

## Objectives

- Docker

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## Data Center Tour?

- Fri, Mar 11 or Mon, Mar 21?
- Break into two groups of ~10 people
  - 12:20-12:40
    - Better for students who don't have class from 11-12.
    - If this isn't feasible, I'll see if we can change the time a bit.
  - 12:40-1:00

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## Review: Containerization

- Compare and contrast containers and virtual machines
- What is the commonly used tool for containerization?
  - What are some of its components?
  - What are the commands?

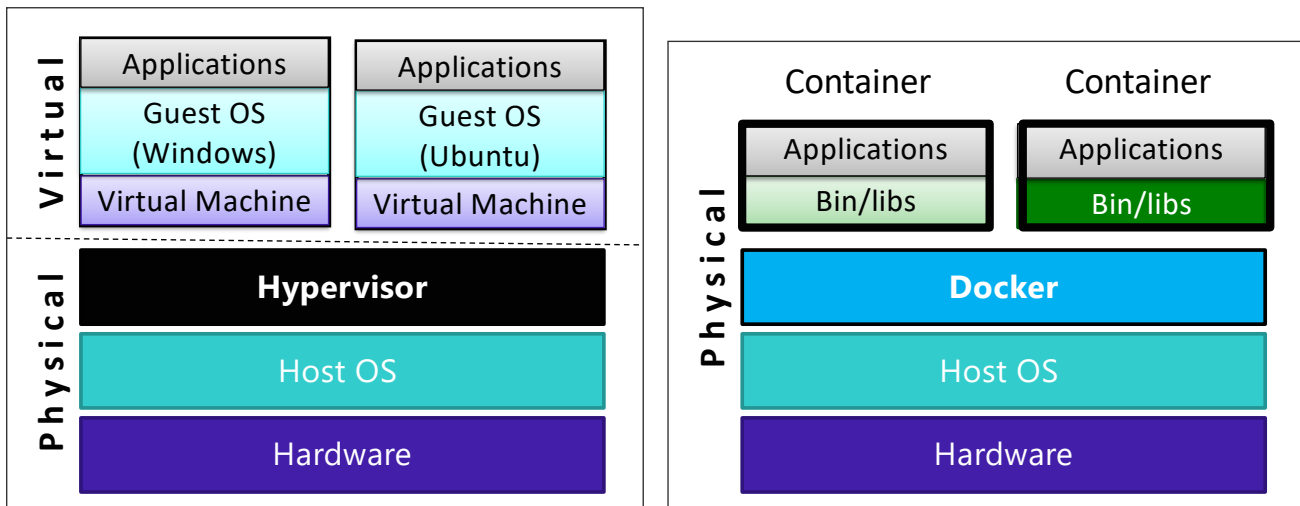
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## Review: Virtual Machine vs Container



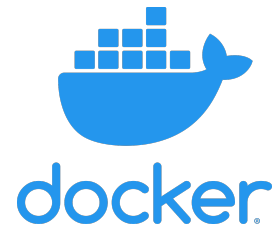
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## Docker



- Provides an interface on top of underlying containerization designs
  - Popularized containers
  - Interesting case in commercializing existing OS functionality
- Packages a filesystem in a docker image
  - Provides more of a “virtual machine” notion
  - But processes still running on existing kernel

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## Docker

- Installed on forth, fortran, java, logo, prolog, postscript
- Everyone in this class should have permission to run
  - Typically, only usable as sudo

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# docker Commands Summary

Command	Purpose	Options

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# docker Commands Summary

Command	Purpose	Options
run	Runs a command in a new container	-it interactive mode --name name the container
start	Start the existing named container, with same command as specified with run initially	
rm	Delete the container's files	
image prune	Delete images not in use	
ps	List running containers	-a all containers
build	Build a new image	
stop	Stops a container	

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## Docker Images

- Docker Hub
  - Repository of docker images
- Dockerfile
  - Create your own image

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## Docker Components

- Image: blue print for the container
- Containers: running process
- Bind mounts: allows files on the home system to be used by the container
- Dockerfile: file with commands describing an image

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## Looking Ahead

- Vote and sign up for data center tours
- Email Sprenkle with Docker issues
- Assignment 1 is due Thursday night
  - Reload the assignment page for updates/clarifications