Schedule and outline

Texts

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

Week 1 (Aug 24 - 28)

Topics:
- Continuous Deployment & Integration
- Git

Readings:
- What is Dev Ops
- Youtube video
- DWD-ch 1
- Continuous Integration
- Git intro
- Version Control
- DWD-ch 2
- [The phoenix project] Chapters 1 - 2

Slides:
- Intro
- More Intro
- Git basics
- Git hello world
- Basic git
- Branching and merging

Notes:
- Create EC2 instance

Assignments:
- Assignment 1 - AWS

Week 2 (Aug 31 - Sep 4)

Topics:
- Cloud overview
- Connecting to EC2 again
- Our sample petClinic project
- Jenkins

Readings:
- The phoenix project (3-6)
- DWD-ch 2
- DWD-ch 3

Slides:
- Chapter 2
- Slides

Notes:

Assignments:
- Assignment 2 - Git
- Assignment 3 - Production VM
- Assignment 4 - Jenkins
**Week 3 (Sep 7 - 11)**

- Topics:
  - The phoenix project (7-10)
- Slides:
- Assignments:
  - [Assignment - Jenkins 2](#)
  - [Assignment - Jenkins Pipelines](#)

**Week 4 (Sep 14 - 18)**

- Topics:
  - Jenkins - Deployment to Tomcat
- Assignments:
  - [Assignment - Jenkins Production](#)
- Readings:
  - reading phoenix (11-14)
  - [wip](#)

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

Exam 1

- Topics:
  - Vagrant
- Readings:
  - reading phoenix (15-18)
- Slides:
  - [Slides](#)

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

- Topics:
  - Vagrant
  - AWS vagrant
- Slides:
  - [Slides](#)
  - [Slides](#)
  - [AWS Vagrant](#)
- Assignments:
  - [Vagrant local](#)
  - [Vagrant AWS](#)
- Readings:
  - reading phoenix (19-22)

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

- 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](#)
  - reading phoenix (23-26)
- Slides:  
  - Ansible 1  
  - Ansible 2  
- Assignments:  
  - Ansible - Tomcat  
  - Ansible - Users

### Week 8 (Oct 12 - 14)

*Fall Break*

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

### Week 9 (Oct 19 - 23)

- Review: Kahoot  
- Exam 2  
- Topics:  
- Readings:  
  - reading phoenix (27-30)  
- Assignments:  
  - Cloud 1

### Week 10 (Oct 26 - 30)

- Topics:  
  - Cloud  
- Readings:  
  - Materials given  
  - reading phoenix (31-34)  
- Assignments:  
  - Cloud 2  
  - Cloud 3

### Week 11 (Nov 2 - 6)

- Topics:  
  - Cloud  
- Readings:  
  - Materials given  
  - phoenix up through end of book  
- Assignments:  
  - Cloud 4

### Week 12 (Nov 9 - 13)

- AWS Exam (Exam 3)  
- Topics:  
  - Docker  
- Readings:  
- Slides:  
  - intro  
  - files app.py requirements.txt
Week 13 (Nov 16 - 20)

- Assignments:
  - Assignment - Docker

- Topics:
  - Continuous Monitoring
  - Nagios

- Readings:
  - Continuous Monitoring

- Video:
  - Monitoring for DevOps and Microservices

- Assignments:
  - Assignment - Nagios

- Slides

Week 14 (Nov 23)

Thanksgiving

- Microservices

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

- Slides

- Assignments:
  - Assignment - Presentation
  - Final paper on Phoenix

Week 15 (Nov 30 - Dec 4) (Online only this week)

Monday - Presentations  Wednesday - Presentations

Final - See date on syllabus