General Information

Course Official Website
https://docs.microsoft.com/en-us/learn/certifications/exams/az-305

Online Courseware
https://docs.microsoft.com/en-us/users/msftofficialcurriculum-4292/collections/zwm5cy2ownzz08

AZ-900 hands-on lab
https://microsoftlearning.github.io/AZ-900T0x-MicrosoftAzureFundamentals/

Free Azure

https://my.visualstudio.com/

Tailwind Traders

Monday, June 6, 2022   12:16 AM

Sample Application
https://github.com/microsoft/TailwindTraders

Exam materials

Suggested study guide
https://www.thomasmaurer.ch/2021/10/az-305-study-guide-azure-solutions-architect
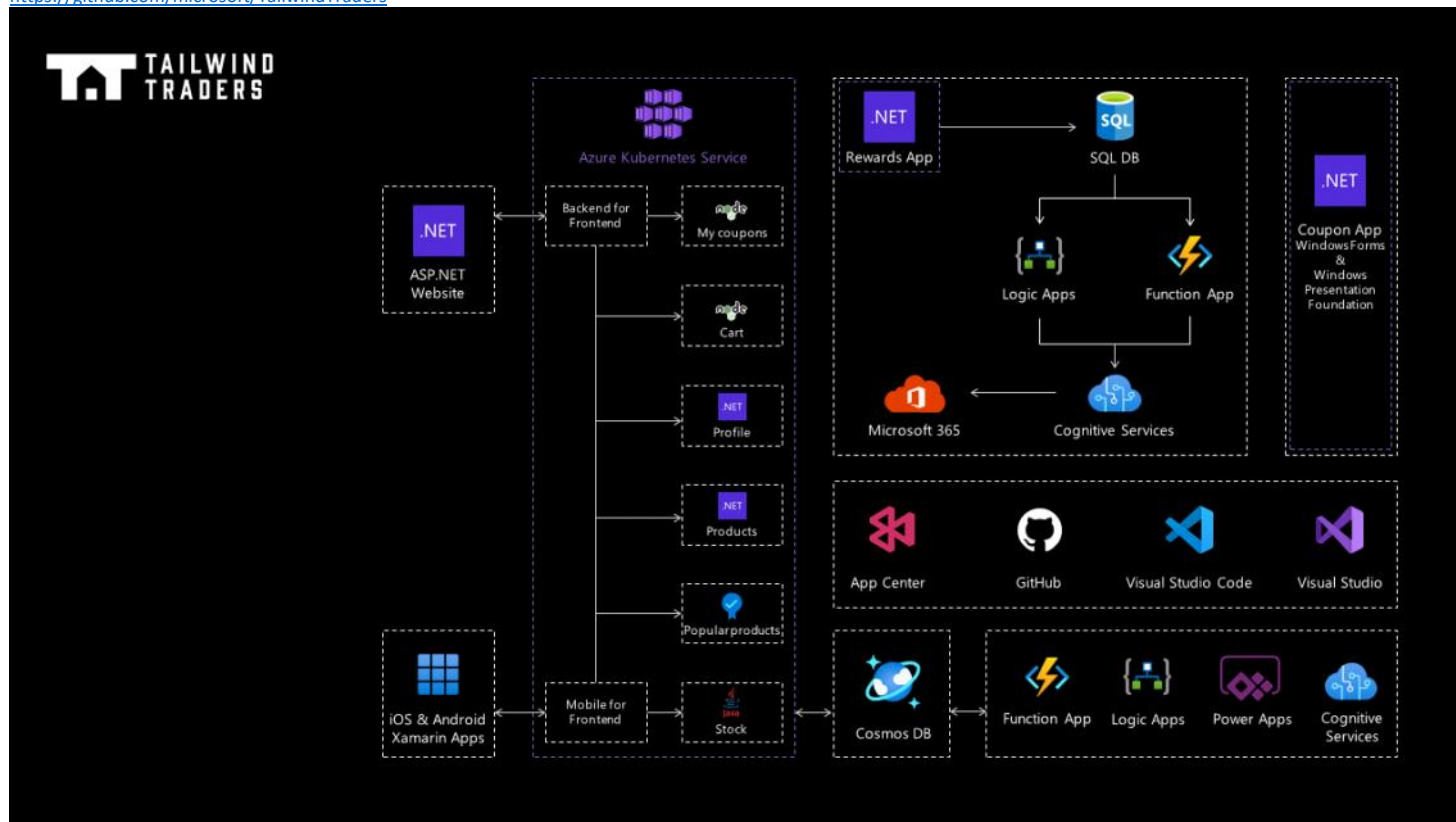
Certification Exam

Certification exams measure your ability to accomplish certain technical tasks for a job role. The study areas are based on the Job Task Analysis that determines what day-to-day tasks are performed in this role.

