DevOps
Lesson 00:

Capgemini

Course Goals

- At the end of this program, participants will gain an understanding of:
  - DevOps Ecosystem
  - Automatic Source Code Management using GIT and Continuous Integration using Jenkins

Course Non Goals

- This program does not attempt:
  - To demonstrate Continuous Deployment and Continuous Monitoring tools like puppet, CHEF and Nagios

Pre-requisites

List the Course Pre-requisites

- Text Basic understanding of system concepts
- Familiarity with Command Line Interface(CLI)
- Familiarity with a Text Editor
- Experience with managing systems/applications/infrastructure or with deployments/automation
- IT experience

Intended Audience

This course is suitable for

- System Administrators
- Developers
- IT Managers
- IT Operations team members who want to learn more about DevOps.

Day Wise Schedule

Day 1

- Lesson 1:Introduction to DevOps
- Lesson 2: GitHub

Day 2

- Lesson 2: GitHub
- Lesson 3:Jenkins

Day 3

- Lesson 4: Introduction To Mockito
- Lesson 5:Junit & Mockito Integration with Jenkins

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Lesson 1: Introduction to DevOps

- What is DevOps
- Evolution of DevOps
- Agile Methodology
- Why DevOps
- Agile vs DevOps
- DevOps Principles
- DevOps Lifecycle
- DevOps Tools
- Benefits of DevOps
- Continuous Integration and Delivery pipeline
- Use-case walkthrough

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Lesson 2: GitHub
- Introduction to Git
- Version control
- Repositories and Branches
- Working Locally with GIT
- Working Remotely with GIT

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- Lesson 03:Jenkins
  - Introduction to CI
  - Jenkins Introduction
  - Creating Job in Jenkins
  - Adding plugin in Jenkins
  - Creating Job with Maven & Git

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- Lesson 04:Introduction To Mokito
  - Mockito Overview
  - General Mocking Concepts
  - Introduction Of Mockito and Demo
  - Core Mockito Features and API

- Lesson 05:JUnit and Mockito Integration with Jenkins

References

http://www.bogotobogo.com/DevOps/DevOps_CI_CD_Pipeline_Sample.php

https://dzone.com/articles/an-example-of-a-continuous-integration-delivery-pi

https://www.edureka.co/blog/devops-tutorial?utm_source=blog&utm_medium=left-menu&utm_term=DevOps%20Tutorial%20:%20Introduction%20To%20DevOps

http://www.guru99.com/cloud-computing-for-beginners.html

https://www.slideshare.net/Agarwaljay/cloud-computing-simple-ppt-41561620

Next Step Courses (if applicable)

Containerization using Docker

Puppet

Continuous Monitoring using Nagios