

Microsoft

(AI-102)

Designing and Implementing a Microsoft Azure AI Solution

Total: **340 Questions**

Link:

Actions

Run a container that has version set as an environment variable.

Export the model by using the Export as JSON option.

Select v1.1 of app1.

Run a container and mount the model file.

Select v1.0 of app1.

Export the model by using the Export for containers (GZIP) option.

Select v1.2 of app1.

Answer Area

Select v1.1 of app1.

Export the model by using the Export for containers (GZIP) option.

Run a container and mount the model file.

Explanation:

Step 1: Select v1.1 of app1.

A trained or published app packaged as a mounted input to the container with its associated App ID.

Step 2: Export the model using the Export for containers (GZIP) option.

Export versioned app's package from LUIS portal

The versioned app's package is available from the Versions list page.

1. Sign on to the LUIS portal.
2. Select the app in the list.
3. Select Manage in the app's navigation bar.
4. Select Versions in the left navigation bar.
5. Select the checkbox to the left of the version name in the list.
6. Select the Export item from the contextual toolbar above the list.
7. Select Export for container (GZIP).
8. The package is downloaded from the browser.

Explanation:

Box 1: **PUT** .

Sample Request: PUT <https://management.azure.com/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/test-rg/providers/>

Microsoft.DeviceUpdate/accounts/contoso?api-version=2020-03-01-preview

Incorrect Answers:

PATCH is for updates.

Box 2: **CognitiveServices** .

Microsoft Azure Cognitive Services provide us to use its pre-trained models for various Business Problems related to Machine Learning.

List of Different Services are:

- ⇒ Decision
- ⇒ Language (includes sentiment analysis)
- ⇒ Speech
- ⇒ Vision (includes OCR)
- ⇒ Web Search

Reference:

<https://docs.microsoft.com/en-us/rest/api/deviceupdate/resourcemanager/accounts/create>

<https://www.analyticsvidhya.com/blog/2020/12/microsoft-azure-cognitive-services-api-for-ai-development/>

Question: 6

You are developing a new sales system that will process the video and text from a public-facing website. You plan to monitor the sales system to ensure that it provides equitable results regardless of the user's location or background.

Which two responsible AI principles provide guidance to meet the monitoring requirements? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. transparency
- B. fairness
- C. inclusiveness
- D. reliability and safety
- E. privacy and security

Answer: BC

Explanation:

Fairness is a core ethical principle that all humans aim to understand and apply. This principle is even more important when AI systems are being developed. Key checks and balances need to make sure that the system's decisions don't discriminate or run a gender, race, sexual orientation, or religion bias toward a group

Answer Area

```
docker run --rm -it -p 5000:5000 --memory 8g --cpus 1 \
```

▼ \
http://contoso.blob.core.windows.net
https://contoso.cognitiveservices.azure.com
mcr.microsoft.com/azure-cognitive-services/textanalytics/keyphrase
mcr.microsoft.com/azure-cognitive-services/textanalytics/sentiment

Eula=accept \

Billing=

▼ \
http://contoso.blob.core.windows.net
https://contoso.cognitiveservices.azure.com
mcr.microsoft.com/azure-cognitive-services/textanalytics/keyphrase
mcr.microsoft.com/azure-cognitive-services/textanalytics/sentiment

ApiKey=xxxxxxxxxxxxxxxxxxxxxx

Explanation:

Box 1: **mcr.microsoft.com/azure-cognitive-services/textanalytics/sentiment.**

To run the Sentiment Analysis v3 container, execute the following docker run command. `docker run --rm -it -p 5000:5000 --memory 8g --cpus 1 \ mcr.microsoft.com/azure-cognitive-services/textanalytics/sentiment \`

`Eula=accept \`

`Billing= ENDPOINT_URI \`

`ApiKey= API_KEY` is the endpoint for accessing the Text Analytics API. `https://<your-custom-subdomain>.cognitiveservices.azure.com`

Box 2: **https://contoso.cognitiveservices.azure.com.**

ENDPOINT_URI is the endpoint for accessing the Text Analytics API: `https://<your-custom-subdomain>.cognitiveservices.a` The endpoint for accessing the Text

Analytics API. `zure.com -`

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/text-analytics/how-tos/text-analytics-how-to-install-containers?tabs=sentiment>

Question: 9

You have the following C# method for creating Azure Cognitive Services resources programmatically.

```
static void create_resource(CognitiveServicesManagementClient client, string
resource_name, string kind, string account_tier, string location)
{
    CognitiveServicesAccount parameters =
        new CognitiveServicesAccount(null, null, kind, location, resource_name,
new CognitiveServicesAccountProperties(), new Sku(account_tier));
    var result = client.Accounts.Create(resource_group_name, account_tier,
parameters);
}
```

You need to call the method to create a free Azure resource in the West US Azure region. The resource will be used to generate captions of images automatically.

