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
• 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**
• 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