Microsoft Azure Developer Associate (AZ-204) Crash Course

Developing Solutions for Microsoft Azure

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Course Overview

AZ-204 Skills Measured

Exam AZ-204: Developing Solutions for Microsoft Azure

Questions & Resources

- Post questions in the QnA box
- Resources are in the course repository
  - https://github.com/zaalion/oreilly-az-204

- Reach out:
  - Twitter: @zaalion

AZ-204 Candidate Profile

- Professionals who
  - have subject matter expertise designing, building, testing, and maintaining cloud applications and services on Microsoft Azure.

Azure Data Engineers

- Should have 1-2 years professional development experience
- Experience with Microsoft Azure
- Should have the ability to program in a language supported by Azure

AZ-204 Candidates

- Proficiency in
  - Azure SDKs, Azure PowerShell, Azure CLI, data storage options, data connections, APIs, app authentication and authorization, compute and container deployment, debugging, performance tuning, and monitoring.

AZ-204 Skills Measured

- Skills measured:
  - Develop Azure compute solutions (25-30%)
  - Develop for Azure storage (15-20%)
  - Implement Azure security (20-25%)
  - Monitor, troubleshoot, and optimize Azure solutions (15-20%)
  - Connect to and consume Azure services and third-party services (15-20%)

Course Repository

https://github.com/zaalion/oreilly-az-204

Develop Azure Compute Solutions

Design Azure Data Storage Solutions

- Implement IaaS solutions
- Create Azure App Service Web Apps
- Implement Azure functions

Implement IaaS solutions

- Provision virtual machines (VMs) [see 1 2 3]
- Configure, validate, and deploy ARM templates [see 1 2 3 4 5 6 7 8]
- Configure container images for solutions [see 1 2]
- Publish an image to the Azure Container Registry [see 1 2 3 4]
- Run containers by using Azure Container Instance [see 1 2 3]

Create Azure App Service Web Apps

- Create an Azure App Service Web App [see 1 2 3]
- Enable diagnostics logging [see 1]
- Deploy code to a web app [see 1 2 3 4]
- Configure web app settings including SSL, API settings, and connection strings [see 1 2]
- Implement auto scaling rules including scheduled autoscaling and autoscaling by operational or system metrics [see 1]

Implement Azure functions

- Create and deploy Azure Functions apps [see 1 2 3]
- Implement input and output bindings for a function [see below]
- Implement function triggers by using data operations, timers, and webhooks [see 1 2 3 4]
- Implement Azure Durable Functions [see 1 2 3 4 5]

Break

Develop for Azure Storage

Design Azure Data Storage Solutions

- Develop solutions that use Cosmos DB storage
- Develop solutions that use blob storage

Develop solutions that use Cosmos DB storage

- Select the appropriate API and SDK for a solution [see 1 2 3 4 5 6 7 8 9]
- Implement partitioning schemes and partition keys [see 1 2]
- Perform operations on data and Cosmos DB containers [see 1 2]
- Set the appropriate consistency level for operations [see 1]
- Manage change feed notifications [see 1]

Develop solutions that use blob storage

- Move items in Blob storage between storage accounts or containers [see 1]
- Set and retrieve properties and metadata [see 1]
- Perform operations on data by using the appropriate SDK [see 1 2]
- Implement storage policies, and data archiving and retention [see 1 2]

Break

Implement Azure Security

Design Azure Data Storage Solutions

- Implement user authentication and authorization
- Implement secure cloud solutions

Implement user authentication and authorization

- Authenticate and authorize users by using the Microsoft Identity platform

  [see 1 2 3 4]

- Authenticate and authorize users and apps by using Azure Active

  Directory [see 1 2]

- Create and implement shared access signatures [see 1 2]

- Implement solutions with Microsoft Graph [see 1 2 3 4]

Implement secure cloud solutions

- Secure app configuration data by using App Configuration Azure Key Vault [see 1]
- Develop code that uses keys, secrets, and certificates stored in Azure Key Vault [see 1 2 3]

Monitor, Troubleshoot, and Optimize Azure Solutions

Design Azure Data Storage Solutions

- Implement caching for solutions
- Troubleshoot solutions using metrics and log data

Implement caching for solutions

- Configure cache and expiration policies for Azure Cache for Redis [see 1 2]
- Implement secure and optimized application cache patterns including data sizing, connections, encryption, and expiration [see 1]

Troubleshoot solutions using metrics and log data

- Configure an app or service to use Application Insights [see 1 2 3]
- Review and analyze metrics and log data [see 1]
- Implement Application Insights web tests and alerts [see 1 2 3]

Break

Connect to and Consume Azure Services and Third-party Services

Design Azure Data Storage Solutions

- Implement API Management
- Develop event-based solutions
- Develop message-based solutions

Implement API Management

- Create an APIM instance [see 1]
- Create and document APIs [see 1]
- Configure authentication for APIs [see 1]
- Define policies for APIs [see 1]

Develop event-based solutions

- Implement solutions that use Azure Event Grid [see 1 2]
- Implement solutions that use Azure Notification Hubs [see 1 2]
- Implement solutions that use Azure Event Hub [see 1 2 3 4]
- Import OpenAPI definitions [see 1]

Develop message-based solutions

- Implement solutions that use Azure Service Bus [see 1 2 3 4 5]
- Implement solutions that use Azure Queue Storage queues [see 1 2]

The Exam

Questions in AZ-204

- Multiple choice
- Drag and drop
- Scenario based
- There will be hands-on labs

AZ-204

- Exam AZ-204: https://docs.microsoft.com/en-us/learn/certifications/exams/az-204
- Skills measured : https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RE4oZ7B

debugging, performance tuning, and monitoring.

