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)
- 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:
  - Terraform
- Slides:
  - Vagrant Slides
  - Terraform Slides
  - Terraform From Jenkins
- Assignments:
  - Vagrant local
  - Terraform
  - Terraform and Jenkins
- 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

Week 8 (Oct 12 - 14)

Fall Break

Topics:
- Continue with automation
Readings:
- See above
Assignments:
- Ansible - Users

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)
Slides:
- Cloud basics
- GCP basics
Assignments:
- Cloud 2

Week 11 (Nov 2 - 6)

Topics:
- Docker
Slides:
- intro
Readings:
- files app.py requirements.txt
- Materials given
- phoenix up through end of book
Assignments:
- Assignment - Docker

Week 12 (Nov 9 - 13)
Topics:
- Guest speakers?
- All day devops

Readings:

Assignments:

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**Week 13 (Nov 16 - 20)**

- Topics:
  - Continuous Monitoring
  - Nagios
- Readings:
  - Continuous Monitoring
- Video:
  - Monitoring for DevOps and Microservices *suggested*
- Assignments:
  - Assignment - Nagios
  - Slides

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**Week 14 (Nov 23)**

Thanksgiving

- Microservices
- Readings:
  - Monolithic pattern
  - Microservice pattern
  - Breaking away from the monolith
  - The 12 factor app
- Slides
- Assignments:
  - Final paper on Phoenix

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

Work on paper Study for exam

Final - See date on syllabus