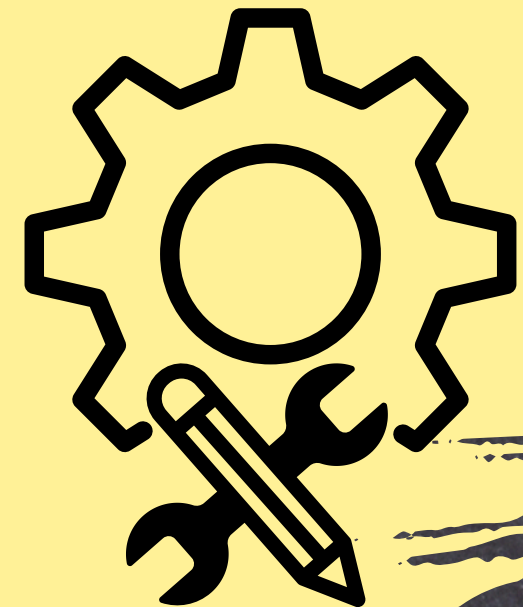




DEVOPS CERTIFICATION TRAINING



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INTRODUCTION

UPSKILLMENT'S DEVOPS TRAINING COURSE OFFERS COMPREHENSIVE KNOWLEDGE OF KEY DEVOPS TOOLS SUCH AS GIT, JENKINS, DOCKER, ANSIBLE, TERRAFORM, KUBERNETES, PROMETHEUS, AND GRAFANA. THIS HANDS-ON COURSE IS DESIGNED TO EQUIP YOU WITH THE SKILLS NEEDED TO BECOME A CERTIFIED DEVOPS PRACTITIONER, FOCUSING ON BEST PRACTICES IN CONTINUOUS DEVELOPMENT, CONFIGURATION MANAGEMENT, INTEGRATION, AND CONTINUOUS MONITORING THROUGHOUT THE SOFTWARE DEVELOPMENT LIFECYCLE. THE LIVE INSTRUCTOR-LED TRAINING PROGRAM PROVIDES AN OPPORTUNITY TO WORK ON REAL-WORLD PROJECTS, HELPING YOU ACHIEVE DEVOPS ENGINEER CERTIFICATION.

DURATION: 16 HRS OF LIVE CLASSES (WEEKEND/WEEKDAY CLASSES)
ALSO AVAILABLE IN SELF-PACED FORMAT.



CURRICULUM

MODULE 1: INTRODUCTION TO DEVOPS

- OVERVIEW OF DEVOPS PRINCIPLES AND PRACTICES
- ADVANTAGES OF IMPLEMENTING DEVOPS IN MODERN SOFTWARE DEVELOPMENT
- UNDERSTANDING THE DEVOPS LIFECYCLE
- KEY STAGES IN THE DEVOPS WORKFLOW
- DEVOPS DELIVERY PIPELINE AND ITS COMPONENTS

SKILLS ACQUIRED:

- GAINING KNOWLEDGE OF THE DEVOPS APPROACH AND ITS IMPACT ON EFFICIENCY
- COMPREHENDING THE FLOW OF SOFTWARE DEVELOPMENT IN A DEVOPS SETTING

MODULE 2: VERSION CONTROL WITH GIT

- INTRODUCTION TO VERSION CONTROL AND GIT FUNDAMENTALS
- INSTALLING AND SETTING UP GIT
- BASIC GIT COMMANDS AND USAGE
- WORKING WITH REMOTE REPOSITORIES ON PLATFORMS LIKE GITHUB OR GITLAB

HANDS-ON PROJECTS:

- USING GIT FOR VERSION CONTROL AND COMMON COMMANDS
- MANAGING AND INTERACTING WITH REMOTE REPOSITORIES
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SKILLS ACQUIRED:

- TRACKING AND MANAGING CODE CHANGES EFFECTIVELY
- UTILIZING SOURCE CODE MANAGEMENT TOOLS
- SAVING AND REVISING CHANGES IN FILES SYSTEMATICALLY

MODULE 3: BRANCHING AND MERGING IN GIT

- UNDERSTANDING GIT BRANCHING AND MERGING TECHNIQUES
- HANDLING MERGE CONFLICTS
- GIT OPERATIONS LIKE STASHING, REBASING, REVERTING, AND RESETTING
- GIT WORKFLOWS AND BEST PRACTICES FOR TEAM COLLABORATION
- INTRODUCTION TO MAVEN AND ITS STRUCTURE
- CONTINUOUS INTEGRATION (CI) OVERVIEW

HANDS-ON PROJECTS:

