

✓ Q₃, Chitchat → QnA maker

CLU → Utterance & Intent

Text Analytics → Sentiment Analysis

✓ Q₉, Fo = Free

✓ Q₁₁, Doc Intelligence → file size < 50 mb

Also GIF wont work

✓ Q₁₂, CMK degrades Query performance
- More Index & Query time

✓ Q₁₄, private link / endpoint

✓ Q₁₅, No public endpoint

→ Q₁₈,

```
var audioFormat =   
    AudioConfig SetProperty  
    AudioStreamFormat GetCompressedFormat  
    AudioStreamFormat GetWaveFormatPCM  
    PullAudioInputStream  
  
var speechConfig = SpeechConfig.FromSubscription("18c51a87-3a0c-45d3-8f8e-  
    000000000000");  
  
var audioConfig = AudioConfig.FromStreamInput(pushStream, audioFormat);  
  
using (var recognizer = new   
    KeywordRecognizer  
    SpeakerRecognizer  
    SpeechRecognizer  
    SpeechSynthesizer)
```

✓ Q₁₉, Talking - Audio

✓ Q₂₀; when setting Q&A App

- App service
- AI search ↗ automatically

✓ Q₂₃:

Detect the incoming language:

Speech to Text

Respond in the callers' own language:

Text to Speech

✓ Q24: Form Recognizer client

- Q25; FO is limited for 50K docs so is necessary.

✓ Q26; if Querying time increases use higher tier (ai search)
Indexing wont help

✓ Q27 CMK wont also help

✓ Q28 private endpoint always preferred.

• Q29 Direct line speech or inclusiveness

✓ Q30 east US. API → text Analytics languages

✓ Q31 Replicas - can stop throttling of queries

Explanation:

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>

✓ Q33 Retrievable & searchable go hand in hand or separate

Go thru simulation 30 - 37.

39, 40 - 49

④ Q45 Azure Metrics Advisor

End to End Anomaly, RCA, Report

✓ Q46 Vision Impaired

= Describe Images in Sync.

✓ Q47

Actions		Answer Area	
Change the classification type.	(>)	Change Domains to General (compact).	(<)
Export the model.	(>)	Retrain the model.	(<)
Retrain the model.	(<)	Export the model.	(>)
Change Domains to General (compact).	(<)	Create a new classification model.	(>)
Create a new classification model.	(>)		(<)

because custom vision model needs to be in compact mode to be exported.

✓ Q48 Botanic sentiment Analysis will need human review

④ Q50 Generate alerts - Multivariate Anomaly Detec. { when more metrics

✓ Q51 Docker for Remote areas

⑤ Q52 Limit access to internet - private endpoint

Limit Queries - Roles → Ti | o

⑥ Q54

Actions		Answer Area	
Run the container and specify an App ID and Client Secret.	(<)	Provision an on-premises Kubernetes cluster that is isolated from the internet.	(>)
Provision an on-premises Kubernetes cluster that is isolated from the internet.	(<)	Pull an image from the Microsoft Container Registry (MCR).	(<)
Run the container and specify an API key and the Endpoint URL of the Cognitive Services resource.	(<)	Run the container and specify an API key and the Endpoint URL of the Cognitive Services resource.	(<)
Provision an on-premises Kubernetes cluster that has internet connectivity.	(<)		(<)
Put an image from Docker Hub.	(<)		(<)
Provision an Azure Kubernetes Service (AKS) resource.	(<)		(<)

ppr

✓ Q56 Billing & API Key - Docker necessary

⑦ Q57 Custom sub domain

✓ Q58 600 ARM Request = 600 capacity

⑧ Q59

Actions		Answer Area	
Identify the Language service endpoint URL and query the prediction endpoint.	(<)	①	(<)
Provision the Language service resource in Azure.	(<)	②	(<)
Run the container and query the prediction endpoint.	(<)	③	(<)
Deploy a Docker container to an on-premises server.	(<)		(<)
Deploy a Docker container to an Azure container instance.	(<)		(<)

Q60 AI Service = API Key

Apps = Deployment Endpoints

Q61 Bot framework emulator

allows to test bots.

Q62 Connect to AzureOpenAI Model

- Endpoint
- Deployment
- Key

Q63 Secure AI Services to specific VNet Rules

Q65 Docker Run Sentiment

- mcr → Actual model
- Eula → Agreement
- Billing → AI service etc

Q66 Since single metric Alert

kmp → Univariate

Alerts

also atypical = abnormal

= variate

Q67 One drive access link is required for video indexing

Q68

- In VNet1, enable a service endpoint for CSAccount.
- In CSAccount1, configure the Access control (IAM) settings.
- In VNet1, modify the virtual network settings.
- In VNet1, create a virtual subnet.
- In CSAccount1, modify the virtual network settings.

CSA

Vnet

AE

Answer: AE

Explanation:

A. In VNet1, enable a service endpoint for CSAccount1. This allows you to secure your Azure service resources to the virtual network.

Q69 To detect questions on video we need speech to text not face

Q70 Get AI Acc. Details = az cognitiveservice acc. show.

Q71 Inconsistent file type for Doc Intel

- Use Storage Acc for storage
- Use custom neural to handle it

Q73

During testing, you discover that the call to the GetReadResultAsync method occurs before the read operation is complete.

You need to prevent the GetReadResultAsync method from proceeding until the read operation is complete.

Which two actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. Remove the Guid.Parse(operationId) parameter.
- ✓ B. Add code to verify the results.Status value.
- C. Add code to verify the status of the txtHeaders.Status value.
- ✓ D. Wrap the call to GetReadResultAsync within a loop that contains a delay.

