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
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
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