You may be eligible for ACE college credit if you pass this certification exam. See ACE college credit for certification exams for details.

Part of the requirements for: Microsoft Certified: Azure Developer Associate
Related exams: none
Important: See details
Go to Certification Dashboard

Schedule exam

Exam AZ-204: Developing Solutions for Microsoft Azure

United States

Languages: English, Japanese, Chinese (Simplified), Korean
Retirement date: none

This exam measures your ability to accomplish the following technical tasks: develop Azure compute solutions; develop for Azure storage; implement Azure security; monitor, troubleshoot, and optimize Azure solutions; and connect to and consume Azure services and third-party services.

$165 USD*

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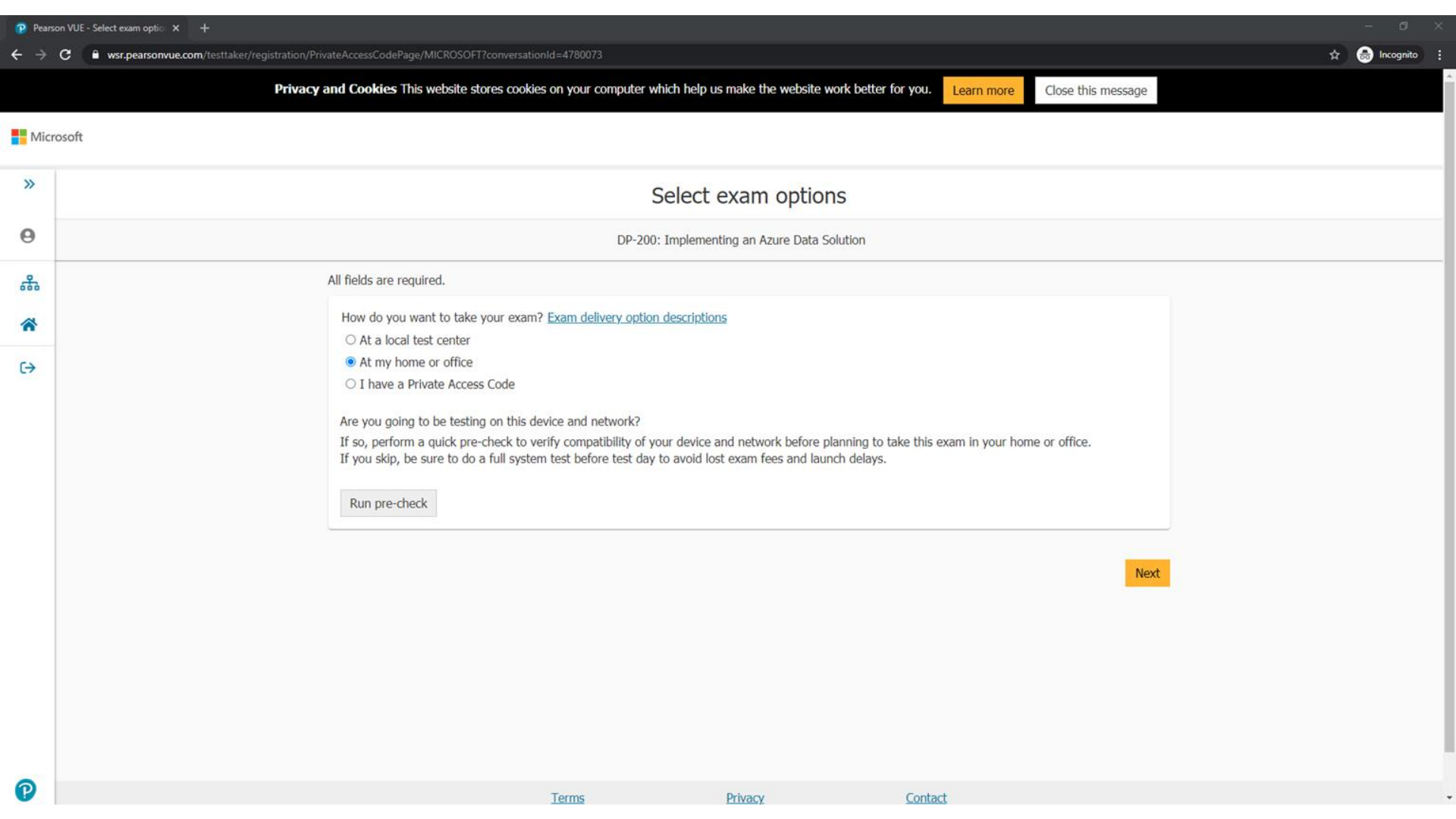
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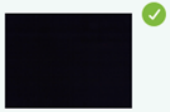

Webcam

Integrated Webcam (0c4

Next

Course Repository

https://github.com/zaalion/oreilly-az-204

Q&A

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Thank you!

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