Which code should you use?

Question: 14

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

You create a web app named app1 that runs on an Azure virtual machine named vm1. Vm1 is on an Azure virtual network named vnet1.

You plan to create a new Azure Cognitive Search service named service1.

You need to ensure that app1 can connect directly to service1 without routing traffic over the public internet.

Solution: You deploy service1 and a public endpoint to a new virtual network, and you configure Azure Private Link. Does this meet the goal?

A. Yes

B. No

Answer: B

Explanation:

Answer is no. you should create a private link with private endpoint

The Azure Private Link should use a private endpoint, not a public endpoint.

Private Link service can be accessed from approved private endpoints in any public region.

Reference:

<https://docs.microsoft.com/en-us/azure/private-link/private-link-overview>

Question: 15

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.

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You create a web app named app1 that runs on an Azure virtual machine named vm1. Vm1 is on an Azure virtual network named vnet1.

You plan to create a new Azure Cognitive Search service named service1.

You need to ensure that app1 can connect directly to service1 without routing traffic over the public internet.

Solution: You deploy service1 and a public endpoint, and you configure an IP firewall rule.

Does this meet the goal?

A. Yes

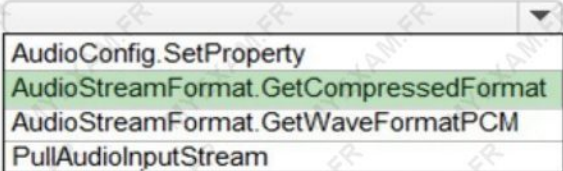
B. No

Answer: B

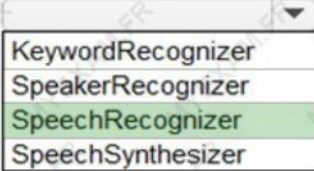
Explanation:

Correct Answer is B. No. this scenario routes over public internet, to do this without touching public internet you would use a private endpoint on a vnet then private link to access it.

Answer Area

```
var audioFormat =  (AudioStreamContainerFormat.MP3);

var speechConfig = SpeechConfig.FromSubscription("18c51a87-3a69-47a8-aedc-a54745f708a1", "westus");
var audioConfig = AudioConfig.FromStreamInput(pushStream, audioFormat);

using (var recognizer = new  (speechConfig, audioConfig))
{
    var result = await recognizer.RecognizeOnceAsync();
    var text = result.Text;
}
```

Explanation:

1. AudioStreamFormat.GetCompressedFormat.

This correctly specifies that the input audio is in a compressed format (MP3), which is necessary when working with non-PCM audio streams in Azure Speech SDK.

2. SpeechRecognizer.

This is the correct recognizer type because it is used for speech-to-text conversion, which matches the functionality required in the code.

Question: 19

HOTSPOT -

You are developing an internet-based training solution for remote learners.

Your company identifies that during the training, some learners leave their desk for long periods or become distracted.

You need to use a video and audio feed from each learner's computer to detect whether the learner is present and paying attention. The solution must minimize development effort and identify each learner.

Which Azure Cognitive Services service should you use for each requirement? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Question: 23

DRAG DROP -

You need to develop an automated call handling system that can respond to callers in their own language. The system will support only French and English.

Which Azure Cognitive Services service should you use to meet each requirement? To answer, drag the appropriate services to the correct requirements. Each service may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.

NOTE: Each correct selection is worth one point.

Select and Place:

Services

Answer Area

Speaker Recognition

Speech to Text

Text Analytics

Text to Speech

Translator

Detect the incoming language:

Respond in the callers' own language:

Answer:

Services

Answer Area

Speaker Recognition

Speech to Text

Text Analytics

Text to Speech

Translator

Detect the incoming language:

Respond in the callers' own language:

Speech to Text

Text to Speech

Explanation:

A. Speech-to-text.

You use Speech-to-text recognition when you need to identify the language in an audio source and then transcribe it to text.

B. Text to Speech.

the output is voice.

