DevOps Course Content

DevOps

1. Definition of SDLC
2. Purpose of SDLC
3. General Phases of SDLC
4. Various Models of SDLC
5. About Waterfall SDLC Model
6. Waterfall SDLC Model - Advantages
7. Waterfall SDLC Model - Disadvantages
8. About Agile SDLC Model
9. Agile SDLC Model - Advantages
10. Introduction to DevOps
11. History of DevOps
12. What is DevOps
13. Definition of DevOps
14. Fundamental Principles of DevOps
15. Benefits of DevOps
16. After Implementation
17. DevOps Roles and Responsibilities
18. Continuous Integration in DevOps

12. Download a key pairs
13. How to connect EC2 instances
14. What is pem file
15. What is ppk file
16. What are default usernames to connect AMI's
17. How to Login into LINUX AMI
18. How to reboot the Instance
19. How to stop instance
20. How to terminate instance

AWS Cloud

1. Brief History of AWS
2. AWS Features
3. How to Create Account in AWS
4. Introduction to EC2
5. Features of EC2
6. EC2 Dashboard Overview
7. About Amazon Machine Images (AMI)
8. Different types of AMI's
9. How to create AWS AMI
10. How to create a Key Pairs
11. What is EBS Volumes

Unix/Linux

Git

Docker

1. What is Container
2. Docker features
3. Docker history
4. Docker usage
5. Docker Architecture
6. Docker Editions
7. Docker system Requirements
8. Docker installation and setup
9. How to verify docker installation
10. About Docker version
11. OS-Level-Virtualization
12. Layered file system
13. VM Ware vs Docker
14. Docker components
15. Docker workflow
16. Docker benefits
17. Docker images
18. Docker Container
19. Docker file
20. Docker hub/registry
21. Docker daemon
22. Docker Install & Configure
23. Docker all commands
24. Docker Volumes
25. Volume (container-container)
26. Volume (Host- Container)
27. Port mapping
28. Registry server
29. Pull/push images from /to registry
30. CMD
31. RUN
32. ENTRYPOINT
33. Introduction to Docker
34. Why docker
35. Relation between container and docker
36. Why docker is so popular
37. Difference between container and image
38. Containers History
39. How to see list images in docker
40. What is Docker Registry
41. How to see all docker images

42. How to pull images from docker registries
43. What is pulling in docker?
44. Difference between Docker Pull, run, Push
45. How to run docker image
46. How to exit from container without killing it
47. How to exit from container by killing it
48. How to see all running container on docker host
49. How to check the history of all containers
50. How to stop a container that is running
51. How to find latest containers that are created
52. How to get inside of already a running container
53. How to start a container and remove it once task is completed
54. How to delete or remove a container
55. How to delete or remove image from docker host
56. How to attach a port of docker host to docker container
57. How to run a container in background
58. Difference between docker container run and docker container start
59. How to specify a name to docker container
60. How to see container logs
61. How to see all commands related to a container
62. How to remove docker multiple containers
63. How to check docker container metadata using docker inspect
64. How to list what ports are being used by docker container
65. How to tags docker images
66. How to log into docker registries using docker CLI
67. How to logout from docker registries using docker CLI
68. How to push docker image to docker registries
69. About Docker file
70. How to create Dockerfile to build an image
71. How to build an image from Dockerfile
72. About Dockerfile Instructions

Ansible

Maven

1. What is Build
2. Purpose of Build Tools
3. Build Tools Ideology
4. Evolution of Build Tools
5. Few Notable Build Tools
6. Java Based Build Tools
7. Build management
8. Advantages of Build tool
9. Architecture of Maven
10. Maven build life-cycle
11. Maven directory structure
12. Maven repositories
13. Pom.xml
14. Multi module project(over view)

Nagios

1. Why monitoring tool
2. Ways of monitoring
3. Why Nagios so cool?
4. Architecture of Nagios
5. Plugins
6. Config files
7. Dashboard overview
8. Nagios working process
9. Nagios Installation
10. Naagios Configuration
11. Nagios Directory structure

Cloud Watch

1. What is Cloud Watch
2. Why to monitor
3. What is default monitoring
4. What is detailed monitoring
5. Time interval
6. Why only cloud watch
7. How to see metrics
8. Creating Alarms
9. Creating Graphs
10. Line
11. Stacked
12. Number
13. Text
14. Create Billing Alarm
15. Deleting Billing Alarm

Jenkins

Kubernetes

Tomcat Web Server

Apache Web Server

Virtual box

Projects

- *DevOps Real time project - 1*
- *DevOps Real time project - 2*
- CI-CD Pipeline projects
- Interview questions (Technical, Manager & HR)
- Resume preparation & Evaluation
- Real time Scenarios
- Day-to Day activities
- Provide Material

My way of Teaching

- ✓ Theoretical Knowledge
- ✓ Practical Knowledge
- ✓ Interview & Exam Points
- ✓ Provide material
- ✓ Resume preparation (Fresher's & Experience)
- ✓ Provide project
- ✓ Interview cracking tips

Thank you