Q74

Answer: Imp API for CV

Answer Area

```
curl -H "Ocp-Apim-Subscription-Key: xxx" /  
-o "sample.png" -H "Content-Type: application/json" /  
https://api.projectoxford.ai  
https://contoso1.cognitiveservices.azure.com  
https://westus.api.cognitive.microsoft.com  
/vision/v3.1/  
areaOfInterest  
detect  
generateThumbnail  
-d "[{"url": "https://upload.wikimedia.org/wikipedia/commons/1/1f/Bicycle.jpg"}]"
```

Q75

Answer:

Values

Answer Area

Cognitive Insights Widget
https://www.videoindexer.ai/embed/insights/<accountId>/<videoId>/?widget= people,keywords controls= search

Player Widget
https://www.videoindexer.ai/embed/player/<accountId>/<videoId>/?showcaptions= true captions= en-US

Q77 Azure Face supports 10000 people in person Group — limit

- Can add face & call face

Q78

Actions

Answer Area

- ② Use the ExportProject endpoint on acvdev.
- ① Use the GetProjects endpoint on acvprod.
- ③ Use the ImportProject endpoint on acvprod.
- ④ Use the ExportIteration endpoint on acvdev.
- ⑤ Use the GetIterations endpoint on acvdev.
- ⑥ Use the UpdateProject endpoint on acvprod.

Finally ③

Q80

Simple projects = General
(Compact).

→ Q81 Video Indexer

= Create person model

✓ Q82 Classification = precision &
NO F1
Recall

✓ Q84

Values	Answer Area
detect	POST (Endpoint)/face/v1.0/ [findsimilar]
findsimilar	Request Body
group	{
identify	"faceId": "c5c24a82-6845-4031-9d5d-978df9175426",
matchFace	"largeFaceListId": "sample list",
matchPerson	"maxNumOfCandidatesReturned": 10,
verify	"mode": "matchPerson"
	}

For Face Match similar is API call

✓ Q85

```
for brand in image_analysis.brands:  
    if brand_confidence >= 0.75:  
        print(f"\nLogo of {brand.name} between {brand.rectangle_x}, {brand.rectangle_y} and  
(brand.rectangle_w), (brand.rectangle_h)")  
For each of the following statements, select Yes if the statement is true. Otherwise, select No.  
NOTE: Each correct selection is worth one point.  
Hot Area:
```

→ Top corner only

✓ Q87 Better at blurred & side images
Change detection model
& check which works

Q89

Answer: BD

Explanation:

B. Add code to verify the read_results.status value.

D. Wrap the call to get_read_result within a loop that contains a delay.

✓ Q90 Computer vision can suggest alt text
and detect inappropriate content.

Generate alt text:

https://westus.api.cognitive.microsoft.com/contentmoderator/moderate/v1.0/ProcessImage/Evaluate
https://westus.api.cognitive.microsoft.com/customvision/v3.1/prediction/projectId/classify/iterations/publishedName/image
https://westus.api.cognitive.microsoft.com/vision/v3.2/analyze/?visualFeatures=Adult,Description

Detect inappropriate content:

https://westus.api.cognitive.microsoft.com/contentmoderator/moderate/v1.0/ProcessImage/Evaluate
https://westus.api.cognitive.microsoft.com/customvision/v3.1/prediction/projectId/classify/iterations/publishedName/image
https://westus.api.cognitive.microsoft.com/vision/v3.2/analyze/?visualFeatures=Adult,Description
https://westus.api.cognitive.microsoft.com/vision/v3.2/describe?maxCandidates=1

✓ Q91 private on premise = Container

① Q92 OCR → handwritten also while
DOC intel can't.

→ ② Q93 Tag Images as photos, drawings
Clipart
use Image Analysis (CV).
→ Image Type

✓ Q94 Detect Image Licenses

↳ Headpose;
↳ Nodding / Headshaking

→ ③ Q95 parallel Processing

④ Q97 Analyze video content.

Actions	Answer Area
Add the specific company names to the exclude list.	Sign in to the Azure Video Analyzer for Media website.
Add the specific company names to the include list.	From Content model customization, select Brands .
From Content model customization, select Language .	Add the specific company names to the include list.
Sign in to the Custom Vision website.	(Right Arrow)
Sign in to the Azure Video Analyzer for Media website.	(Left Arrow)
From Content model customization, select Brands .	

→ ⑤ Q98 Raw binary Image

→ Image must not be stored in
the cloud.

→ ⑥ Q101 Contains numbers

Object detection

→ * Q103 Read text from Images

CV Read API Read - Read

* Q104 Upload 20GB file?

upload directly → 2GB

→ One Drive → upto 30GB

/ Q105 Text Extraction = OCR (CV)

profanity → Content Moderator

→ * Q106 Categorize = Classification Model

Caption = Image Description

* Q107 Enhancer

Video Indexer = .TXT

Speech = SSML = XML

* Q108

Label the sample images.	From the Custom Vision portal, open the project.
From Vision Studio, open the project.	
Publish the model.	
From the Custom Vision portal, open the project. ①	
Retrain the model.	② Label the sample images.
Upload sample images of the new products.	③ Retrain the model.
From the Azure Machine Learning studio, open the workspace.	Publish the model.

→ * Q110 - read results . status value

- delay

* Q111



Q112

"enabled":	<input checked="" type="checkbox"/>
"state":	<input type="checkbox"/>
"tags":	<input type="checkbox"/>
"useBuiltIn":	<input type="checkbox"/>

✓ Q113

Video Indexer = WMV
AVI
MOV } All
MP4

✓ Q114

Creating new pattern won't help, creating new intent

✓ Q115

You develop an application to identify species of flowers by training a Custom Vision model.
You receive images of new flower species.
You need to add the new images to the classifier.
Solution: You add the new images, and then use the Smart Labeler tool.
Does this meet the goal?