Each functional area has a percentage indicating the relative weight of the area on the exam. The higher the percentage, the more questions you are likely to see in that area.

Study Area	Percentage
Design identity, governance, and monitoring solutions	25-30%
Design data storage solutions	25-30%
Design business continuity solutions	10-15%
Design infrastructure solutions	25-30%

Exam

Schedule exam

Exam AZ-305: Designing Microsoft Azure Infrastructure Solutions

Hong Kong SAR

$125 USD*

Price based on the country or region in which the exam is proctored.

Languages: English, Japanese, Chinese (Simplified), Korean, German, French, Spanish, Portuguese (Brazil), Arabic (Saudi Arabia), Russian, Chinese (Traditional), Italian, Indonesian (Indonesia)
Retirement date: none

This exam measures your ability to accomplish the following technical tasks: design identity, governance, and monitoring solutions; design data storage solutions; design business continuity solutions; and design infrastructure solutions.

Schedule exam >

Official practice test for Designing Microsoft Azure Infrastructure Solutions
All objectives of the exam are covered in depth so you'll be ready for any question on the exam.

⊕ Save

Practical Test (Cannot Share/Concurrent Login)

If you wants to have individual access, you can purchase from me, I have 40% off discount

https://marketplace.measureup.com/login

cyrus@cyrus-sir.com

When you see this, ask is there anyone is using in the WhatsApp Group, before you logout someone

You already have an open session

The user **cyrus@cyrus-sir.com** is logged on the following device:

Device	Date
Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/102.0.0.0 Safari/537.36	2022-06-05 04:14:32

If you are not logged in to another device we recommend that you change your password here.

For security reasons, you can only have one session active on a device.

If you sign in here, you will automatically be logged out on another device.

← BACK   SIGN IN HERE

Tailwind

Case Study GitHub

https://github.com/MicrosoftLearning/AZ-305-DesigningMicrosoftAzureInfrastructureSolutions

Design a governance solution

Azure built-in roles
https://docs.microsoft.com/en-us/azure/role-based-access-control/built-in-roles

Exercise

Title	URL
Create a management group	https://docs.microsoft.com/en-us/azure/governance/management-groups/create-management-group-portal
Manage your resources with management groups	https://docs.microsoft.com/en-us/azure/governance/management-groups/manage
Protect a storage account from accidental deletion by using a resource lock	https://docs.microsoft.com/en-us/learn/modules/build-cloud-governance-strategy-azure/4-protect-storage-account-resource-lock
Restrict deployments to a specific location by using Azure Policy	https://docs.microsoft.com/en-us/learn/modules/build-cloud-governance-strategy-azure/7-restrict-location-azure-policy
List access using Azure RBAC and the Azure portal	https://docs.microsoft.com/en-us/learn/modules/secure-azure-resources-with-rbac/4-list-access?source=learn
Grant access using Azure RBAC and the Azure portal	https://docs.microsoft.com/en-us/learn/modules/secure-azure-resources-with-rbac/5-grant-access
View activity logs for Azure RBAC changes	https://docs.microsoft.com/en-us/learn/modules/secure-azure-resources-with-rbac/6-view-activity-logs

Knowledge Check

Title	URL
Using Azure RBAC	https://docs.microsoft.com/en-us/learn/modules/secure-azure-resources-with-rbac/7-knowledge-check-rbac
Build a cloud governance strategy on Azure	https://docs.microsoft.com/en-us/learn/modules/build-cloud-governance-strategy-azure/11-knowledge-check
Intro to Azure blueprints	https://docs.microsoft.com/en-us/learn/modules/intro-to-azure-blueprints/5-knowledge-check
Describe core Azure architectural components	https://docs.microsoft.com/en-us/learn/modules/azure-architecture-fundamentals/knowledge-check

Case Study

Requirements

Tailwind Traders is planning on making some significant changes to their governance solution. They have asked for your help with recommendations and questions. Here are the specific requirements.

