Faysal Aziz

Fundamentals of Cloud Computing

FA-0221 · two-day

DevOps, Cloud & Infrastructure

Introduction

The two-day exploratory course is designed to empower participants with a holistic understanding of cloud computing. This course is ideal for beginners venturing into the realm of cloud computing and managers who aim to evaluate the advantages, risks, and workings of cloud computing to aid their organizations. The course covers cloud computing fundamentals, architecture, security, compliance, service providers, and deployment models, among other topics. With a blend of theoretical and practical aspects, it equips learners to select and assess the appropriate cloud service providers for specific business needs.

Learning outcomes

By the end of the course, participants will be able to:

- Understand the fundamentals of cloud computing.
- Know the history and evolution of cloud computing.
- Understand different cloud computing architectures and services.
- Evaluate and compare various cloud service providers.
- Understand different cloud service and deployment models.
- Grasp the essentials of cloud security and compliance.
- Address and mitigate the common risks and concerns associated with cloud computing.
- Understand career opportunities in the field of cloud computing.
- Evaluate the benefits and concerns of cloud computing in a business context.

Prerequisites

Knowledge:

- Basic understanding of IT and computing concepts.
- Basic familiarity with the internet and web services.

Hardware:

- A computer with a stable internet connection.
- Modern browser (latest version of Google Chrome, Mozilla Firefox, or Microsoft Edge).
- Zoom Conferencing software.
- Webcam
- Microphone

Training outline

1. Day 1:

Introduction to the Course

- Welcome and Introductions
- Overview of the course

History and Evolution of Cloud Computing

- Understanding what led to the rise of Cloud Computing
- Key milestones and advancements in Cloud Computing

Fundamentals of Cloud Computing

- Understanding Cloud Computing
- Components of Cloud Computing
- Benefits and Concerns of Cloud Computing

Exploring Cloud Computing Architectures and Services

- Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS)
- Private, Public, and Hybrid Clouds
- Other Cloud Services (FaaS, DaaS, etc.)

Comparative Analysis of Cloud Providers

- Overview of Major Cloud Providers: AWS, Azure, GCP, and others
- Comparing Cloud Providers: Strengths, weaknesses, unique offerings

2. Day 2:

Cloud Service and Deployment Models

- Understanding Service Models: IaaS, PaaS, SaaS
- Understanding Deployment Models: Private, Public, Hybrid, and Multi-cloud

Cloud Security and Compliance

- Basic Principles of Cloud Security
- Key Cloud Compliance Considerations
- Case Studies: Security Breaches and Lessons Learned

Career Opportunities in Cloud Computing

- Understanding different roles in Cloud Computing
- Certifications and Career Paths
- Key skills for a successful career in Cloud Computing

Assessing the Benefits and Concerns of Cloud Computing for Businesses

- Factors for businesses to consider when moving to the cloud
- Evaluating ROI and Cost-Benefit Analysis for Cloud Adoption
- Case Studies: Successful Cloud Adoption Stories

Course Wrap-up and Next Steps

- Course Review and Key Takeaways
- Open Q&A and Course Feedback

Note: Each session will include a 15-minute Q&A at the end, allowing participants to clarify any doubts they might have.

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