- PRACTICAL EXPERIENCE WITH BRANCHING AND MERGING
- RESOLVING MERGE CONFLICTS IN TEAM PROJECTS
- USING STASHING, REBASING, REVERTING, AND RESETTING TO MANAGE CODE VERSIONS
- CONFIGURING AND INTEGRATING MAVEN FOR BUILDS

SKILLS ACQUIRED:

- CREATING AND MANAGING MULTIPLE BRANCHES WITHIN GIT REPOSITORIES
- AUTOMATING BUILD AND INTEGRATION TASKS WITH MAVEN
- IMPLEMENTING CONTINUOUS INTEGRATION (CI) PRACTICES

MODULE 4: JENKINS FOR CONTINUOUS INTEGRATION

- UNDERSTANDING JENKINS ARCHITECTURE AND COMPONENTS
- MANAGING JENKINS PLUGINS AND CONFIGURATIONS
- SECURING JENKINS AND ENSURING SAFETY IN THE CI/CD PIPELINE
- SETTING UP NOTIFICATION SYSTEMS IN JENKINS
- IMPLEMENTING JENKINS MASTER-SLAVE ARCHITECTURE FOR SCALABLE PIPELINES
- CONFIGURING AND USING JENKINS DECLARATIVE PIPELINES

HANDS-ON PROJECTS:

- CREATING AND MANAGING JENKINS PIPELINE VIEWS
- CONFIGURING JENKINS MASTER-SLAVE NODES FOR DISTRIBUTED BUILDS
- DEVELOPING A COMPLETE JENKINS DELIVERY PIPELINE

SKILLS ACQUIRED:

- BUILDING AND MANAGING JENKINS PIPELINES EFFECTIVELY
- ENABLING JENKINS PLUGIN FUNCTIONALITIES
- SETTING UP AUTOMATED EMAIL NOTIFICATIONS FOR BUILD STATUSES

MODULE 5: INTRODUCTION TO CONFIGURATION MANAGEMENT WITH ANSIBLE

- KEY CONCEPTS OF CONFIGURATION MANAGEMENT AND INFRASTRUCTURE AS CODE (IAC)
- INTRODUCTION TO ANSIBLE AND ITS ARCHITECTURE
- MANAGING INVENTORY AND HANDLING ANSIBLE MODULES
- WRITING AND EXECUTING ANSIBLE AD-HOC COMMANDS
- DEVELOPING ANSIBLE PLAYBOOKS AND ORGANIZING TASKS INTO ANSIBLE ROLES

HANDS-ON PROJECTS:

- RUNNING AD-HOC COMMANDS WITH ANSIBLE
- WRITING AND EXECUTING BASIC ANSIBLE PLAYBOOKS
- USING VARIABLES, HANDLERS, AND ROLES IN ANSIBLE PLAYBOOKS

SKILLS ACQUIRED:

- UNDERSTANDING THE PRINCIPLES OF CONFIGURATION MANAGEMENT
- USING ANSIBLE FOR EFFECTIVE CONFIGURATION AUTOMATION
- DEVELOPING PLAYBOOKS AND ROLES FOR REPEATABLE AND CONSISTENT CONFIGURATIONS

FREQUENTLY ASKED QUESTIONS (FAQ)

1. Who issues the DevOps certification, and how long is it valid?

Upon successful completion of the DevOps course, Upskillment provides a course completion certificate, which is valid for a lifetime.

2. How can I unlock my Upskillment DevOps certification?

To unlock your DevOps certification from Upskillment, you must complete at least one full session of the course and finish all requirements, including achieving a minimum score of 80% in the final simulation test.

3. What are the costs of different DevOps certification exams?

Here's a breakdown of the costs for popular DevOps certification exams:

- DevOps Foundation: \$300-\$500

- AWS Certified DevOps Engineer – Professional: \$300

- Microsoft Certified: Azure DevOps Engineer Expert: \$165

- Docker Certified Associate: \$195

- Certified Kubernetes Administrator (CKA): \$300

- Google Cloud Professional DevOps Engineer: \$200

- Red Hat Certified Engineer in DevOps: Varies

- DevOps Institute Certifications (e.g., DevOps Leader): Varies

- HashiCorp Certified: Terraform Associate: \$70

- Jenkins Certified Engineer: Varies

Please note that these costs are for the exams only and do not include training or study materials. Some certifications may offer discounted retake options or bundled packages with study resources.

4. How valuable is a DevOps certification in the IT industry?

A DevOps certification can significantly enhance your career by:

- Boosting your resume with recognized credentials

- Increasing your earning potential

- Demonstrating expertise in the software development lifecycle

- Providing access to advanced career opportunities

DevOps professionals are in high demand, and roles in this field are among the highest-paying in the tech industry.