Reference:

B. No

Answer: B

Explanation:

Customer-managed key (CMK) encryption does not affect throttling.

Instead, you could migrate to a Cognitive Search service that uses a higher tier.

Note: A simple fix to most throttling issues is to throw more resources at the search service (typically replicas for query-based throttling, or partitions for indexing-based throttling). However, increasing replicas or partitions adds cost, which is why it is important to know the reason why throttling is occurring at all.

Reference:

<https://docs.microsoft.com/en-us/azure/search/search-performance-analysis>

Question: 28

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

You create a web app named app1 that runs on an Azure virtual machine named vm1. Vm1 is on an Azure virtual network named vnet1.

You plan to create a new Azure Cognitive Search service named service1.

You need to ensure that app1 can connect directly to service1 without routing traffic over the public internet.

Solution: You deploy service1 and a private endpoint to vnet1.

Does this meet the goal?

A. Yes

B. No

Answer: A

Explanation:

A private endpoint is a network interface that uses a private IP address from your virtual network. This network interface connects you privately and securely to a service powered by Azure Private Link. By enabling a private endpoint, you're bringing the service into your virtual network.

The service could be an Azure service such as:

- ⇒ Azure Storage
- ⇒ Azure Cosmos DB
- ⇒ Azure SQL Database
- ⇒ Your own service using a Private Link Service.

Reference:

<https://docs.microsoft.com/en-us/azure/private-link/private-endpoint-overview>

Microsoft Azure



Sign in

to continue to Microsoft Azure

Email, phone, or Skype

No account? [Create one!](#)

[Can't access your account?](#)

Next

Step 3: On the Create page, provide the following information.

Name: Text12345678 -

Microsoft Azure



Sign in

to continue to Microsoft Azure

Email, phone, or Skype

No account? [Create one!](#)

[Can't access your account?](#)

Next

Step 3: On the Create page, provide the following information.

Name: search12345678 -

Create Cognitive Services ...



Basics Tags Review + create

Get access to Vision, Language, Search, and Speech Cognitive Services with a single API key. Quickly connect services together to achieve more insights into your content and easily integrate with other services like Azure Search. [Learn more](#)

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ

Resource group * ⓘ

[Create new](#)

Instance details

Region * ⓘ



Location specifies the region only for included regional services. This does not specify a region for included non-regional services. [Click here for more details.](#)



Name * ⓘ

Pricing tier * ⓘ

[View full pricing details](#)

By checking this box, I certify that use of this service is not by or for a police department in the United States.

☐

I confirm I have read and understood the notice below.

☐

Review + create

< Previous

Next : Tags >

Step 4: Click Review + create -

(Step 5: Create a data source

In Connect to your data, choose Azure Blob Storage. Choose an existing connection to the storage account and container you created. Give the data source a name, and use default values for the rest.)

Analyze Invoice

1. Choose file for analysis.

Source:

☐ Page range:

2. Get prediction.

Form recognizer service endpoint

API key

Form Type

Step 7: Select Run analysis. The Form Recognizer Sample Labeling tool will call the Analyze Prebuilt API and analyze the document.

Step 8: View the results - see the key-value pairs extracted, line items, highlighted text extracted and tables detected.

Prediction results

Page # / Field name / Value Confidence

1 AmountDue 96.80%

text: \$10.00

2 BillingAddress 95.10%

123 8th St, Redmond WA, 98052

3 BillingAddressRecipient 95.40%

Microsoft Finance

4 CustomerAddress 95.10%

123 8th St, Redmond WA, 98052

5 CustomerAddressRecipient 95.40%

Microsoft Corp

6 CustomerId 96.10%

CID-12345

7 CustomerName 94.60%

MICROSOFT CORP

8 DueDate 96.90%

text: 12/15/2019

9 InvoiceDate 96.70%

text: 11/15/2019

10 InvoiceId 97.00%

INV-100

11 InvoiceTotal 96.70%

text: \$110.00

12 PreviousUnpaidBalance 95.60%

text: \$500.00

13 PurchaseOrder 96.20%

PO-3333

14 RemittanceAddress 94.80%

123 Ramit St New York, NY, 10001

Download

Click to view analyzed table

PreviousUnpaidBalance

text: \$500.00

valueNumber: 500

PurchaseOrder

PO-3333

RemittanceAddress

123 Ramit St New York, NY, 10001

INVOICE

INVOICE NUMBER: 123456789
 INVOICE DATE: 12/15/2019
 DUE DATE: 12/15/2019
 CUSTOMER NAME: MICROSOFT CORPORATION
 SERVICE PERIOD: 01/01/2019 - 12/31/2019
 CUSTOMER ID: 123456789

