

Designing and Implementing a Microsoft Azure AI Solution

1. DRAG DROP (Drag and Drop is not supported)

You have 100 chatbots that each has its own Language Understanding model. Frequently, you must add the same phrases to each model.

You need to programmatically update the Language Understanding models to include the new phrases.

How should you complete the code? To answer, drag the appropriate values to the correct targets. Each value 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:

Values

AddPhraseListAsync
Phraselist
PhraselistCreateObject
Phrases
SavePhraselistAsync
UploadPhraseListAsync

Answer Area

```
var phraselistId = await client.Features.   
(appId, versionId, new   
{  
    EnabledForAllModels = false,  
    IsExchangeable = true,  
    Name = "PL1",  
    Phrases = "item1,item2,item3,item4,item5"  
});
```

A. See Explanation section for answer.

Answer(s): A

2. DRAG DROP (Drag and Drop is not supported)

You plan to use a Language Understanding application named app1 that is deployed to a container. App1 was developed by using a Language Understanding authoring resource named lu1.

App1 has the versions shown in the following table.

Version	Trained date	Published date
V1.2	None	None
V1.1	2020-10-01	None
V1.0	2020-09-01	2020-09-15

You need to create a container that uses the latest deployable version of app1.

Which three actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order. (Choose three.)

Select and Place:

Actions

Answer Area

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.

A. See Explanation section for answer.

Answer(s): A

3. You need to build a chatbot that meets the following requirements:

- Supports chit-chat, knowledge base, and multilingual models
- Performs sentiment analysis on user messages
- Selects the best language model automatically

What should you integrate into the chatbot?

A. QnA Maker, Language Understanding, and Dispatch

B. Translator, Speech, and Dispatch

C. Language Understanding, Text Analytics, and QnA Maker

D. Text Analytics, Translator, and Dispatch

Answer(s): C

4. Your company wants to reduce how long it takes for employees to log receipts in expense reports. All the receipts are in English.

You need to extract top-level information from the receipts, such as the vendor and the transaction total. The solution must minimize development effort.

Which Azure Cognitive Services service should you use?

A. Custom Vision

B. Personalizer

C. Form Recognizer

Answer(s): C

5. HOTSPOT (Drag and Drop is not supported)

You need to create a new resource that will be used to perform sentiment analysis and optical character recognition (OCR). The solution must meet the following requirements:

- Use a single key and endpoint to access multiple services.
- Consolidate billing for future services that you might use.
- Support the use of Computer Vision in the future.

How should you complete the HTTP request to create the new resource? To answer, select the appropriate options in the answer area.

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

	▼	https://management.azure.com/subscriptions/xxxxxxxx-xxx
PATCH		
POST		
PUT		

xxxx-xxxx-
xxxxxxxxxxxxxx/resourceGroups/RG1/providers/Microsoft.CognitiveServices
accounts/CS1?api-version=2017-04-18

```
{
  "location": "West US",
  "kind": " ",
  "sku": {
    "name": "S0"
  },
  "properties": {},
  "identity": {
    "type": "SystemAssigned"
  }
}
```

	▼	"
CognitiveServices		
ComputerVision		
TextAnalytics		

A. See Explanation section for answer.

Answer(s): A

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. (Choose two.)

NOTE: Each correct selection is worth one point.

A. transparency

B. fairness

C. inclusiveness

D. reliability and safety

E. privacy and security

Answer(s): B C

7. DRAG DROP (Drag and Drop is not supported)

You plan to use containerized versions of the Anomaly Detector API on local devices for testing and in on-premises datacenters.

You need to ensure that the containerized deployments meet the following requirements:

-Prevent billing and API information from being stored in the command-line histories of the devices that run the container.

-Control access to the container images by using Azure role-based access control (Azure RBAC).

Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order. (Choose four.)

NOTE: More than one order of answer choices is correct. You will receive credit for any of the correct orders you select.

Select and Place:

Actions

Answer Area

Create a custom Dockerfile.

Pull the Anomaly Detector container image.

Distribute a `docker run` script.

Push the image to an Azure container registry.

Build the image.

Push the image to Docker Hub.

A. See Explanation section for answer.

Answer(s): A

8. HOTSPOT (Drag and Drop is not supported)

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

You configure `https://contoso.cognitiveservices.azure.com` as the endpoint URI for the service, and you pull the latest version of the Text Analytics Sentiment Analysis container.

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.

