

Git for course deployment and websites: lesson plan (Fall 2019)

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<2019-11-18 Mon>

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1 Git for course deployment and websites: lesson plan (Fall 2019)

1.1 Introduce main website (10-20 min)

Go over the main workshop website, say it was designed to be analogous to a course websites. Follow the link to the Git repository and show that Github both stores the files of the website and course materials, and also hosts the website. Show the students that the website is generated from simple Markdown files, and that Markdown is much easier to write than html (by comparing an html file in the repository to the Markdown file it was generated from).

While doing this, regularly query for hands as to who is familiar or has used a given tool/format. Do this for Github, Markdown, and html. This lets you know what the attendee's baseline is.

Finally, introduce the CTL section and links at the bottom of the website, and how they are funding this workshop and all of the great programming they offer.

1.2 Work through first slideshow introducing Git and Github (40-50 min)

This should be self explanatory, except for the "Github features" slide. Here follow the link and show students the main features of Github, at a level commiserate with their baseline knowledge (determined by the questions at the beginning). Make sure they understand that a repository is just a directory, that commits provide the history of the material, and that people can create issues. Connect "issues" to other course forums like Piazza and how they offer the same functionality.

Also while students are doing the self directed tasks (e.g. create a Github account, fork repository, make changes, etc.). Circulate and just make sure everyone is doing okay. Some shy students might not say they are not done when you ask the group if they are finished with a task.

1.3 Work through second slideshow on generating materials from markdown with Pandoc (15-25 min)

This slide show is a little less self-explanatory. First follow the link on the title page to Pandoc's website, and explain how Pandoc is a powerful tool that can covert between many document formats, and that it was created by a university professor who uses it explicitly to manage his course notes using Markdown.

Then present the general workflow slide, and at each step do a demo on your computer where you execute that step for the attendee's contributions from the first slideshow. After you are done, show the updated course materials reflecting all the attendees' contributions.

On the Pandoc slide demonstrate the two links for using it on the web and how to install, should they be interested in using it on their own. Also the installing Git slide is there as a resource for anyone who wants to install Git on their local computer.

Finally finish with the last slide, ask students to take the survey, and then just stick around in case anyone has questions or wants to chat about the workshop.