ClassDocs: All Class Materials

- We will be using GitHub to manage all class material. The links below are used to pull over your to classDocs repository to get slides and labs.

  - HTTP based repository pull: works in absence of installed ssh keys.
    - https://github.com/Allegheny-Computer-Science-301-F2020/classDocs.git

  - SSH based repository pull: uses installed ssh keys.
    - git clone
git@github.com:Allegheny-Computer-Science-301-F2020/classDocs.git
Installing Git

- **MacOS**: go to your *Terminal*, type in “git” and if not installed, MacOS will offer to install the free *Xcode* software development suit from Apple that contains git.

- **Ubuntu**: Git may already be installed. If not, use the command, `sudo apt install git` to install git. You will need your password.
  - Good ref: https://www.digitalocean.com/community/tutorials/how-to-install-git-on-ubuntu-20-04

- **Windows**: Git does not come with the Windows OS and so it must be installed. Please visit https://gitforwindows.org/ to install and learn more.
Git and Your Class Repositories

- **PULL** your classDocs before class (cloud data sent to you).
  
  ```
  git pull
  ```

- **PUSH** assignment repos to submit homework (your data sent to the cloud)
  
  ```
  git add -A
  git commit -m "My mesg"
  git push
  ```
Docker for Running Software

- A container in which to run programs in isolation.
- Please be sure that you machine will work with the **regular Docker**, **not** Docker ToolBox.
- Verify: [www.cs.allegheny.edu/canirundocker](http://www.cs.allegheny.edu/canirundocker)

Yes!

Check the [docker docs](http://docker.docs) for more information about the Linux system requirements and installation procedure.

All Set!

- Windows: Purchase a Windows Enterprise activation key
- Dual boot: Linux and Windows
- Use another computer

No / Maybe
Get Started With Docker

- Dept of CS video (Dr. Jumadinova):
  - https://www.youtube.com/watch?v=iceAgNEORCA
- Main site
  - https://www.docker.com/
- Downloads
  - https://www.docker.com/get-started
- Tutorial
  - https://www.docker.com/101-tutorial
Exploring Docker

- Play-with-Docker
  - https://www.docker.com/play-with-docker
- Once Docker has been installed, you can play with it.
- Build the container:
  - `docker run -dp 80:80
docker/getting-started:pwd`
- Then browser url: http://localhost/
Atom: Suggested for Programming

- We will be programming and Atom facilitates this task
- If you do not already have it, please download it from: https://atom.io/
Please Install Your Software

- We will be using Git and GitHub. Please setup your account by next class at https://github.com/ and also download a Git client software from https://git-scm.com/downloads

- We will also be using the Atom editor to write code. Please download and install your editor from https://atom.io/

- For most labs, we will be using Docker. Please download and install your Docker Desktop installation (note: not the Docker ToolBox) from https://www.docker.com/. Help: https://hub.docker.com/

- If necessary, please help each other to install this software. Or see the department’s Technical Leaders with questions.

Links to download sites are above!
Article For Class

- *Twelve Million Phones, One Dataset, Zero Privacy*, A New York Times opinion piece

Discuss With Your Group

- Why is smart-phone location data considered to be sensitive and confidential?
- Discuss any two issues of personal privacy which may likely be discovered when this data is analyzed.
- How could the found trends in the data be used in unethical ways? Who would gain/lose something?
- After reading this article, what concerns do you have data that you did not have prior?
Next Week’s Focus

- Web site analysis
  - Yandex Metrica
  - Matomo
  - Google analysis
Looking at Websites and Data

- The Internet houses websites that are used to give product information to *consumers* and potential *customers*.

- Q: How do owners of these sites know that they are fulfilling their roles to generate business?

- Web Analytics to study web traffic to and from a site

- Yandex Metrics dashboard demo:
  - https://metrica.yandex.com/dashboard?group=day&period=week&id=44147844

- Matomo dashboard demo
  - Demo: https://demo.matomo.org/