CONTOSSO (RED)
 Contoso Headquarters
 123 456th St
 New York, NY, 10001

Microsoft Corp
 123 8th St
 Redmond WA, 98052

SHIP TO:
 Microsoft Delivery
 123 8th St
 Redmond WA, 98052

SERVICE ADDRESS:
 Microsoft Delivery
 123 8th St
 Redmond WA, 98052

SALESPERSON	P.O. NUMBER	REQUESTIONER	SHIPPED VIA	F.O.B. POINT	TERMS
PO-3333					

DATE	ITEM CODE	DESCRIPTION	QTY	UNIT	PRICE	TAX	AMOUNT
8/14/2021	A123	Consulting Services	2	hours	\$30.00	10%	\$60.00
8/5/2021	B456	Document Fee	3		\$10.00	5%	\$30.00
8/5/2021	C789	Pending Fee	10	pages	\$1.00	20%	\$10.00

Date	ProductCode	Description	UnitPrice	Quantity	Unit	Tax	Amount
#1 3/4/2021	A123	Consulting Services	\$30.00	2	hours	10%	\$60.00
#2 3/5/2021	B456	Document Fee	\$10.00	3		5%	\$30.00
#3 3/6/2021	C789	Pending Fee	\$1.00	10	pages	20%	\$10.00

GRAND TOTAL: \$100.00
 SALES TAX: \$10.00
 TOTAL: \$110.00
 BALANCE: \$110.00
 AMT DUE: \$110.00

PRINTER NAME
 123 Ramit St
 New York, NY, 10001

Step 9: Save the results as C:\Resources\Invoices\Results.json.

hints to clarify the context of the tag. Tagging isn't limited to the main subject, such as a person in the foreground, but also includes the setting (indoor or outdoor), furniture, tools, plants, animals, accessories, gadgets, and so on.

Try out the image tagging features quickly and easily in your browser using Vision Studio.

Reference:

<https://docs.microsoft.com/en-us/learn/modules/analyze-images-computer-vision/3-analyze-images>

<https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/overview-image-analysis>

Question: 40

SIMULATION -

Use the following login credentials as needed:

To enter your username, place your cursor in the Sign in box and click on the username below.

To enter your password, place your cursor in the Enter password box and click on the password below.

Azure Username: -

Azure Password: XXXXXXXXXXXX -

The following information is for technical support purposes only:

Lab Instance: 12345678 -

Task -

You need to build an API that uses the service in Azure Cognitive Services named AAA12345678 to identify whether an image includes a Microsoft Surface Pro or Surface Studio.

To achieve this goal, you must use the sample images in the C:\Resources\Images folder.

To complete this task, sign in to the Azure portal.

Answer:

See explanation below.

Explanation:

 = admin@abc.com

Step 1: In the Azure dashboard, click Create a resource.

Step 2: In the search bar, type "Cognitive Services."

You'll get information about the cognitive services resource and a legal notice. Click Create.

Step 3: You'll need to specify the following details about the cognitive service (refer to the image below for a completed example of this page):

Subscription: choose your paid or trial subscription, depending on how you created your Azure account.

Resource group: click create new to create a new resource group or choose an existing one.

Region: choose the Azure region for your cognitive service. Choose: East US Azure region.

Name: choose a name for your cognitive service. Enter: AAA12345678

Pricing Tier: Select: Free pricing tier

Step 4: Review and create the resource, and wait for deployment to complete. Then go to the deployed resource.

Note: The Computer Vision Image Analysis service can extract a wide variety of visual features from your

4. When the resource has been deployed, go to it and view its Keys and Endpoint page. You will need the endpoint and one of the keys from this page in the next procedure.

Step 2: Save Key and Endpoint values in Params.json

Open the configuration file, C:\Resources\Caption\Params.json. and update the configuration values it contains to reflect the endpoint and an authentication key for your cognitive services resource. Save your changes.

Reference:

<https://microsoftlearning.github.io/AI-102-AIEngineer/Instructions/15-computer-vision.html>

Question: 43

SIMULATION -

Use the following login credentials as needed:

To enter your username, place your cursor in the Sign in box and click on the username below.

