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Azure Masters

Under The guidance of :
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Introduction

- Azure is a Microsoft's cloud computing platform
- It offers a wide range of cloud services, and gives freedom to build, manage and deploy applications on a massive global network.

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What is Cloud Computing?

Cloud computing is a technology that provides on-demand access to a shared pool of computing resources over the internet.

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Objective

- To understand the aspects of Cloud Computing
- Traverse through variety of services offered in Azure
- To be able to create and handle cloud-based infrastructure
- Getting hands-on experience with Cloud Service portals

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Content

- Azure VMs and basic services
- Networks and Availability Zones
- Deployment of resources over cloud and accessing them through Internet
- Scaling and Auto-scaling applications for traffic management
- Ensuring security by adding rules to network access methods
- Deploying a web application on a fully functional cloud infrastructure

IT Process Management:

- Streamlining workflows for efficiency.
- Ensuring IT aligns with business goals.

Importance of Compliance:

- Secure handling of sensitive data
- Adherence to industry-specific regulations.

Data Handling and Security:

- Understanding data storage and processing.
- Compliance with encryption, access control, and industry standards.

DevOps Introduction:

- Automation and integration of software development and IT operations.
- Accelerating the software delivery lifecycle.

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Service Models

Infrastructure as a Service (IaaS)

Examples: Virtual Machines, Storage.

Platform as a Service (PaaS)

Examples: Azure App Services, Google App Engine.

Software as a Service (SaaS)

Examples: Email, Figma

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Advantages

- **Cost-Efficiency**: Pay only for what you use, reducing infrastructure costs.
- **Reliability**: Azure's global network ensures high availability and reliability of services.
- **Security**: Built-in security features and compliance options to safeguard data.

Methodology

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1. Foundational Learning:

Introduction to Azure Fundamentals:

- Basics of cloud computing and Azure's role in the industry.
- Navigating the Azure portal and understanding subscription models.

2. Hands-on Labs:

Practical Application of Concepts:

- Engaging in hands-on labs for real-time experience.
- Implementing core Azure services to reinforce theoretical knowledge.

3. Case Studies:

Real-world Scenarios:

- Analyzing case studies showcasing Azure applications in different industries.
- Gaining insights into practical challenges and solutions.

4. Project Work:

Application in Personal Projects:

- Encouraging participants to apply Azure skills in their own projects.
- Tailoring learning to individual interests and goals.

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5. Assessments and Certifications:

Knowledge Validation:

- Regular assessments to gauge understanding and track progress.
- Guidance on Azure certifications for future career development.

6. Community Engagement:

Networking and Knowledge Exchange:

- Connecting with a community of Azure learners.
- Sharing experiences and insights through forums and discussion platforms.

7. Feedback Loop:

Continuous Improvement:

- Collecting feedback for course improvement.
- Iterative updates based on participant suggestions.

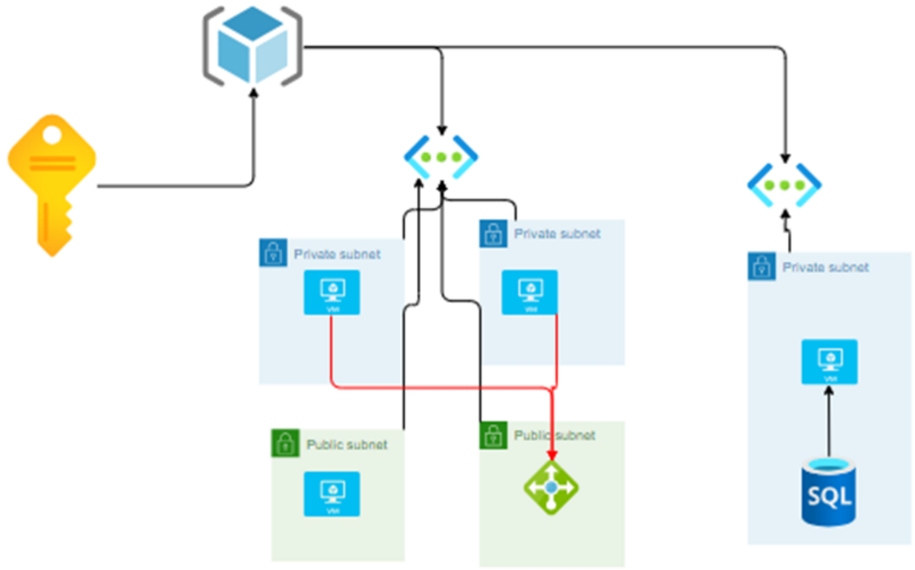
8. Real-Time Support:

Immediate Query Resolution:

- Offering real-time support during the course.
- Ensuring participants feel supported throughout their learning journey.

Project

- Web application deployed on Azure VMs on different subnets within same Vnet.
- Database application deployed on different Vnet connected to the web servers by peering.
- Web app servers associated to a load balancer for scaling and traffic management with auto-scaling enabled
- Load balancer IP mapped to a Domain Name bought from GoDaddy.
- SSL associated to the DNS Services using CloudFlare DNS name servers.



[Project link]

THANK YOU