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

**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

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**Week 14**

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

- Slides
- Assignment

Thanksgiving

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**Week 15**

Monday - Presentations

Wednesday - Presentations

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**Week 16**

Monday - Presentations

Wednesday - Presentations/Review

Final - See date on syllabus