To enter your password, place your cursor in the Enter password box and click on the password below.

Azure Username: -

Azure Password: XXXXXXXXXXXX -

The following information is for technical support purposes only:

Lab Instance: 12345678 -

Task -

You plan to build an application that will use caption12345678. The application will be deployed to a virtual network named VNet1.

You need to ensure that only virtual machines on VNet1 can access caption12345678.

To complete this task, sign in to the Azure portal.

Answer:

See explanation below.

Explanation:

 = admin@abc.com

Step 1: Create private endpoint for your web app

1. In the left-hand menu, select All Resources > caption12345678 - the name of your web app.

2. In the web app overview, select Settings > Networking.

3. In Networking, select Private endpoints.

4. Select + Add in the Private Endpoint connections page.

5. Enter or select the following information in the Add Private Endpoint page:

Name: Enter caption12345678.

Subscription Select your Azure subscription.

Virtual network Select VNet1.

Subnet: -

Integrate with private DNS zone: Select Yes.

6. Select OK.

Actions

Change the classification type.

Export the model.

Retrain the model.

Change Domains to **General (compact)**.

Create a new classification model.



Answer Area

Change Domains to **General (compact)**.

Retrain the model.

Export the model.



Explanation:

1. Change Domains to General (compact).

Some models in Azure Custom Vision need to be in a compact domain to be exportable.

If the model is in a non-compact domain, it cannot be exported.

Thus, switching to General (compact) is the first step.

2. Retrain the model.

After changing the domain, the model must be retrained so that it is optimized for the new domain.

This ensures that the model is functioning correctly under the new settings.

3. Export the model.

Once the model is in the correct General (compact) domain and retrained, it can now be exported for use in offline or embedded scenarios.

Question: 48

You are building an AI solution that will use Sentiment Analysis results from surveys to calculate bonuses for customer service staff.

You need to ensure that the solution meets the Microsoft responsible AI principles.

What should you do?

- A. Add a human review and approval step before making decisions that affect the staff's financial situation.
- B. Include the Sentiment Analysis results when surveys return a low confidence score.
- C. Use all the surveys, including surveys by customers who requested that their account be deleted and their data be removed.
- D. Publish the raw survey data to a central location and provide the staff with access to the location.

Answer: A

Explanation:

A. Add a human review and approval step before making decisions that affect the staff's financial situation.

This option aligns with the responsible AI principle of fairness and accountability. By adding a human review and approval step, you ensure that the decisions affecting staff bonuses are reviewed by humans who can consider factors beyond just the sentiment analysis results. It adds an element of transparency, accountability, and fairness to the process, reducing the risk of biased or unfair decisions.

Answer Area

To prevent access from the internet:

Configure an IP firewall.
Create a private endpoint.
Use Azure roles.

To limit access to queries:

Create a private endpoint.
Use Azure roles.
Use key authentication.

Explanation:

1. Create a private endpoint
2. Use Azure roles

<https://learn.microsoft.com/en-us/azure/search/service-create-private-endpoint#why-use-a-private-endpoint-for-secure-access>

Private Endpoints for Azure Cognitive Search allow a client on a virtual network to securely access data in a search index over a Private Link. The private endpoint uses an IP address from the virtual network address space for your search service. Network traffic between the client and the search service traverses over the virtual network and a private link on the Microsoft backbone network, eliminating exposure from the public internet.

<https://learn.microsoft.com/en-us/azure/search/search-security-rbac?tabs=config-svc-portal%2Croles-portal%2Ctest-portal%2Ccustom-role-portal%2Cdisable-keys-portal#grant-access-to-a-single-index>

In some scenarios, you may want to limit application's access to a single resource, such as an index.

The portal doesn't currently support role assignments at this level of granularity, but it can be done with PowerShell or the Azure CLI.

Question: 53

You are building a solution that will detect anomalies in sensor data from the previous 24 hours. You need to ensure that the solution scans the entire dataset, at the same time, for anomalies. Which type of detection should you use?

- A.batch
- B.streaming
- C.change points

- D.Create a private endpoint.
- E.Create a Conditional Access policy.

Answer: BD

Explanation:

B. Configure a custom subdomain.

Configuring a custom subdomain involves setting up a custom domain for your Speech service instance, which can help in integrating with Azure AD and managing authentication effectively.

D. Create a private endpoint.

Creating a private endpoint allows your app to securely connect to the Speech service without exposing it to the public internet, maintaining network security and compliance.

