

Vendor: Microsoft

Exam Code: AI-100

Exam Name: Designing and Implementing an Azure Al

Solution

Version: Demo

## **QUESTION 1**

You are developing an application that will perform optical character recognition of photos of medical logbooks.

You need to recommend a solution to validate the data against a validated set of records.

Which service should you include in the recommendation?

- A. Azure Data Catalog
- B. Text Analytics
- C. Bing Autosuggest
- D. Master Data Services (MDS) in Microsoft SQL Server

Correct Answer: D

References: https://docs.microsoft.com/en-us/sql/master-data-services/validation-master-data-services?view=sql-server-2017

## **QUESTION 2**

You are developing an AI application for a virtual classroom.

Your application must perform the following tasks:

Capture audio and video data of the students in the virtual classroom.

Identify each student in the virtual classroom for attendance purposes.

Alert the teacher when a student\\'s facial expression indicates the student having difficulty.

Which two of the following actions should you take? Each correct selection is part of the solution.

NOTE: Each correct selection is worth one point.

- A. Make use of the Face API
- B. Make use of the Computer Vision API
- C. Make use of the QnA Maker
- D. Make use of the Video Indexer API
- E. Make use of the Custom Speech Service

Correct Answer: AD

A. Make use of the Face API: The Face API can be used to detect and identify individuals in images and videos. In this case, it can be utilized to identify each student in the virtual classroom for attendance purposes based on their facial features. This API can help capture the audio and video data of the students by recognizing their faces and linking them to their identities.

D. Make use of the Video Indexer API: The Video Indexer API enables the analysis and extraction of insights from video content. It can be employed to capture the audio and video data of the students in the virtual classroom. Additionally, the Video Indexer API offers capabilities for facial emotion recognition, which can help identify when a student\\'s facial expression indicates difficulty. This can trigger an alert for the teacher, allowing timely intervention.

### **QUESTION 3**

You plan to build an application that will perform predictive analytics. Users will be able to consume the application data by using Microsoft Power BI or a custom website.

You need to ensure that you can audit application usage.

Which auditing solution should you use?

- A. Azure Storage Analytics
- B. Azure Application Insights
- C. Azure diagnostics logs
- D. Azure Active Directory (Azure AD) reporting

Correct Answer: A

## **QUESTION 4**

You plan to deploy an AI solution that tracks the behavior of 10 custom mobile apps. Each mobile app has several thousand users.

You need to recommend a solution for real-time data ingestion for the data originating from the mobile app users.

Which Microsoft Azure service should you include in the recommendation?

- A. Azure Event Hubs
- B. Azure Service Bus queries
- C. Azure Service Bus topics and subscriptions
- D. Apache Storm on Azure HDInsight

Correct Answer: A

References: https://docs.microsoft.com/en-in/azure/event-hubs-about

## **QUESTION 5**

You need to recommend a data storage solution that meets the technical requirements.

What is the best data storage solution to recommend? More than one answer choice may achieve the goal. Select the BEST answer.

- A. Azure Databricks
- B. Azure SQL Database
- C. Azure Table storage
- D. Azure Cosmos DB

Correct Answer: B

References: https://docs.microsoft.com/en-us/azure/architecture/example-scenario/ai/commerce-chatbot

### **QUESTION 6**

You plan to deploy Azure IoT Edge devices. Each device will store more than 10,000 images locally. Each image is approximately 5 MB.

You need to ensure that the images persist on the devices for 14 days.

What should you use?

- A. Azure Stream Analytics on the IoT Edge devices
- B. Azure Database for Postgres SQL
- C. Azure Blob storage on the IoT Edge devices
- D. Microsoft SQL Server on the IoT Edge devices

Correct Answer: C

Azure Blob Storage on IoT Edge provides a block blob and append blob storage solution at the edge. A blob storage module on your IoT Edge device behaves like an Azure blob service, except the blobs are stored locally on your IoT Edge

device.

This e is useful where data needs to be stored locally until it can be processed or transferred to the cloud. This data can be videos, images, finance data, hospital data, or any other unstructured data.

References:

https://docs.microsoft.com/en-us/azure/iot-edge/how-to-store-data-blob

# **QUESTION 7**

Note: This question is part of a series of questions that present the same scenario. Each question in the series contains a unique solution that might meet the stated goals. Some question sets might have more than one correct solution, while

others might not have a correct solution.

