Schedule and outline

Texts

- Virtualization for Dummies (Dummies)
- ESXi Documentation from VMware
- Learning VMware Vsphere (LVV)
- Proxmox Admin guide (PX)

Week 1 (Aug 24 - 28)

Topics:
- Hypervisors
- Types of virtualization
- Virtualization with Proxmox
- Connect ISO to proxmox
- Virtual Machines

Readings:
- Dummies chapter 1,3
- PX 1, PX 2.3.1, 2.3.2
- Explained by vmware

Slides:
- Intro Slides
- More Slides
- Proxmox Chapter 1

Notes:
- Movie - Connect to proxmox with tunnel from mac/linux
- Movie - install vm

Assignments:
- Project 1 - Research
- Also begin project 2

Week 2 (Aug 31 - Sep 4)

Topics:
- More on VMs
- NFS and proxmox
- Clustering

Readings:
- PX 5 (Explanation of the GUI) (review if needed)
- PX 10

Slides:
- Proxmox Chapter 10

Notes:
- FreeNas Install
- FreeNas NFS
- FreeNas networking

Assignments:
- Proxmox Install

Week 3 (Sep 7 - Sep 11)

Topics:
- Clustering
- High availability

Readings:
- PX 6

Slides:
- Proxmox Chapter 6
**Week 4 (Sep 14 - 18)**

- **Topics:**
  - Finish up, Proxmox exam
  - Review
- **Readings:**
  - Proxmox 8
- **Assignments:**
  - Proxmox Stats

**Week 5 (Sep 21 - 25)**

- **Topics:**
  - containers
  - docker
- **Readings:**
  - LXC vs Docker
  - Chapter 1
  - Good overview video of Docker
- **Slides:**
  - Containers
  - Docker 1
  - Docker 2
  - Docker 3
- **Assignments:**
  - Docker - hello
  - Docker - identidock
  - Docker - webapp

**Week 6 (Sep 28 - Oct 2)**

- **Topics:**
  - More Docker
  - docker compose
- **Readings:**
  - Entrypoint vs CMD
  - Chapter 3
  - Basic container networking
- **Slides:**
  - Docker storage
  - Docker compose
- **Assignments:**
  - Docker - Mysql Apache

**Week 7 (Oct 5 - 9)**

- **Topics:**
  - Kubernetes
  - demo
- **Readings:**
  - K8S tutorial
- **Slides:**
Week 8 (Oct 12 - 15)

- Topics:
  - Kubernetes
  - K8s yml files

Week 9 (Oct 19 - 23)

- Topics:
  - Kubernetes
- Slides:
  - Slides
- Assignments:

Week 10 (Oct 26 - Oct 30)

- Topics:
  - More kubernetes
- Slides:
  - Slides
  - Slides
- Assignments:
  - K8s wordpress

Week 11 (Nov 2 - 6)

- Topics:
  - More kubernetes
  - Cloud?
  - Walkthrough
- Slides:
- Assignments:
  - K8s php and redis

Week 12 (Nov 9 - 13)

- Topics:
  - More kubernetes
  - Slides
- Assignments:
  - K8s pokemon
  - K8s cloud

Week 13 (Nov 16-20)

- Topics:
  - Slides
  - Example backend
  - Example frontend
Week 14 (Nov 23)

- Topics:
  - Kubernetes exam
  - Canvas exam
  - ** Thanksgiving **
- Assignments:
  - [Presentation Instructions](#)

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Week 14 (Nov 30 - Dec 4)

- Monday - Presentations
- Wed - Presentations