Starting and Stopping Containers !

Starting a Shell Session

- To begin a session in our course's environment:
  1. Open a terminal program:
     - **Terminal** on MacOS
     - **Windows Terminal** on Windows
  2. Change your working directory to learncli211: `cd learncli211`
  3. Run the learncli script to start a container

     MacOS: `./learncli.sh`

     Windows: `.\learncli.ps1`

- The above steps connect your terminal to a Linux container running an interactive bash shell process.
  - You will know when you are working in our course container because its prompt string is **`learncli$`** which is different from your host machine's.

What is a container?

- A process ("running program") that is intentionally:
  1. "Sandboxed " or isolated from your host operating system
  2. Consistently configured each time you start it
     - By default, any changes you make inside of a container are ephemeral and reset on restart
     - We will see how to share files between a container and your host OS to save work
  3. Built and shared in such a way it is easy to distribute with confidence

- Why are we using containers?
  - An even, consistent playing field and configuration for everyone enrolled!
  - We've prepackaged a significant number of great tools on the course container.
  - Containers are now widely used in industry by all major players for these properties.

Ending a Shell Session

- To end a session you should run the `exit` command.
  - Do not just close your terminal window without exiting!
  - Doing so will leave the session running in the background.

- If you forget, from your host terminal, run `docker ps`
  - The `ps` is short for "process" and you will see the origination of this soon
  - A list of your running containers will print, if any.
  - To stop a container, run the command: `docker stop [id]`
    - Replace [id] with the first few characters of the container's ID

- Still having trouble? Restart the Docker Daemon
  - Look for its icon in your System Tray (near your date / time).
  - Click on the Docker icon and select "Restart..."
  - If that fails, reboot your computer.

Next Steps

- Follow along with Chapter 1 "The Sorcerer's Shell" in its entirety!
  - From Learn a Command-line Interface PDF in Sakai
  - Actively follow the examples! Take a page of notes!