

TRAINING REPORT

On

“AWS Academy Cloud Architechting ”

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ABSTRACT

The AWS Academy Cloud Architecting course is an advanced educational program offered by Amazon Web Services (AWS) that equips students with comprehensive skills and knowledge in cloud architecture. This course provides a thorough understanding of AWS cloud computing services, architecture design principles, and best practices for building robust and scalable cloud solutions. The curriculum of the AWS Academy Cloud Architecting course covers an array of topics, including cloud infrastructure, networking, security, and application deployment. Through hands-on labs, practical exercises, and real-world scenarios, students gain practical experience in designing, implementing, and managing cloud-based solutions using AWS technologies. By enrolling in this course, students have the opportunity to earn industry-recognized certifications, such as AWS Certified Solutions Architect, which further enhances their career prospects in the cloud computing domain. With a focus on cutting-edge cloud technologies, the AWS Academy Cloud Architecting course prepares students to address the dynamic challenges of the modern IT landscape, enabling them to excel in roles that demand cloud architecture expertise. Overall, the AWS Academy Cloud Architecting course empowers learners with the skills and credentials needed to thrive in the ever-evolving world of cloud computing, making it a valuable investment for aspiring cloud professionals seeking to stay at the forefront of the industry.

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Introduction

AWS Academy Cloud Architecting Course, explores the exciting world of cloud computing and teaches us on how to design and deploy scalable and reliable applications using AWS cloud services. This course, aids in deep understanding of cloud architecture principles, AWS best practices, and how to optimize performance and cost. Also, it talks about the benefits of cloud computing and why it is important for businesses to adopt it. The course let you have hand-on experience on AWS covering various cloud computing concepts. This course is valuable for those who want to get equipped with the skills and knowledge about cloud computing and AWS.

AWS Fundamentals

The course talked about AWS Fundamentals to get a better understanding of how AWS works. Amazon Web Services (AWS) is a cloud computing platform that provides a wide range of services to individuals and businesses. AWS offers a variety of services, including compute, storage, databases, analytics, machine learning, and more. These services can be used to build and deploy applications quickly and easily. AWS architecture provides high availability, scalability, and security. One of the key benefits of AWS is its flexibility. Users can choose from a wide range of services and only pay for what they use. This makes it easy to scale up or down depending on demand. AWS fundamentals refer to the foundational concepts and principles that underpin the cloud computing platform offered by Amazon. As the leading cloud service provider, AWS offers a vast array of services and solutions to help individuals, businesses, and organizations harness the power of the cloud to scale, innovate, and achieve their goals efficiently and cost-effectively.

The core principles of AWS Fundamentals revolve around flexibility, scalability, reliability, and security. AWS provides an elastic and pay-as-you-go model, allowing users to access computing resources on-demand and only pay for what they use. This scalability ensures that businesses can easily adapt to varying workloads and rapidly expand or shrink their infrastructure based on demand. AWS operates on a global network of data centers, known as Availability Zones (AZs), providing high availability and redundancy. This design approach minimizes the risk of downtime due to hardware failures or natural disasters, making AWS services highly reliable. Security is a paramount aspect of AWS, and the platform provides a wide range of security tools and features. AWS adheres to stringent security measures and compliance standards, ensuring that customer data is protected and secure. AWS offers a comprehensive portfolio of services, including computing power, storage, databases, analytics, machine learning, Internet of Things (IoT), and more. These services can be easily integrated and orchestrated to build sophisticated, scalable, and cost-effective applications and solutions. One of the key components of AWS Fundamentals is Amazon's management console, providing a user-friendly interface to manage and monitor AWS services. Additionally, AWS Command Line Interface (CLI) and Software Development Kits (SDKs) enable developers to interact with AWS programmatically, automating various tasks and workflows. In conclusion, AWS Fundamentals encompass the fundamental principles, features, and services that define Amazon Web Services as a leading cloud computing platform. Understanding these fundamentals is essential for leveraging AWS effectively, unlocking the full potential of cloud computing, and empowering organizations to innovate, scale, and succeed in the digital era.

Cloud Computing Concepts

Cloud computing is a revolutionary technology that has transformed the way we store, process, and access data. It offers numerous benefits such as scalability, flexibility, security and cost savings.

The AWS Academy Cloud Architecting course provides a comprehensive education on various cloud computing concepts essential for building scalable, secure, and efficient solutions using Amazon Web Services. Some of the key cloud computing concepts covered in the course including, cloud infrastructure. Understanding the fundamental building blocks of cloud infrastructure, such as compute instances, storage options, and virtual networks. Students learn how to provision and manage resources effectively in the cloud. The course also included cloud networking concepts. Exploring concepts related to networking in the cloud, including Virtual Private Cloud (VPC), subnets, routing, and security groups. Students gain insights into designing and implementing secure and isolated network architectures. Security in the cloud is another concept that was covered. Focusing on security best practices, access control, data encryption, and compliance. Students learn how to safeguard data and applications in a cloud environment. The course also focused on how to architect applications in the cloud. Designing resilient and fault-tolerant applications using AWS services like Elastic Load Balancing, Auto Scaling, and Amazon Relational Database Service (RDS). Cloud cost management was also taught. Understanding cost optimization strategies, cost allocation tags, and monitoring usage to ensure cost-effective solutions on AWS. Another important concept was High Availability and Disaster Recovery. Learning to design architectures that ensure high availability and business continuity using AWS services like Amazon Route 53 and AWS Backup. AWS course pointed out the importance of serverless architecture and taught how it works. Exploring the serverless paradigm and using AWS Lambda to build event-driven applications without the need for managing servers. DevOps and Continuous Integration/Continuous Deployment (CI/CD) also covered in the course. Understanding DevOps practices and setting up CI/CD pipelines using AWS CodePipeline and AWS CodeDeploy.

Throughout the course, students gain hands-on experience through labs and projects, enabling them to apply these cloud computing concepts in real-world scenarios. By the end of the AWS Academy Cloud Architecting course, participants are equipped with the knowledge and skills to design, deploy, and manage cloud-based solutions effectively, making them valuable assets in the ever-evolving field of cloud architecture.

Architecting on AWS

Architecting on AWS, there are a few key design principles. First and foremost, you want to build scalable applications that can handle changing workloads without sacrificing performance. This means leveraging services like Amazon EC2 Auto Scaling and Amazon Elastic Load Balancing to automatically adjust capacity based on demand.

Additionally, you also need to prioritize reliability and security. AWS offers a number of tools and services to achieve this, such as Amazon CloudWatch for monitoring and alerting, Amazon S3 for durable object storage, and AWS Identity and Access Management (IAM) for managing user access.

By following these best practices and taking advantage of AWS's powerful infrastructure, you can build robust and resilient applications that are capable of handling even the most demanding workloads.

Conclusion

In conclusion, the AWS Academy Cloud Architecting Course provides a comprehensive understanding of cloud computing and how to design and deploy applications in the cloud using AWS services.

By completing this course, anyone can gain a deep understanding of benefits of cloud computing, the AWS cloud services, cloud architecture principles, as well as best practices for building reliable and secure applications on the cloud. This course enables individuals to apply their newfound knowledge to real-world scenarios

Certificate