- A. Yes
B. No

Because we need to extend &
Retrain the model

Q116

Yes (Intent)

(Same)

Q117

extended & Retrained

Q119

You develop an application to identify species of flowers by training a Custom Vision model.
You receive images of new flower species.
You need to add the new images to the classifier.
Solution: You add the new images, and then use the Smart Labeler tool.
Does this meet the goal?

- A. Yes
B. No

→ Q120

Capture billing address

↳ machine learned

✓ Q121

Method to create knowledge bases

- B. Call the client.Knowledgebase.CreateAsync method.
C. Create a list of QnADTO objects that represents data from the WebJob.
D. Create a CreateKbDTO object.

✓ Q122 api-nam → translate, to = en

```
var endpoint = "https://api.cognitive.microsofttranslator.com/translate"  
"https://api.cognitive.microsofttranslator.com/transliterate"  
"https://api.apc.cognitive.microsofttranslator.com/detect"  
"https://api-nam.cognitive.microsofttranslator.com/detect"  
"https://api-nam.cognitive.microsofttranslator.com/translate"  
  
var apiKey = "F956C6883B21B38691ABD200A4C606";  
var text = getTextToBeTranslated();  
var body = "[{"Text":"" + text + ""}];  
var client = new HttpClient();  
client.DefaultRequestHeaders.Add("Ocp-Apim-Subscription-Key", apiKey);  
  
var uri = endpoint + "?from=en";  
var uri = endpoint + "?suggestedFrom=en";  
var uri = endpoint + "?to=en";
```

Q123 Add logs = for active learning

✓ Q124 Swagger = documentation for endpoints

✓ Q126 Speech file = .wav format
in zip folder.

Q127

- A. toScript=Cyril
- B. from=el
- C. textType=html → ✓
- D. to=el → ✓
- E. textType=plain
- F. toScript=Latin → ✓

(2)
HTML → Latin

Q128

Bot Debugging

- BOT Emulator
- ngrok

Q130

Brand perception

→ Text Analytics

Q131 phrase list of location
in CLU → Entity type.

✓ Q132 decrease FP → Add examples to
None Intent

✓ Q133 LUIS or CLU uses ML entity

Entity Types	Answer Area
Email	
List	Paris: GeographyV2
Regex	email@domain.com: Email
GeographyV2	2 audit business: Machine learned
Machine learned	

✓ Q134 To specify Azure Resource

we have to specify capacity units

F0, SO

✓ Q135 weather. Historic = Month.

→ Q137 NER = Named Entity Recognition
is used to do text analysis
on unstructured data like

Text	Category	ConfidenceScore
Tour guide	PersonType	0.45
Space Needle	Location	0.38
Trip	Event	0.78
Seattle	Location	0.78
Last week	DateTime	0.80

• Q138 - Q139 → SIMULATION

→ Q140 Brand position = Language Services
or
Text Analytics

✓ Q143 On premisc data should be exported
to Azure data lake

Q144 - Q145 SIMULATION

• Q147 Accompany video content (Add Audio to video)
↳ Text to speech

• Q152 Model performance

- A. From the language authoring REST endpoint, retrieve the model evaluation summary.
- B. From Language Studio, enable Active Learning, and then validate the utterances logged for review.
- C. From Language Studio, select Model performance.
- D. From the Azure portal, enable log collection in Log Analytics, and then analyze the logs.

Q155

TIP

Actions	Answer Area
Deploy the model.	Create a Custom Speech project.
Create a Custom Speech project.	Create a speech-to-text model.
Upload training datasets.	Upload training datasets.
Create a speech-to-text model.	Train the model.
Create a Speaker Recognition model.	Deploy the model.
Train the model.	
Create a Conversational Language Understanding model.	

✓ Q156

.wav or mp3 format with
content is must for Synthesis

Q157

Actions	Answer Area
From the host computer, move the package file to the Docker input directory.	From the Language Understanding portal, export the solution as a package file.
From the Language Understanding portal, export the solution as a package file.	From the host computer, move the package file to the Docker input directory.
From the host computer, build the container and specify the output directory.	From the host computer, run the container and specify the input directory.
From the host computer, run the container and specify the input directory.	
From the Language Understanding portal, retrain the model.	

→ Q158

Answer Area

```
...
<mstts:express-as>
  How can I assist you?
</mstts:express-as>
  ...
<role>YoungAdultFemale</role>
<style>gentle</style>
<stylizedegree>
<type>voice</type>
</stylizedegree>
```

✓ Q159 For Text Extraction

- Always OCR from CV
not Document Intel

- For Sentiment Analysis

→ - Language.

→ Q160 Text Moderator

- Classifications

- Personal Data

✓ Q161 Text processing Solution

Answer Area

Only NER

Statements

The output will include the following words: our and included.

The output will include the following words: Paris, Eiffel, and Tower.

The function will output all the key phrases from the input string to the console.

Yes No

Separate Service
key phrase

→ Q162

name = north America

Answer Area

```
https://api.cognitive.microsofttranslator.com
api-nam.cognitive.microsofttranslator.com
api-nam.cognitiveservices.azure.com
eastus.api.cognitive.microsoft.com
```

?api-version=3.0&to=es

detect
languages
text-to-speech
translate

→ Q163

Actions

Retrain the model.
Request approval to run the container.
Export model to Host.
Run the container.
Configure disk logging.

Answer Area

Request approval to run the container.
Export model to Host.
Run the container.

✓ Q169

A conversational expert provides you with the following list of phrases to use for training.

- Find contacts in London.
- Who do I know in Seattle?
- Search for contacts in Ukraine.

You need to implement the phrase list in Conversational Language Understanding.

Solution: You create a new utterance for each phrase in the FindContact intent.

Does this meet the goal?

