DevOps Master Workshop

Duration

4 Days

Pre-requisite

- Development / Deployment / Testing Knowledge / Agile Knowledge

Target Audience

Anyone working within DevOps or looking to transition to DevOps

Application or Service Product Owners / Agile Scrum Masters / Project Managers / Test Managers / IT Service Managers / Process Managers / Lean IT Practitioners

Certification Body

EXIN

Certificate Nature

International Certificate of Life time Validity that does not require any further investment in renewal.

Workshop Outline

DevOps Adoption

DevOps Mindset and Benefits

- Analyze DevOps anti-patterns in a scenario
- Explain the benefits of DevOps
- Explain why DevOps fits the current software development process so well
- Explain why DevOps needs a specific mindset to work
- Explain how DevOps fits with Lean and Agile Scrum practices

Organizational Culture

- Explain why the 4 Pillars of Effective DevOps (Collaboration, Affinity, Tools and Scaling) are so important
- Analyze a scenario for missing parts of the DevOps mindset
- Explain how to create a team from a group of people, through fostering collaboration, a DevOps mindset, and empathy and trust

- Analyze a situation where there is a misconception regarding collaboration and identify the correct troubleshooting method
- Analyze a situation where there is a need for conflict management and identify the best solution
- Explain how human resource management can foster diversity and which benefits this brings to the organization

DevOps Principles and Concepts

- Explain the use and usefulness of different software development
- Methodologies (Waterfall, Agile, Scrum, etc.) and their basic principles
- Explain the use and usefulness of different operations methodologies (IT
- Service Management)
- Explain the use and usefulness of the Lean systems methodology

Planning, Requirements, and Design

Application or Service Lifecycle Management

- Explain how DevOps adds value to modern Application Lifecycle Management
- Explain why DevOps improves customer experience when used for Service

Lifecycle Management

- Project Charter and Visual Control
- Explain how a DevOps project's scope should be determined
- Explain why Visual Control over a DevOps project facilitates DevOps practices
- Infrastructure and Architecture Design
- Explain how DevOps changes or influences the design of IT infrastructure and architecture
- Explain why Cloud computing and virtualization techniques make integrating

Dev and Ops easier

- Service Level Requirements and Agreements
- explain how DevOps changes Service Level Requirements and Agreements
- Implementing a Testing Strategy
- Explain why and how the Testing Strategy needs to be changed when transitioning to DevOps
- Analyze User Stories for completeness

Development and Deployment

Continuous Delivery and Continuous Integration

- Explain why Continuous Delivery is essential for Effective DevOps
- Analyze how to integrate Continuous Delivery in a scenario

- Analyze how to solve problems with Continuous Delivery in a scenario
- Explain why Continuous Integration is essential for Effective DevOps
- Analyze how to achieve Continuous Integration in a scenario with a distributed team or a distributed version control system
- Analyze how to solve problems with Continuous Integration in a scenario

Deployment Pipeline

- Explain the logic of the anatomy of a DevOps deployment pipeline
- Explain how to use build and deployment scripting

Continuous Deployment

- Explain why the iteration plan and the release plan should be changed for effective DevOps
- Analyze how to implement Continuous Deployment in a scenario

Ji-Kotei-Kanketsu, Rhythm, Work-in-Progress and One-piece-flow

- Explain the concepts Ji-Kotei-Kanketsu, Rhythm, Work-in-Progress and Onepiece-flow
- Analyze a scenario for a problem with Ji-Kotei-Kanketsu, Rhythm, Work-inProgress or One-piece-flow and find a suitable solution

Automation, Tools and Testing

- Explain why automation is important for effective DevOps
- Explain how to use tools to facilitate DevOps in general
- Explain how to use tools to support DevOps mindset and culture
- explain why it is important that DevOps testing is automated
- Analyze a scenario and choose the correct way of automating an acceptance test

Operation and Scaling

Managing Data; Infrastructure and Environments; and Components and Dependencies

- Explain which problems can be encountered when managing data in databases within DevOps
- Analyze a scenario where a database is used in DevOps and provide the best solution to a problem
- Analyze a scenario and identify the best way to prepare an infrastructure environment for deployment or manage it after deployment
- Analyze a scenario and suggest a commonly used strategy to manage components
- Explain how to manage dependencies

Configuration Management and Version control

- Explain why version control is a key to effective DevOps
- Explain how to keep version control over data, infrastructure and components
- Analyze a scenario and suggest the best strategy to manage a configuration problem

Cloud and Immutable Infrastructure

- Explain when it is and when it is not necessary to move to Cloud-based
- Infrastructure for effective DevOps
- Explain how Cloud-based infrastructure should be managed within DevOps
- Business Continuity
- Explain how DevOps can facilitate Business Continuity practices

Scaling

- Analyze a scenario, explain if and why it is important to scale up or down in that situation, and identify the best way to do that
- Analyze a scenario for what went wrong with scaling, and identify a good way to solve the problem
- Explain how social policy and hiring practices support scaling DevOps

End-of-Life

Conditions for End-of-Life of a product or service

- Explain which conditions should be met before terminating a service or product

Tools Covered

S.No	Software	Description
1	**Elasticsearch**	NoSQL Database
2	**Logstash**	Log pipeline tool
3	**Kibana**	Virtualization layer
4	**Dynatrace**	Application performance management
5	**Sonarqube**	Continuous code quality
6	**Artifactory**	Repository
7	**Jit / Jit Hub**	Version control
8	**Jenkin**	Continuous integration
9	**Docker**	Platform
10	**Ancible**	Configuration management
11	**Vagrant**	Virtual environment
12	**Jira**	Workflow
13	**Splunk**	Event analyzer and reports

Requirements

Laptop

Locations offered

On-demand Anytime Anywhere Instructor led training available

Chennai, Bangalore, Hyderabad, Pune & other major cities in India, US, UK, Middle east, Dubai & Singapore.

Offers

Early bird / Group / Corporate Group / Festive offers available

Demo Session

For a Free Demo session of 2 Hours - Contact 9500087437 / 044-4005 0999 / 044–42178519/24322519 or Register yourself using the link

https://docs.google.com/forms/d/e/1FAIpQLSdhXC9DF8cgObBKIxtZmK3b1hsbmnYX62Grxwsyi96xBnLG0A/viewform