After you answer a question, you will NOT be able to return to it. As a result, these questions will not appear in the review screen.

You create several AI models in Azure Machine Learning Studio.

You deploy the models to a production environment.

You need to monitor the compute performance of the models.

Solution: You write a custom scoring script.

Does this meet the goal?

A. Yes

B. No

Correct Answer: B

You need to enable Model data collection.

References: https://docs.microsoft.com/en-us/azure/machine-learning/service/how-to-enable-data-collection

### **QUESTION 8**

Your company is about to deploy an Azure Machine Learning experiment. The company is concerned that the experiment might not be adhering to GDPR regulations.

You have been instructed to do a review of the experiment\\'s adherence to GDPR regulations. You must perform the review as quickly as possible.

Which of the following actions should you take?

- A. Make use of Azure Policy
- B. Make use of Azure Security Center
- C. Make use of Azure Log Analytics
- D. Make use of Compliance Manager

Correct Answer: D

To quickly review the adherence of an Azure Machine Learning experiment to GDPR regulations, you can use Compliance Manager. Compliance Manager is a built-in Azure tool that helps organizations assess and track their compliance with various regulatory standards, including GDPR.

By using Compliance Manager, you can assess the compliance of your Azure resources, including Azure Machine Learning, against GDPR requirements. It provides a centralized dashboard that allows you to view the compliance status, identify any potential gaps, and track the progress of remediation actions.

Compliance Manager also provides predefined assessments and control mappings specific to GDPR, which can help streamline the review process and provide insights into the experiment\\'s adherence to GDPR regulations.

## **QUESTION 9**

You design an AI workflow that combines data from multiple data sources for analysis. The data sources are composed of:

1.

JSON files uploaded to an Azure Storage account

2.

On-premises Oracle databases

3.

Azure SQL databases

Which service should you use to ingest the data?

A. Azure Data Factory

B. Azure SQL Data Warehouse

C. Azure Data Lake Storage

D. Azure Databricks

Correct Answer: A

References: https://docs.microsoft.com/en-us/azure/data-factory/introduction

### **QUESTION 10**

You are developing a Microsoft Bot Framework application. The application consumes structured NoSQL data that must be stored in the cloud.

You implement Azure Blob storage for the application. You want access to the blob store to be controlled by using a role.

You implement Azure Active Directory (Azure AD) integration on the storage account.

Does this action accomplish your objective?

A. Yes, it does

B. No, it does not

Correct Answer: A

Azure Active Directory (Azure AD) integration for blobs, and queues provides Azure role-based access control (Azure RBAC) for control over a client\\'s access to resources in a storage account.

Reference:

## **QUESTION 11**

Your company has several AI solutions and bots.

You need to implement a solution to monitor the utilization of the bots. The solution must ensure that analysts at the company can generate dashboards to review the utilization.

What should you include in the solution?

- A. Azure Application Insights
- B. Azure Data Explorer
- C. Azure Logic Apps
- D. Azure Monitor

Correct Answer: A

Bot Analytics.

Analytics is an extension of Application Insights. Application Insights provides service-level and instrumentation data like traffic, latency, and integrations. Analytics provides conversation-level reporting on user, message, and channel data.

References:

https://docs.microsoft.com/en-us/azure/bot-service/bot-service-manage-analytics

# **QUESTION 12**

You are designing an AI solution in Azure that will perform image classification.

You need to identify which processing platform will provide you with the ability to update the logic over time. The solution must have the lowest latency for inferencing without having to batch.

Which compute target should you identify?

- A. graphics processing units (GPUs)
- B. field-programmable gate arrays (FPGAs)
- C. central processing units (CPUs)
- D. application-specific integrated circuits (ASICs)

Correct Answer: B

FPGAs, such as those available on Azure, provide performance close to ASICs. They are also flexible and reconfigurable over time, to implement new logic. Incorrect Answers:

D: ASICs are custom circuits, such as Google\\'s TensorFlow Processor Units (TPU), provide the highest efficiency.

They can\\'t be reconfigured as your needs change.

References: https://docs.microsoft.com/en-us/azure/machine-learning/service/concept-accelerate-with-fpgas