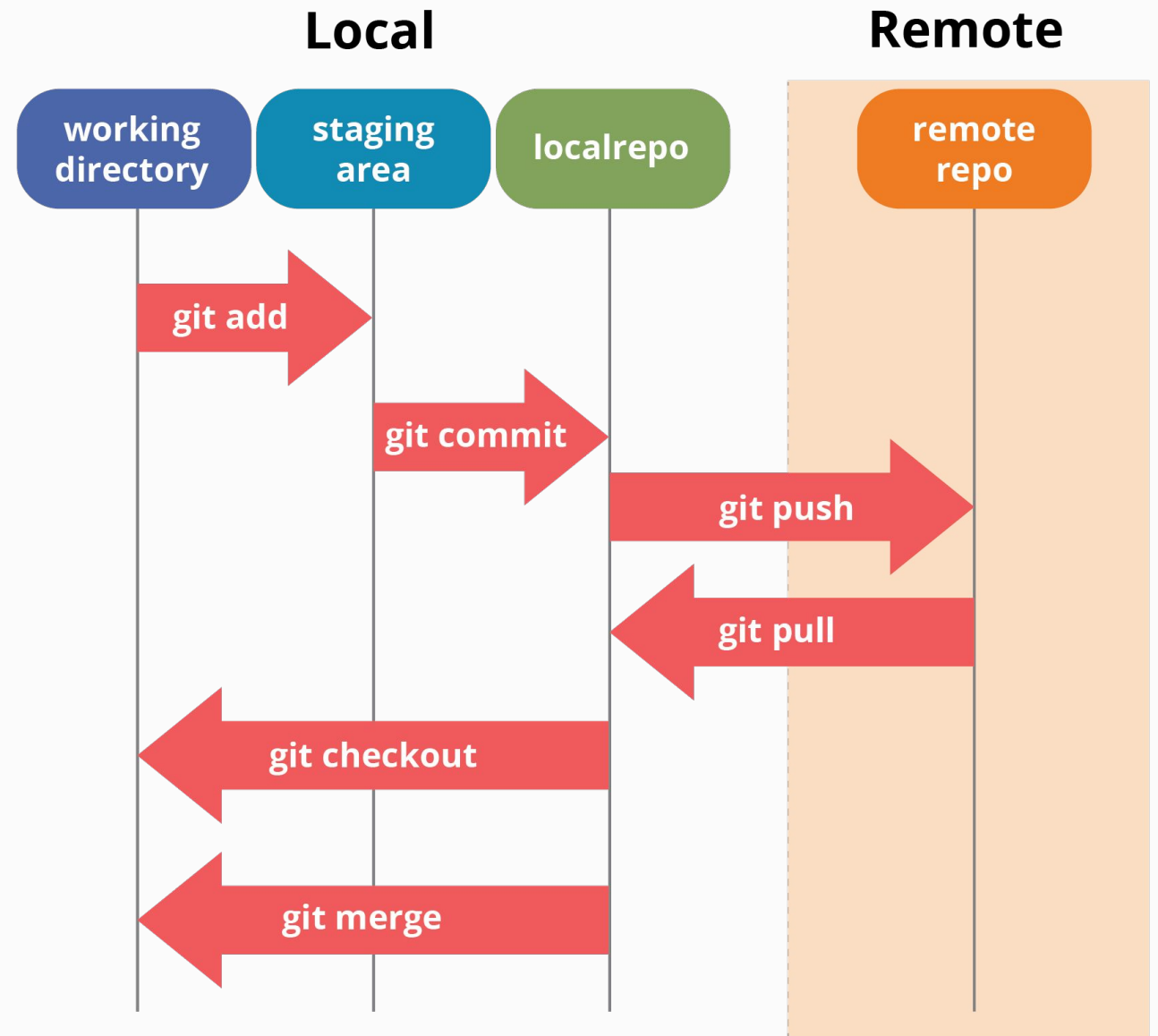
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Version Control with Git

First Step: [Download the desktop version](#)

Working With Git

1. For Local we use Git Bash
2. For remote we'll use github



Git Commands

After you've downloaded and installed git SCM, goto the folder (a project) you want to track, right click and choose "git bash here". Then use the following commands as explained in class:

1. **git init** (initializes git version control for that folder)
2. **git status** (check which files are currently being tracked).
3. **git add .** (add all files inside that folder for tracking, the files are in "staging" area now, changes are only being **tracked**, no versions are being saved explicitly).

Git Commands

4. **git commit -m “initial version”** (once you’re ready to save the current state of project as a named version, use this command to save that entire code as a version of your project. This is locally stored and tracked. Done by the git SCM local repository).

However, the first time you do it you’ll get an error to enter email and password for your local repository account. Just type the two commands shown in git console, one at a time and enter an email and password. This step creates and then logs into your local git account on your PC. Then use the command no 4 again once you’re logged in.

Git Commands

5. **git status** or **git diff** (once committed, these commands show you the specific changes from last committed version).

Now, Time to save your project to a remote/cloud repository.

6. **git add .** (in case you have made new changes/added files)
7. **git commit -m "Any message to identify this version (maybe for your friends!)"**
8. **goto github.com**, open a new repository and then copy and enter the 3 commands into the git console in your PC as shown in class to connect your github repository to your local git.
9. Once step 8 is done, whenever you want to publish a new version of your website, you can just repeat step 6, 7 and then just write **git push** to upload any **new version** to your remote github repository!

Git Commands

Reverting to a previous version in local repository

10. There are various ways to revert to a previous working directory.
 - a. `git checkout -- .`
Deletes all the uncommitted changes in all the files in the working directory.
 - b. `git revert "the commit ptr you want to revert"`
Goes to the state before that commit and creates a new commit point with that state in git log. You should use this if you have already pushed to remote repository.
 - c. `git reset -- hard "the commit ptr you want to go back to"`
Deletes all the commit points after that pointer from the log and takes the repository back. You may use this if commit was done only locally.

Check out the detailed [commands here](#).

Publishing your site with git

To publish your site-

1. Go to the “settings” tab on your specific repository page on github.
2. Go to the section “github pages” inside setting.
3. Choose branch as “main”
4. Click Save.
5. A link should appear and your site should be published there within 2-3 minutes.

<h1>Thank You!</h1>