- A.Yes
 B.No

Answer: A

Explanation:

A. Yes

→ Q166

Custom NER

Credit cards = PII

Q168

Answer:

no list

Tip = French

Actions	Answer Area
Perform an asynchronous translation by using the list of files to be translated.	Upload a glossary file to the container for French files.
Perform an asynchronous translation by using the document translation specification.	Define a document translation specification that has a French target.
Generate a list of files to be translated.	Perform an asynchronous translation by using the document translation specification.
Upload a glossary file to the container for German files.	
Upload a glossary file to the container for French files.	
Upload a glossary file to the container for French files.	
Define a document translation specification that has a French target.	

✓

Q170

Text Analytics = Sentiment Analysis

Standard (X)

→ Q173

Query parameters

autocorrect	Value	<input checked="" type="checkbox"/> Remove parameter
PII	Value	<input checked="" type="checkbox"/> Remove parameter
listid	Value	<input checked="" type="checkbox"/> Remove parameter
classify	Value	<input checked="" type="checkbox"/> Remove parameter
language	Value	<input checked="" type="checkbox"/> Remove parameter
+ Add parameter		

Headers

Content-Type	text/plain	<input checked="" type="checkbox"/> Remove header
Ocp-Apim-Subscription-Key	Value	→ Authenticator

✓

Q174

Multiple services with single

Endpoint = Azure AI service

→ Q176 Connect to Azure AI Resource

→ URL & Subscription
Endpoint key.

→ Q177 For REST API, we need

TIP
Subscription

- Subscription Key
- Subscription Region
- Content Type.

✓ Q178 Doc Intel = Specific for
Invoices

④ Q182 Optimize Quality of voice
→ effect attribute of voice
element.

✓ Q183 Immersive Reader = Specially
abled.

→ Q184 Mention Order Details

Synthesizer

✓ Q185 Intent = Language Conversations
CLU

→ Q187 AI Search Custom Skill based on
Sentiment Analysis

Actions	Answer Area
Create an endpoint for the model. 3.	
Rerun the indexer to enrich the index. 5.	
Create an Azure Machine Learning workspace. 1.	
Create and train the model in the Azure Machine Learning studio. 2.	
Provision an Azure AI Services resource and obtain the endpoint.	
Connect the custom skill the endpoint. 4.	

✓ Q188 Extract text from PDF's

Imp Document Intelligence

Sentiment Analysis:

Azure AI Language.

✓ Q109 Monitor live video

↳ Spatial Analysis

→ * Q109 Minimize no. of utterances

Imp. → List

✓ Q109 primary key is compromised

1 - Regenerate Secondary Key

2 - Use secondary key

3. - Then Regen primary

✓ Q109 Increase performance of AI search on 1M blobs

→ Create multiple AI searchers or more search units

→ * Q109 Defining Table projection (JSON)

- tablename
- Connection name
- Source

* Q109 projections;

Text Data - File

JSON Data - Object ↗ projection

* Q100

```
{ "@odata.type": "#Microsoft.Skills.Custom.WebApiSkill",
  "description": "My custom skill description",
  "uri": "https://contoso-webskill.azurewebsites.net/api/process",
  "context": "/document/organizations/*",
  "inputs": [
    {
      "name": "companyName",
      "source": "/document/organizations/*"
    }
  ],
  "outputs": [
    {
      "name": "companyDescription"
    }
  ]
}
```

Answer Area

Statements

Yes



No



CompanyDescription is available for indexing.

The definition calls a web API as part of the enrichment process.

The enrichment step is called only for the first organization under "/document/organizations".

↗ Q202 word cloud - key phrases

Q204 Document level filtering.

- ✓ C. Retrieve the group memberships of the user. ←
- ✓ D. Add allowed groups to each index entry. ←
- E. Create one index per group.
- ✓ F. Supply the groups as a filter for the search requests. ←

Revise

Q205

You have an Azure Cognitive Search solution and an enrichment pipeline that performs Sentiment Analysis on social media posts.

You need to define a knowledge store that will include the social media posts and the Sentiment Analysis results.

Which two fields should you include in the definition? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. storageContainer
- B. storageConnectionString
- C. files
- D. tables
- E. objects

→ projections

Q206 Simulation

✓ Q207

Answer Area

There will be [answer choice].

- no projection groups
- one projection group
- two projection groups
- four projection groups

Normalized images will [answer choice].

- not be projected
- be projected to Azure Blob storage
- be projected to Azure File storage
- be saved to an Azure Table storage

Normalized →
Images = Blob

✓ Q208 Full Search and Show

- Searchable & Retrievable.

✓ Q212 Confidence Threshold = 75%.

↗ Q213 extend doc intelligence

- Add additional context forms

- Retrain the model.

✓ Q215 Amount
 taxes }
 Address } Invoice - Doc Intel

✓ Q216 Lesson plans are PDF's
 so we need Doc Intel

Immersive Reader - visual aids etc

• Q217 Analyse Docs using Doc Intel



(Prebuilt Layout)

✓ Q220

Question: 220

You have an Azure AI Search resource named Search1.

You have an app named App1 that uses Search1 to index content.

You need to add a custom skill to App1 to ensure that the app can recognize and retrieve properties from invoices by using Search1.

What should you include in the solution?

A.Azure AI Immersive Reader
 B.Azure OpenAI
 C.Azure AI Document Intelligence
 D.Azure AI Custom Vision

• Q221

Answer Area

Expenditure request authorization forms:
 Prebuilt layout

Structured employment application forms:
 Custom Template

Structured and unstructured survey forms:

Custom neural
 Custom template
 Prebuilt contract
 Prebuilt invoice
 Prebuilt layout

Prebuilt
 Ti | o
 { Custom
 Custom }

Imp. F. • Q222 Max Doc Intel file size
 = 500 MB

- Q224 In Document Intelligence

presuilt Read is used to extract text from handwritten notes.

