Schedule and outline

Texts

- DevOps for Web Development (Abbreviated as DWD below)

Week 1

- Topics:
  - TCP/HTTP Review / Name-based vs ip-based hosting
  - Apache
  - NGINX
  - IIS
- Readings:
  - Apache name-based
  - Apache ip-based
  - Virtual Host in depth
- Slides
- Slides
- Slides
- Nginx Howto
- IIS Howto
- Register AWS
- EC2 Create
- Slides
- Assignment

Week 2

- Topics:
  - SSL
- Readings:
  - EC2 Allow Firewall
  - Easy SSL
  - Easier SSL - Lets Encrypt
- Assignment
- Assignment
- Slides

Week 3

- Topics:
  - Continuous Deployment & Integration
  - Git
  - Finish SSL
Readings:
- What is Dev Ops
- Youtube video
- DWD-ch 1
- Continuous Integration

Slides
Assignment

Week 4
Topics:
- GIT
- Continuous Deployment & Integration

Readings:
- Git intro
- DWD-ch 2

Slides
Assignment
Assignment
Assignment
Exam 1

Week 5
Topics:
- Jenkins

Readings:
- DWD-ch 2
- DWD-ch 3

Slides
Assignment
Assignment
Assignment

Week 6
Topics:
- Jenkins - Deployment to Tomcat

Assignment
Exam 2

Week 7
• Topics:
  • Vagrant

• Slides

• Slides

• Assignment

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**Week 8**

• Topics:
  • AWS vagrant

• Slides

• Aws notes

• Vagrant and AWS Screens

• AWS AMI Screens

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**Week 9**

• Topics:
  • Google Cloud Platform
  • Automated Configuration (Configuration Management)
  • Ansible

• Readings:
  • How ansible works
  • Benefits of CM
  • Ansible Getting Started (Also covered in my slides)

• Slides

• GCP Screens

• Assignment

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**Week 10**

• Topics:
  • Ansible Playbooks

• Readings:
  • Ansible Playbooks Intro
  • More about playbooks

• Slides

• Assignment

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**Week 11**

• Topics:
  • More ansible
  • Vagrant + Ansible

• Assignment

• Assignment
Week 12

- Topics:
  - Chef
  - Docker
- Exam 3
- Readings:
  - Docker
  - Assignment
  - Assignment

Week 13

- Topics:
  - Docker
  - Thanksgiving

Week 14

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

Week 15

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

Final - See date on syllabus