ExLearn Technologies

We are Certified!

CLOUD TRAINING + INTERNSHIP PROGRAM



FUNDAMENTALS OF COMPUTER NETWORKING

1. Introduction to Networking

Importance of Networking, How Internet works?

2. Inter-Networking Devices and Network Topologies

Working of Hub, Switch, and Router. Architecture of Ring, Mesh, Star topologies.

3. OSI Layer and TCP/IP Model

Working of 7 Layers of OSI Model and TCP/IP Model.

4. Ports and Protocols

What are Ports and Protocols with real time examples?

5. Physical and Logical Addressing

Working with IPv4 addressing and MAC Addressing.

6. Subnetting

Division of Logical Addressing and different methods.



LINUX OPERATING SYSTEM

1. Introduction to Linux

Introduction to Different OS, Intro to Unix /Linux OS, Architecture of Unix.

2. Linux OS Installation

Virtualization and Linux OS Installation.

3. Linux File System Structure

Overview of Linux File system.

4. Basic Commands

Working with basic commands and filetypes in Linux.

5. Working with Files And Directories

Managing Files and Directories using Commands.

6. Working with File editors

Different types of editors in Linux. (#vi, #vim, #nano).

6. Managing the File Content and Filter Commands

Commands to manage file content. Use of multiple Filter Commands.

6. Permissions in Linux

Managing the File permissions in Linux along with ownership Permissions

7. User and Group Management

Creating Local users and groups,.



8. Package Management

Installing and updating packages, Different package handlers in Linux.

9. Process and Service Management

Managing the multiple Services.

10. Linux Networking

Working with multiple networking commands like ping, traceroute, dig,nslookup etc.



AMAZON WEB SERVICES

OBJECTIVES

- Compute Service Elastic Compute Cloud (EC2)
- Storage Service Simple Storage Service (S3) and Elastic Block Storage (EBS)
- Database Service Relational Database Service (RDS)
- Network Service Virtual Private Cloud (VPC)
- Identity Compliance Identity and Access Management (IAM)
- DNS Service Route53 (R53)
- Monitoring Service Cloud Watch (CW)

INTRODUCTION TO CLOUD COMPUTING

DEPLOYMENT MODELS:

- Public Cloud
- Private Cloud
- Hybrid Cloud

SERVICE MODELS:

- SaaS (Software as a Service)
- PaaS (Platform as a Service)
- laaS (Infrastructure as a Service)

INTRODUCTION TO AWS:

- AWS Global Infrastructure
- AWS Account creation
- AWS Free tier overview



IDENTITY ACCESS MANAGEMENT (IAM)

- Root User
- IAM user
- AWS Managed Policies
- Customer Managed Policies
- IAM Roles

AMAZON ELASTIC COMPUTE CLOUD (AMAZON EC2)

- EC2 Introduction
- EC2 Instance Types
- Amazon Machine Image (AMI)
- Elastic Block Storage (EBS)
- Security Groups and Keys Pairs
- Launching a Windows Instance
- Launching a Linux Instance
- Elastic Load Balancer

AMAZON SIMPLE STORAGE SERVICE (S3)

- S3 Introduction
- Storage Classes
- Glacier
- Versioning

PROJECT - S3 STATIC WEBSITE HOSTING



AMAZON VIRTUAL PRIVATE CLOD (VPC)

- VPC Basics
- Subnets
- NAT
- Route Table
- Internet gateway
- Configuring NAT gateway
- Creating custom VPC with custom Subnets

AMAZON ROUTE53 AND DOMAIN NAME SYSTEM(DNS)

- What is DNS
- How DNS works
- DNS Record types
- Hosted Zone and NS

DATABASES

- Databases introduction
- Traditional DB Vs EC2 hosted Database Vs RDS
- Launching a MSSQL RDS Instances
- Multi-AZ Use cases and Configuration
- Read Replicas Use cases and Configuration
- Amazon Aurora Infrastructure

AWS PROJECT