- ✓ Q225 Train Storage Account.

Answer:	
Actions	Answer Area
Upload five sample documents.	Create a custom model project and link the project to sa1.
Upload 50 sample documents.	Upload five sample documents.
Upload JSON files that contain the document layout and labels.	Apply labels to the sample documents.
Train and test the model.	Train and test the model.
Create a custom model project and link the project to sa1.	
Apply labels to the sample documents.	

- Q226

Answer: Tib > Blob	
Actions	Answer Area
Call the Get info REST API function.	Upload the forms and JSON files to blob1.
Retrieve the access key for sa1.	Create a shared access signature (SAS) URL for blob1.
Call the Build model REST API function.	Call the Build model REST API function.
Upload the forms and JSON files to share1.	Call the Get model REST API function.
Upload the forms and JSON files to blob1.	
Create a shared access signature (SAS) URL for blob1.	
Call the Get model REST API function.	

Build
Get

- • Q227 update app to read QR code

→ Implement the Read Model

- Imp Q228

Deploy Bot using MS Bot Framework
Azure Bot Service

→ AppId and App Secret

- Q229

Statements	Yes	No
<u>user.name</u> is an entity. → No, it is a property	<input type="radio"/>	<input checked="" type="radio"/>
The dialog asks for a user name and a user age and assigns appropriate values to the <code>user.name</code> and <code>user.age</code> properties.	<input checked="" type="radio"/>	<input type="radio"/>
The chatbot attempts to take the first non-null entity value for <code>userName</code> or <code>personName</code> and assigns the value to <code>user.name</code> .	<input checked="" type="radio"/>	<input type="radio"/>

- Q230 positive / negative = Sentiment Analysis

Language = Detection

✓ Q231

Build or Train CLU app

Actions	Tip: prebuilt	Answer Area
Train the application.	3	Add a new application.
Publish the application.	4	Add the prebuilt domain ToDo.
Add a new application.	1	Train the application.
Add example utterances.		Publish the application.
Add the prebuilt domain ToDo.	2	

✓ Q232

CLU model locally
export .LU file

Review
→ Q233

Improve pre-existing chatbot

Actions	Tip: Active Learning	Answer Area
Add prebuilt domain models as required.		Enable active learning. Imp.
Validate the utterances logged for review and modify the model.		Validate the utterances logged for review and modify the model.
Migrate authoring to an Azure resource authoring key.		Train and republish the Language Understanding model.
Enable active learning. ?		
Enable log collection by using Log Analytics.		
Train and republish the Language Understanding model.		

Q235

Tip: only for new members

OnMembersAddedAsync will be triggered when a user joins the conversation.

When a new user joins the conversation, the existing users in the conversation will see the chatbot greeting.

OnMembersAddedAsync will be initialized when a user sends a message.

→ only new members will see greet
not existing ones

Hotspot

Q236



Greet(user)
 - \$ Greeting(), \$ user.name
 For each of the following statements, select Yes if the statement is true. Otherwise, select No.
 NOTE: Each correct selection is worth one point.
 Hot Area:

Answer Area

Statements

Yes No

\${user.name} retrieves the user name by using a prompt.

Greet () is the name of the language generation template.

\${Greeting()} } is a reference to a template in the language generation file.

Hotspot Q237

HOTSPOT -
 You are building a chatbot by using the Microsoft Bot Framework SDK.
 You use an object named `UserProfile` to store user profile information and an object named `ConversationData` to store information related to a conversation.
 You create the following state accessors to store both objects in state. `var userStateAccessors = _userState.CreateProperty<UserProfile>(nameof(UserProfile)); var conversationStateAccessors = _conversationState.CreateProperty<ConversationData>(nameof(ConversationData));`
 The state storage mechanism is set to Memory Storage.
 For each of the following statements, select Yes if the statement is true. Otherwise, select No.
 NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

Statements

Yes No

The code will create and maintain the `UserProfile` object in the underlying storage layer.



The code will create and maintain the `ConversationData` object in the underlying storage layer.



The `UserProfile` and `ConversationData` objects will persist when the Bot Framework runtime terminates.



Hotspot Q238

Passengers
 Sarah Hum
 Jeremy Goldberg
 Evan Litvak

Adaptive Card

Image

2 Stops
 Tue, May 30, 2017 10:25 PM

San Francisco
 Amsterdam

SFO AMS

San Francisco
 Amsterdam

SFO AMS

The chatbot is showing [answer choice].

The card includes [answer choice].

- an Adaptive Card
- a Hero Card
- a Thumbnail Card
- an action set
- an image**
- an image group
- media

Q239

PL/TC

SelectItem is [answer choice]

Choose {@DirectionalReference=top right} is [answer choice].

- a domain
- an entity
- an intent**
- an utterance

- a domain
- an entity
- an intent**
- an utterance

Q240

```

user=User1
bot=watchbot
user: I want a new watch.
bot: [Attachment
      ConversationUpdate
      Typing]
      ][Delay=3000]

bot: I can help you with that! Let me see what I can find.
bot: Here's what I found.
bot:
[AttachmentLayout=
  [adaptivecard
   carousel
   thumbnail]
  ]
[Attachment=https://contoso.blob.core.windows.net/watch01.jpg]
[Attachment=https://contoso.blob.core.windows.net/watch02.jpg]
user: I like the first one.
bot: Sure, pulling up more information.
bot: [Attachment=cards\watchProfileCard.json]
user: That's nice! Thank you.
bot: Sure, you are most welcome!
  
```

Q241

You are building a chatbot by using the Microsoft Bot Framework Composer as shown in the exhibit. (Click the Exhibit tab.)