Question: 58

HOTSPOT

You plan to deploy an Azure OpenAI resource by using an Azure Resource Manager (ARM) template. You need to ensure that the resource can respond to 600 requests per minute. How should you complete the template? To answer, select the appropriate options in the answer area.
NOTE: Each correct selection is worth one point.

Actions

Identify the Language service endpoint URL and query the prediction endpoint.

Provision the Language service resource in Azure.

Run the container and query the prediction endpoint.

Deploy a Docker container to an on-premises server.

Deploy a Docker container to an Azure container instance.

Answer Area

Answer:

Actions

Identify the Language service endpoint URL and query the prediction endpoint.

Provision the Language service resource in Azure.

Run the container and query the prediction endpoint.

Deploy a Docker container to an on-premises server.

Deploy a Docker container to an Azure container instance.

Answer Area

Provision the Language service resource in Azure.

Deploy a Docker container to an on-premises server.

Run the container and query the prediction endpoint.

Explanation:

1. Provision the Language service resource in Azure.

This step involves creating the Azure Language service resource, which will provide you with the necessary credentials and endpoint URL to use the Sentiment Analysis API.

2. Deploy a Docker container to an on-premises server.

By deploying a Docker container on-premises, you can run the Sentiment Analysis API locally, ensuring that the feedback data does not leave your internal network.

3. Run the container and query the prediction endpoint.

Once the container is running on your on-premises server, you can start sending feedback data to the Sentiment Analysis API by querying the prediction endpoint provided by the Language service.

Question: 60

HOTSPOT

You have an Azure OpenAI resource named AI1 that hosts three deployments of the GPT 3.5 model. Each deployment is optimized for a unique workload.

You plan to deploy three apps. Each app will access AI1 by using the REST API and will use the deployment that was optimized for the app's intended workload.

You need to provide each app with access to AI1 and the appropriate deployment. The solution must ensure that

Question: 65

HOTSPOT

You plan to deploy a containerized version of an Azure Cognitive Services service that will be used for sentiment analysis.

You configure `https://contoso.cognitiveservices.azure.com` as the endpoint URI for the service.

You need to run the container on an Azure virtual machine by using Docker.

How should you complete the command? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

```
docker run --rm -it -p 5000:5000 --memory 8g --cpus 1 \
```

```
http://contoso.blob.core.windows.net  
https://contoso.cognitiveservices.azure.com  
mcr.microsoft.com/azure-cognitive-services/textanalytics/keyphrase  
mcr.microsoft.com/azure-cognitive-services/textanalytics/sentiment
```

```
Eula=accept \
```

```
Billing=
```

```
http://contoso.blob.core.windows.net  
https://contoso.cognitiveservices.azure.com  
mcr.microsoft.com/azure-cognitive-services/textanalytics/keyphrase  
mcr.microsoft.com/azure-cognitive-services/textanalytics/sentiment
```

```
ApiKey=xxxxxxxxxxxxxxxxxxxx
```

Answer:

Answer Area

```
docker run --rm -it -p 5000:5000 --memory 8g --cpus 1 \
```

```
http://contoso.blob.core.windows.net  
https://contoso.cognitiveservices.azure.com  
mcr.microsoft.com/azure-cognitive-services/textanalytics/keyphrase  
mcr.microsoft.com/azure-cognitive-services/textanalytics/sentiment
```

```
Eula=accept \
```

```
Billing=
```

```
http://contoso.blob.core.windows.net  
https://contoso.cognitiveservices.azure.com  
mcr.microsoft.com/azure-cognitive-services/textanalytics/keyphrase  
mcr.microsoft.com/azure-cognitive-services/textanalytics/sentiment
```

```
ApiKey=xxxxxxxxxxxxxxxxxxxx
```

Explanation:

1. `mcr.microsoft.com/azure-cognitive-services/textanalytics/sentiment`.

This is the correct Docker container image for sentiment analysis.

It allows running Azure Cognitive Services' Text Analytics API for sentiment detection locally.

2. `https://contoso.cognitiveservices.azure.com`.

This is the billing endpoint, which links the container to an Azure Cognitive Services account.

It ensures the service is authorized and properly billed.

questions. It's an efficient way to monitor for specific verbal cues or keywords that indicate a question is being asked, without the need for extensive programming or manual review. This approach minimizes development effort while providing a robust solution for the requirement.