Hot Area:

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=xxxxxxxxxxxxxxxxxxxxxxxx
```

A. See Explanation section for answer.

Answer(s): A

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?

- A. create_resource(client, "res1", "ComputerVision", "F0", "westus")
- B. create_resource(client, "res1", "CustomVision.Prediction", "F0", "westus")
- C. create_resource(client, "res1", "ComputerVision", "S0", "westus")
- D. create_resource(client, "res1", "CustomVision.Prediction", "S0", "westus")

Answer(s): B

10. You successfully run the following HTTP request.

```
POST https://management.azure.com/subscriptions/18c51a87-3a69-47a8-aedc-
a54745f708a1/resourceGroups/RG1/providers/Microsoft.CognitiveServices/accounts/contosoll/regenerateKey?api-version=2017-04-18
Body{"keyName": "Key2"}
```

What is the result of the request?

A. A key for Azure Cognitive Services was generated in Azure Key Vault.

B. A new query key was generated.

C. The primary subscription key and the secondary subscription key were rotated.

D. The secondary subscription key was reset.

Answer(s): B

11. You build a custom Form Recognizer model.

You receive sample files to use for training the model as shown in the following table.

Name	Type	Size
File1	PDF	20 MB
File2	MP4	100 MB
File3	JPG	20 MB
File4	PDF	100 MB
File5	GIF	1 MB
File6	JPG	40 MB

Which three files can you use to train the model? Each correct answer presents a complete solution.

(Choosethree.)

NOTE: Each correct selection is worth one point.

A. File1

B. File2

C. File3

D. File4

E. File5

F. File6

Answer(s): A C F

12. A customer uses Azure Cognitive Search.

The customer plans to enable a server-side encryption and use customer-managed keys (CMK) stored in Azure.

What are three implications of the planned change? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

A. The index size will increase.

B. Query times will increase.

C. A self-signed X.509 certificate is required.

D. The index size will decrease.

E. Query times will decrease.

F. Azure Key Vault is required.

Answer(s): A B F

13. You are developing a new sales system that will process the video and text from a public-facing website. You plan to notify users that their data has been processed by the sales system. Which responsible AI principle does this help meet?

A. transparency

B. fairness

C. inclusiveness

D. reliability and safety

Answer(s): A

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(s): B

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 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(s): B

16. 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 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 a network security group (NSG) for vnet1. Does this meet the goal?

A. Yes

B. No

Answer(s): B

17. You plan to perform predictive maintenance.

You collect IoT sensor data from 100 industrial machines for a year. Each machine has 50 different sensors that generate data at one-minute intervals. In total, you have 5,000 time series datasets.

You need to identify unusual values in each time series to help predict machinery failures. Which Azure Cognitive Services service should you use?

A. Anomaly Detector

B. Cognitive Search

C. Form Recognizer

D. Custom Vision

Answer(s): A

18. HOTSPOT (Drag and Drop is not supported)

You are developing a streaming Speech to Text solution that will use the Speech SDK and MP3 encoding.

You need to develop a method to convert speech to text for streaming MP3 data.

How should you complete the code? To answer, select the appropriate options in the answer area. NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

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


|                                       |
|---------------------------------------|
| AudioConfig.SetProperty               |
| AudioStreamFormat.GetCompressedFormat |
| AudioStreamFormat.GetWaveFormatPCM    |
| PullAudioInputStream                  |

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


|                   |
|-------------------|
| KeywordRecognizer |
| SpeakerRecognizer |
| SpeechRecognizer  |
| SpeechSynthesizer |

  
{  
    var result = await recognizer.RecognizeOnceAsync();  
    var text = result.Text;  
}
```

A. See Explanation section for answer.

Answer(s): A

19. HOTSPOT (Drag and Drop is not supported)

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:

Answer Area

From a learner's video feed, verify whether the learner is present:

<input type="text"/>
Face
Speech
Text Analytics

From a learner's facial expression in the video feed, verify whether the learner is paying attention:

<input type="text"/>
Face
Speech
Text Analytics

From a learner's audio feed, detect whether the learner is talking:

<input type="text"/>
Face
Speech
Text Analytics

A. See Explanation section for answer.

Answer(s): A

20. You plan to provision a QnA Maker service in a new resource group named RG1. In RG1, you create an App Service plan named AP1.

Which two Azure resources are automatically created in RG1 when you provision the QnA Maker service?

Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

A. Language Understanding

B. Azure SQL Database

C. Azure Storage

D. Azure Cognitive Search

E. Azure App Service

Answer(s): D E