GetUserDetails > BeginDialog > Text Show code

Prompt for text
Text Input
Collection information - Ask for a word or sentence.
Learn more

Bot Asks User input Other

Property (SCOPE).name string

Output format string

Value string

Expected responses (intent): #TextInput_Response_FuuyF4

A. dialog ←
B. user
C. turn
D. conversation

Q242

You have a chatbot that uses a QnA Maker application. You enable active learning for the knowledge base used by the QnA Maker application. You need to integrate user input into the model. Which four actions should you perform in sequence? To answer, move the appropriate actions from the list actions to the answer area and arrange them in the correct order.

Select and Place:

Actions	Answer Area
Add a task to the Azure resource.	
Approve and reject suggestions.	②
Publish the knowledge base.	④
Modify the automation task logic app to run an Azure Resource Manager template that creates the Azure Cognitive Services resource.	⑤
For the knowledge base, select Show active learning suggestions.	①
Save and train the knowledge base.	③
Select the properties of the Azure Cognitive Services resource.	

Q243

Enable speech capabilities for a chatbot ABC

- A. Enable WebSockets for the chatbot app.
- B. Create a Speech service.
- C. Register a Direct Line Speech channel.
- D. Register a Cortana channel.
- E. Enable CORS for the chatbot app.
- F. Create a Language Understanding service.

✓ Q249 cancel orders in chatbot

Dialog Triger

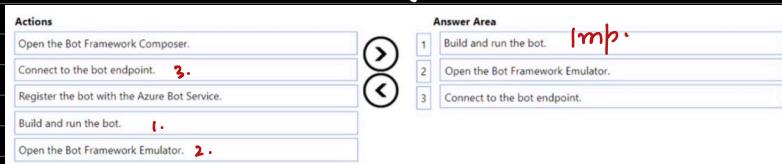
• Q245 - Q248 SIMULATION

✓ Q249 which dialog = waterfall

- The start date of a vacation
- The end date of a vacation
- The amount of required paid time off

} sequence

• Q250 Run Bots Locally



Q251

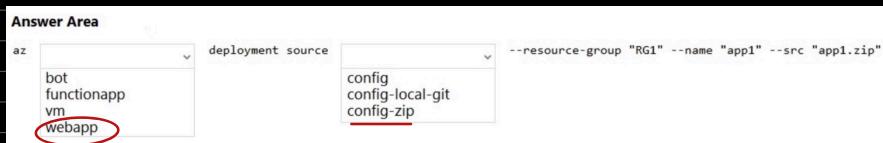
You create a bot by using the Microsoft Bot Framework SDK.

You need to configure the bot to respond to events by using custom text responses.

What should you use?

- A. a dialog
- B. an activity handler
- C. an adaptive card
- D. a skill

• Q252 Deploy Bot → Bots are webapps



✓ Q253 Spurious = unexpected (Need formality)

NO - Adding chitchat. friendly.tsv

✓ Q254 Modify Q&A pair

NO - This wont change formality

✓ Q255 chitchat - professional.fsv

Yes - This will help -

✓ Q256

You create five bots by using Microsoft Bot Framework Composer.

You need to make a single bot available to users that combines the bots. The solution must support dynamic routing to the bots based on user input.

Which three actions should you perform? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A.Create a composer extension.
- B.Change the Recognizer/Dispatch type.
- C.Create an Orchestrator model.
- D.Enable WebSockets.
- E.Create a custom recognizer JSON file.
- F.Install the Orchestrator package.

✓ Imp

• **Orchestration** = used to route to multiple bots

• Q261 List of options with images

Tip: Dialog

- A.an entity
- B.an Azure function
- C.an utterance
- D.an adaptive card ←
- E.a dialog ←

• Q263 Bot with voice interaction

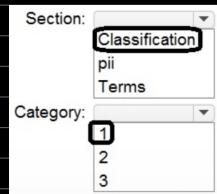
Direct line speech

Direct line speech.

• Q264 Bot framework - spoken Requests

Direct line speech.

✓ Q265 Content moderation = Sexually Explicit



✓ Q267 Ask Questions Continuously
prompt

✓ Q268

You are building a chatbot.

You need to configure the chatbot to query a knowledge base.

Which dialog class should you use?

- A.QnAMakerDialog → Knowledge base
B.AdaptiveDialog
C.SkillDialog

Q269



✓ Q270

Incorrect Responses

→ None Intent

Q271

Question: 271 Add speech to BOT

You have a Speech resource and a bot that was built by using the Microsoft Bot Framework Composer.

You need to add support for speech-based channels to the bot.

Which three actions should you perform? Each correct answer presents part of the solution.

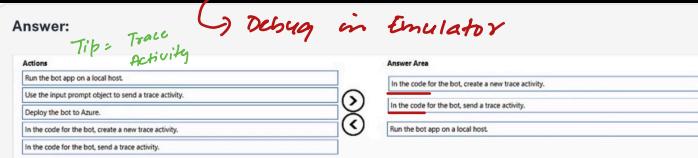
NOTE: Each correct selection is worth one point.

- A. Configure the language and voice settings for the Speech resource.
B. Add the endpoint and key of the Speech resource to the bot.
C. Add language understanding to dialogs.
D. Add Orchestrator to the bot.
E. Add Speech to the bot responses.
F. Remove the setSpeak configuration.

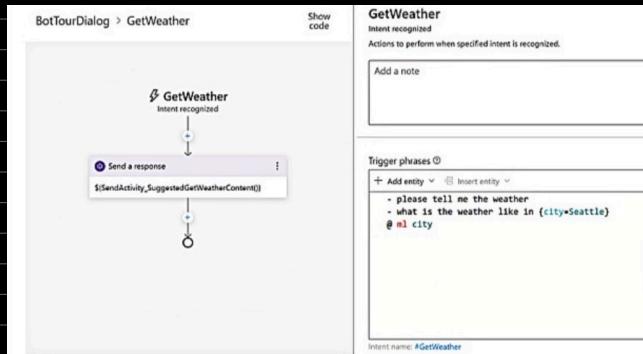
Revising
In the
code

Q272

Bot framework Emulator



Q273



Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

NOTE: Each correct selection is worth one point.