• Cost and accounting. Tailwind Traders has two core business units that handle Apparel and Sporting Goods. Each of the business units has three departments: Product Development, Marketing, and Sales. Each business unit and subunit will track their Azure spend. At the same time, the Enterprise IT team will handle providing company-wide Azure cost reporting.

• New development project. The company has a new development project for customer feedback. The CFO wants to ensure all costs associated with the project are captured. For the testing phase, workloads should be hosted on lower cost virtual machines. The virtual machines should be named to indicate they are part of the project. Any instances of non-compliance with resource consistency rules should be automatically identified.

Tasks

1. Cost and accounting.

• What are the different ways Tailwind Traders could organize their subscriptions and management groups? Which would be the best to meet their requirements?

https://app.diagrams.net/

2. New development project.

• What are the different ways Tailwind Traders could track costs for the new development project?

• How are you ensuring compliance with the requirements for virtual machine sizing and naming?

Design a compute solution

Sunday, June 5, 2022   11:46 PM

VM Size prefix meaning
https://azure.microsoft.com/en-us/pricing/details/virtual-machines/series/

Create a virtual machine in the portal
https://microsoftlearning.github.io/AZ-900T0x-MicrosoftAzureFundamentals/Instructions/Walkthroughs/01-Create%20a%20virtual%20machine.html

Run your first Batch job with the Azure CLI
https://docs.microsoft.com/en-us/azure/batch/quick-create-cli
https://docs.microsoft.com/en-us/azure/batch/quick-create-portal

Run a parallel workload with Azure Batch using the .NET API
https://docs.microsoft.com/en-us/azure/batch/tutorial-parallel-dotnet

Create a Java app on Azure App Service
https://docs.microsoft.com/en-us/azure/app-service/quickstart-java?tabs=javase&pivots=platform-windows

Deploy a container instance in Azure using the Azure CLI
https://docs.microsoft.com/en-us/azure/container-instances/container-instances-quickstart

Deploy an Azure Kubernetes Service cluster using the Azure CLI
https://docs.microsoft.com/en-us/azure/aks/learn/quick-kubernetes-deploy-cli

Create a C# function in Azure from the command line
https://docs.microsoft.com/en-us/azure/azure-functions/create-first-function-cli-csharp?tabs=azure-cli%2Cin-process


Module end labs

Create the social media tracker Logic App
https://docs.microsoft.com/en-us/learn/modules/route-and-process-data-logic-apps/4-ex-create-social-media-tracker

Case study

Requirements
Tailwind Traders would like to migrate their product catalog application to the cloud. This application has a traditional 3-tier configuration using SQL Server as the data store. The IT team hopes you can help modernize the application. They have provided this diagram and several areas that could be improved.
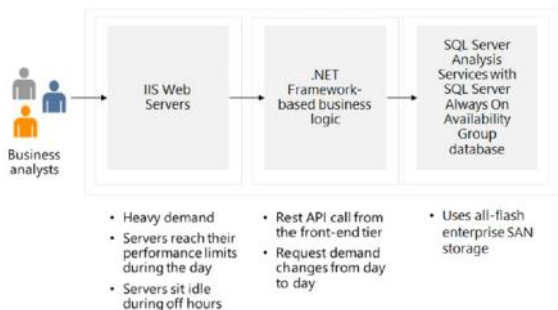
- The front-end application is a .NET core-based web app. During peak periods 1750 customers visit the website each hour.

- The application runs on IIS web servers in a front-end tier. This tier handles all customer requests for purchasing products. During the latest holiday sale, the front-end servers reached their performance limits and page loads were lengthy. The IT team has considered adding more servers, but during off hours the servers are often idle.

- The middle tier hosts the business logic that processes customer requests. These requests are often for help desk support. Support requests are queued and lately the wait times have been exceptionally long. Customers are offered email rather than waiting for a representative. But many customers seem frustrated and are disconnecting rather than waiting. Customer requests are 75-125 per hour.

- The back-end tier uses SQL Server database to store customer orders. Currently, the back-end database servers are performing well.
- While high availability is a concern, due to legal requirements the company must keep all the resources in a single region.

Task
- Front-end tier. Which Azure compute service would you recommend for the front-end tier? Explain why you decided on your solution.
- Middle tier. Which Azure compute service would you recommend for the middle tier? Explain why you decided on your solution.