Lecture 03: Using Git

BME464L (Fall 2013, Palmeri)

- Business Items
    - Review of LabArchives
        - Widgets
        - Signing pages
        - Review on Monday evenings
    - Review of Semester Schedule
        - Expectations in Presentations
        - Copy slides to ELN
- Using Git
    - Lots of good online resources to learn git:
        - http://git-scm.com/book
        - http://help.github.com
        - A Visual Git Reference: http://marklodato.github.io/visual-git-guide/index-en.html
        - git - the simple guide: http://rogerdudler.github.io/git-guide/
        - Atlassian
            - Git Basics: https://www.atlassian.com/git/tutorial/git-basics
            - Git Workflows: https://www.atlassian.com/git/workflows
    - Duke-Medical-Intrumentation groups setup on GitHub, all with distributed management
    - Setting up username & email address
    - Login credentials (push access): HTTPS vs. SSH Public Keys
    - Sharing repository: clone / push / pull
    - Workflow: local -- add --> stage -- commit --> commited -- push -> origin
    - Demo: clone class sandbox repo
    - Local branches / merges
        - Create local branch
        - Make change to team page
        - Switch back to master branch and correct a typo, commit and push (need to commit first!)
        - Make more changes to branch
        - Merge branch changes to master
        - Delete branch
        - Push all changes
    - Post-commit hooks
    - Issues
    - Setting up wiki and GitHub Pages

- Due next lecture: Software License
    - Choose a software license for your GitHub repository. Push an appropriate LICENSE file to your repository, and follow the necessary guidelines in putting header comments in your code moving forward.
    - Upload a one-page writeup (submitted as a group) to your ELN justifying the choice of your software license in the context of other common licenses.
    - A good starting point: http://choosealicense.com/
- Next Lecture: Introduction to the Microcontroller (Arduino)