Answer Area

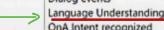
If a user asks "what is the weather like in New York", the bot will [answer choice].

- change to a different dialog
- identify New York as a city entity
- identify New York as a state entity
- respond with the weather in Seattle

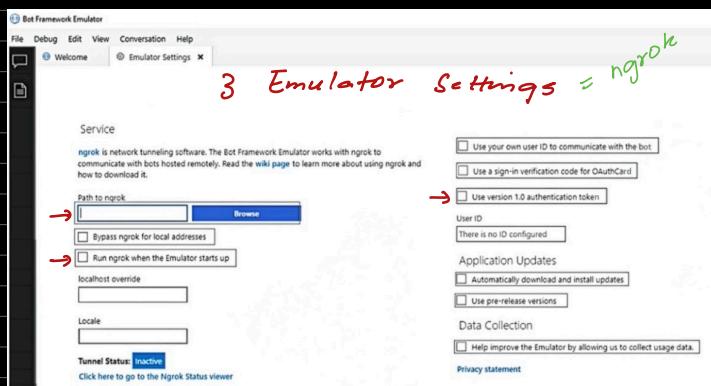
The GetWeather dialog uses a [answer choice] trigger.

- Custom events
- Dialog events
- Language Understanding Intent recognized
- QnA Intent recognized

TIP



Q275 Bot Framework Emulator



Q277

Question: 277

You build a bot.

You create an Azure Bot resource.

You need to deploy the bot to Azure.

What else should you create?

A.only an app registration in Microsoft Azure Active Directory (Azure AD), part of Microsoft Entra, an Azure App

CertyIQ

Tip: A. Active Dir

Q278

Question: 278

You are building a chatbot by using the Microsoft Bot Framework SDK. The bot will be used to accept food orders from customers and allow the customers to customize each food item.

You need to configure the bot to ask the user for additional input based on the type of item ordered. The solution must minimize development effort.

Which two types of dialogs should you use? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A.adaptive
- B.action
- C.waterfall
- D.prompt
- E.input

Tip: Accept orders
= prompt
choose waterfall

✓ Q279

```
self.user_profile_accessor = self.user_state.create_property("UserProfile")
self.conversation_data_accessor = self.conversation_state.create_property("ConversationData")
```

The state storage mechanism is set to Memory Storage.

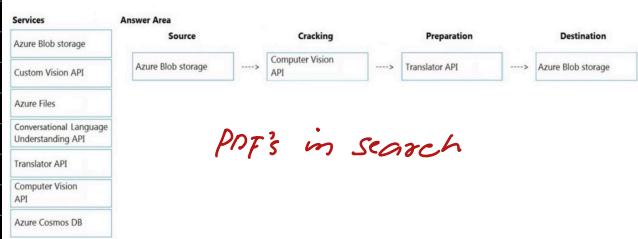
For each of the following statements, select Yes if the statement is true. Otherwise select No.

NOTE: Each correct selection is worth one point.

Answer Area

Statements	Yes	No
The code will create and maintain the UserProfile object in the underlying storage layer.	<input checked="" type="radio"/>	<input type="radio"/>
The code will create and maintain the ConversationData object in the underlying storage layer.	<input checked="" type="radio"/>	<input type="radio"/>
The UserProfile and ConversationData objects will persist when the Bot Framework runtime terminates.	<input type="radio"/>	<input checked="" type="radio"/>

✓ Q280



Imp
o Q281

Chatbot requirements

Q8A options. score threshold

should be $\geq 70\%$.

Gen AI

✓ Q282

Agentic Chatbots

creative = Temp.

Deterministic = Top P.

↳ Fixed Response

o Q285

You build a chatbot that uses the Azure OpenAI GPT 3.5 model.

You need to improve the quality of the responses from the chatbot. The solution must minimize development effort.

What are two ways to achieve the goal? Each correct answer presents a complete solution.

NOTE: Each correct answer is worth one point.

A. Fine-tune the model.

B. Provide grounding content.

RAG

C. Add sample request/response pairs.

D. Retrain the language model by using your own data.

E. Train a custom large language model (LLM).

→ Few shot prompts

✓ Q288

Answer Area

```
response = openai.ChatCompletion.create(  
    engine="dgw-aoai-gpt35",  
    messages = [{"role": "assistant", "content": ""}],  
    temperature=1,  
    max_tokens=800,  
    stop=None)
```

Tip: *assistant*, *function*, *system*, *user*
Rote: *Frequency_penalty*, *Presence_penalty*, *temperature*, *token_selection_biases*

✓ Q289

You configure a model that has the following settings:

-Temperature: 1
-Top probabilities: 0.5
-Max response tokens: 100

You ask the model a question and receive the following response.

```
{  
  "choices": [  
    {  
      "finish_reason": "stop",  
      "index": 0,  
      "message": {  
        "content": "The founders of Microsoft are Bill Gates and Paul Allen. They co-founded the company in 1975.",  
        "role": "assistant"  
      }  
    }  
  ],  
  "created": 1679014554,  
  "id": "chatcmpl-0usfnzyjkbmSe364jaQ86b0Sc01",  
  "model": "gpt-3.5-turbo-0301",  
  "object": "chat.completion",  
  "usage": {  
    "completion_tokens": 86,  
    "prompt_tokens": 37,  
    "total_tokens": 123  
  }  
}
```

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Answer Area

Statements

Yes No

The subscription will be charged 86 tokens for the execution of the session.

