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

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**Week 4**

• Topics:
  • GIT
  • Continuous Deployment & Integration

• Readings:
  • Git intro
  • DWD-ch 2

• Slides

• Assignment

• Assignment

• Exam 1

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**Week 5**

• Topics:
  • Jenkins

• Readings:
  • DWD-ch 2
  • DWD-ch 3

• Slides

• Assignment

• Assignment

• Assignment

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**Week 6**

• Topics:
  • Jenkins - Deployment to Tomcat

• Assignment

Exam 2

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**Week 7**
Week 8

Topics:
- AWS vagrant

Slides
- AWS notes
- Vagrant and AWS Screens
- AWS AMI Screens

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

Week 10

Topics:
- Ansible Playbooks

Readings:
- Ansible Playbooks Intro
- More about playbooks

Slides
Assignment

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