Schedule and outline

Texts

- DevOps for Web Development (Abbreviated as DWD below)
- The phoenix project

Week 1

- Topics:
  - Continuous Deployment & Integration
  - Git
- Readings:
  - What is Dev Ops
  - Youtube video
  - DWD-ch 1
  - Continuous Integration
  - Git intro
  - DWD-ch 2
  - [The phoenix project] Chapters 1 - 2
- Slides:
  - Intro
  - More Intro
  - Git basics
  - Git hello world
  - Basic git
  - Branching and merging
- Assignments:
  - Project 1

Week 2

- Topics:
  - Cloud overview
  - Our sample petClinic project
- Readings:
  - The phoenix project up through chapter 6
  - DWD-ch 2
  - DWD-ch 3
- Slides:
  - Chapter 2
- Notes:
  - Aws notes
- Assignments:
  - Assignment
  - Assignment
  - Assignment

Week 3

- Topics:
  - Jenkins
  - The phoenix project up through chapter 10
Week 4

- Topics:
  - Jenkins - Deployment to Tomcat
- Assignment
- Readings:
  - reading phoenix up through chapter 14
  - wip

Week 5

Exam 1

- Topics:
  - Vagrant
- Readings:
  - phoenix up through chapter 18
- Slides:
  - Slides

Week 6

- Topics:
  - Vagrant
  - AWS vagrant
- Slides:
  - Slides
  - Slides
  - AWS Vagrant
  - Vagrant local
  - Vagrant AWS
- Readings:
  - phoenix up through chapter 22

Week 7

- Topics:
  - Automated Configuration (Configuration Management)
  - Ansible
  - Ansible Playbooks
  - Vagrant + Ansible
- Readings:
  - How ansible works
  - Benefits of CM
  - Ansible Getting Started (Also covered in my slides)
  - Ansible Playbooks Intro
  - More about playbooks
  - phoenix up through chapter 26
- Slides:
  - Ansible 1
  - Ansible 2
- Assignments:
  - Ansible - Tomcat
Week 8

- Topics:
  - Continue with automation
- Readings:
  - See above
- Assignments:
  - Ansible & Vagrant on AWS

Week 9

Fall Break

- Review: Kahoot
- Exam 2 (Written in testing center, Hands-on in class)
- Topics:
- Readings:
  - phoenix up through chapter 30

Week 10

- Topics:
  - AWS
- Readings:
  - Materials given
  - phoenix up through chapter 34
- AWS Assignment

Week 11

- Topics:
  - AWS
- Readings:
  - Materials given
  - phoenix up through end of book
- AWS Assignment

Week 12

- AWS Exam (Exam 3)
- Topics:
  - Docker
- Readings:
- Slides:
  - intro
  - files app.py requirements.txt
- Assignment

Week 13

- Topics:
  - Continuous Monitoring
  - Nagios
- Readings:
  - Continuous Monitoring
• Video: Monitoring for DevOps and Microservices
• Assignment
• Slides

Week 14

• Microservices
• Readings:
  • Monolithic pattern
  • Microservice pattern
  • Breaking away from the monolith
  • The 12 factor app
• Slides
• Assignment

Thanksgiving

Week 15

Monday - Presentations

Wednesday - Presentations

Week 16

Monday - Presentations

Wednesday - Presentations/Review

Final - See date on syllabus