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
• Slides:
  ◦ Slides
• Assignments:
  ◦ Assignment
  ◦ Assignment

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**Week 4**

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

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**Week 5**

Exam 1

• Topics:
  ◦ Vagrant
• Readings:
  ◦ phoenix up through chapter 18
• Slides:
  ◦ Slides

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**Week 6**

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

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**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:**
  - Docker
  - **Assignment**

Week 13

- **Topics:**
  - Continuous Monitoring
  - Nagios
- **Readings:**
  - Continuous Monitoring
- **Video:**
  - Monitoring for DevOps and Microservices
Week 14

- Microservices
- Readings:
  - Monolithic pattern
  - Microservice pattern
  - Breaking away from the monolith
  - The 12 factor app

Week 15

Monday - Presentations
Wednesday - Presentations

Week 16

Monday - Presentations
Wednesday - Presentations/Review

Final - See date on syllabus