Question: 70

You have an Azure DevOps pipeline named Pipeline1 that is used to deploy an app. Pipeline1 includes a step that will create an Azure AI services account.

You need to add a step to Pipeline1 that will identify the created Azure AI services account. The solution must minimize development effort.

Which Azure Command-Line Interface (CLI) command should you run?

- A. az resource link
- B. az cognitiveservices account network-rule
- C. az cognitiveservices account show
- D. az account list

Answer: C

Explanation:

C. az cognitiveservices account show. The az cognitiveservices account show command retrieves details about a specified Azure Cognitive Services account, including its properties and settings. By using this command in the Azure DevOps pipeline, you can identify and confirm the details of the Azure AI services account that was created in a previous step.

Question: 71

HOTSPOT

-

You have 1,000 scanned images of hand-written survey responses. The surveys do NOT have a consistent layout. You have an Azure subscription that contains an Azure AI Document Intelligence resource named Aldoc1.

You open Document Intelligence Studio and create a new project.

You need to extract data from the survey responses. The solution must minimize development effort.

To where should you upload the images, and which type of model should you use? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Answer: BD

Explanation:

Example code :

```
do
```

```
results = await client.GetReadResultAsync(Guid.Parse(operationId));
```

```
while ((results.Status == OperationStatusCodes.Running ||
results.Status == OperationStatusCodes.NotStarted));
```

Reference:

<https://github.com/Azure-Samples/cognitive-services-quickstart-code/blob/master/dotnet/ComputerVision/ComputerVisionQuickstart.cs>

Question: 74

HOTSPOT -

You have a Computer Vision resource named contoso1 that is hosted in the West US Azure region. You need to use contoso1 to make a different size of a product photo by using the smart cropping feature. How should you complete the API URL? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

```
curl -H "Ocp-Apim-Subscription-Key: xxx" /
-o "sample.png" -H "Content-Type: application/json" /
?width=100&height=100&smartCropping=true" /
-d "{\"url\":\"https://upload.litwareinc.org/litware/bicycle.jpg\"}"
```

Answer:

Answer Area

```
curl -H "Ocp-Apim-Subscription-Key: xxx" /
-o "sample.png" -H "Content-Type: application/json" /
?width=100&height=100&smartCropping=true" /
-d "{\"url\":\"https://upload.litwareinc.org/litware/bicycle.jpg\"}"
```

Explanation:

<https://contoso1.cognitiveservices.azure.com>.

This is an Azure Cognitive Services API endpoint.

It is used for making requests to Azure's Computer Vision API.

The selection ensures that the request is routed correctly to Azure for processing.

Actions

Change the model domain.

Retrain the model.

Test the model.

Export the model.

Answer Area

Change the model domain.



Retrain the model.



Export the model.



Explanation:

Change the Model Domain.

The model domain refers to the specific category or type of data the AI model is trained for (e.g., speech, text, vision, etc.).

If you want to modify the focus of the model, you must first change the domain before making further modifications.

This ensures that the model aligns with the correct industry use case and dataset.

Retrain the Model.

Once the domain has been changed, the model must be retrained with updated data.

Training is necessary to adapt the model to the new domain and improve its accuracy.

Without retraining, the model would not function correctly within the new domain.

Export the Model.

After retraining, the model is ready for deployment.

The export step allows the trained model to be saved and deployed to different environments.

This step is crucial if the model needs to be used in cloud applications, edge computing, or integrated with other services.

Question: 77

HOTSPOT -

You are developing an application to recognize employees' faces by using the Face Recognition API. Images of the faces will be accessible from a URI endpoint.

The application has the following code.

Tags help the model learn to classify different objects in images.

Step 3: Train the Classifier Model.

After images are tagged, the next step is to train the classifier model.

This involves using machine learning algorithms to learn patterns in the tagged dataset.

The model is then tested and refined based on performance.

Question: 80

HOTSPOT -

You are building a model that will be used in an iOS app.

You have images of cats and dogs. Each image contains either a cat or a dog.

You need to use the Custom Vision service to detect whether the images is of a cat or a dog.

How should you configure the project in the Custom Vision portal? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Multiclass, depending on your use case. Multilabel classification applies any number of your tags to an image (zero or more), while multiclass classification sorts images into single categories (every image you submit will be sorted into the most likely tag). You'll be able to change the classification type later if you want to.

Reference:

<https://cran.r-project.org/web/packages/AzureVision/vignettes/customvision.html>