The text completion was truncated because the Max response tokens value was exceeded.

The prompt_tokens value will be included in the calculation of the Max response tokens value.

Statement	Yes/No	Short Explanation
1. The subscription will be charged 86 tokens for the execution of the session.	<input checked="" type="checkbox"/> No	You are charged for total tokens = prompt (37) + completion (86) = 123 tokens, not just the completion tokens.
2. The text completion was truncated because the Max response tokens value was exceeded.	<input checked="" type="checkbox"/> No	The response shows "finish_reason": "stop" meaning it ended naturally, not because of token limit. If truncated, it would show "length".
3. The prompt_tokens value will be included in the calculation of the Max response tokens value.	<input checked="" type="checkbox"/> No	max_tokens applies only to the model's output tokens (completion tokens), not to prompt tokens. Prompt tokens are separate and not counted towards max_tokens.

✓ Q292

Encryption

Answer Area

```
az cognitiveservices account create -n myresource -g myResourceGroup --kind  --sku S -l WestEurope
```

Encryption Settings

✓ Q294

Answer Area

```
Uri endpoint = new Uri("https://openai.openai.azure.com");
AzureKeyCredential credentials = new AzureKeyCredential("x
");
```

No special chars. →

```
OpenAIclient openAIclient = new (endpoint, credentials);
```

✓ Q297

JSONL → Fine tune LLM

✓ Q298

Azure CLI supports

xlsx
tsv

pdf
xml

✓ Q299

Role to upload data (openAI)

Cognitive Services OpenAI Contributor

Q302

Data source for LLM model

= Azure AI Search

Q303

Question: 303

HOTSPOT

You are building an app that will provide users with definitions of common AI terms.

You create the following Python code.

```
...
openai.api_key = key
openai.api_base = endpoint
response = openai.ChatCompletion.create(
    engine=deployment_name
    messages=[
        {"role": "system", "content": "You are a helpful assistant."},
        {"role": "user", "content": "What is an LLM?"}
    ]
)
print(response['choices'][0]['message']['content'])
...
```

Tip: LLM
No certainty

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE: Each correct selection is worth one point.

Answer Area

Statements

Yes No

The response will contain an explanation of large language models (LLMs) that has a high degree of certainty.

Changing "What is an LLM?" to "What is an LLM in the context of AI models?" will produce the intended response.

Changing "You are a helpful assistant." to "You must answer only within the context of AI language models." will produce the intended response.

CASE

STUDY

6 Questions

Q304

Core Study

Answer Area

Management-Accountants

TIP = *✓ + 3*

Owner
Contributor
Cognitive Services User
Cognitive Services QnA Maker Read
Cognitive Services QnA Maker Editor

Consultant-Accountants

Owner
Contributor
Cognitive Services User
Cognitive Services QnA Maker Read
Cognitive Services QnA Maker Editor

Agent-CustomerServices

Owner
Contributor
Cognitive Services User
Cognitive Services QnA Maker Read
Cognitive Services QnA Maker Editor

Q306

You have an Azure subscription.

You are building a social media app that will enable users to share images.

You need to ensure that inappropriate content uploaded by the users is blocked. The solution must minimize development effort.

What are two tools that you can use? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A.Azure AI Document Intelligence
- B.Microsoft Defender for Cloud Apps
- C.Azure AI Content Safety
- D.Azure AI Vision
- E.Azure AI Custom Vision

TIP *AI vision*

Analyze Images

Q307

```
curl --location --request POST 'https://cs1.cognitiveservices.azure.com/completions/contentsafety/healthinsights/language/?api-version=2023-10-01' \
--header 'Ocp-Apim-Subscription-Key: <your_subscription_key>' \
--header 'Content-Type: application/json' \
--data-raw '{
  "text": "What is the weather forecast for Seattle",
  "categories": ["Hate"]
  "blocklistNames": [
    "string"
  ],
  "haltonBlocklistHit": true,
  "outputType": "FourSeverityLevels"
}'
```

Content Safety Code

Q308 Content safety - protected material
Detection

NO

only for *PII* etc. not for
objectionable things

Q309

Text moderation

Yes

Q310

monitor online

= NO

Activity

Q311 → safety meta prompt = NO

Q312 →

Answer Area

```
public static void Analyze(AnalyzeImageOptions request)
{
    var endpoint = Environment.GetEnvironmentVariable("ENDPOINT");
    var key = Environment.GetEnvironmentVariable("KEY");
    var client = new
        AnalyzeTextOptions
        BlocklistClient
        ContentSafetyClient
        TextCategoriesAnalysis
    return
        AnalyzeImage(request)
        client.AnalyzeImage(request)
        client.AnalyzeText(request)
        request.AnalyzeImage(client)
}
```

TIP = client
client.

Q313

Block list = helps to create list of offensive terms

✓ Q315

Jailbreak Risk Detection

→ prompt shield

→ Avoid tricking LLM

Case Study

Q316

!

Actions	Answer Area
Index the video by using the Azure Video Analyzer for Media (previously Video Indexer) API.	→ ②
Upload the video to blob storage.	→ ①
Analyze the video by using the Computer Vision API.	
Extract the transcript from Microsoft Stream.	
Send the transcript to the Language Understanding API as an utterance.	→ ③
Extract the transcript from the Azure Video Analyzer for Media (previously Video Indexer) API.	→ ④
Translate the transcript by using the Translator API.	
Upload the video to file storage.	

Tip
video
indexer

Q317

Case Study

Answer Area

```

public static async Task<string> SuggestAltText(ComputerVisionClient client,
{
    List<VisualFeatureTypes?> features = new List<VisualFeatureTypes?>()
    {
        VisualFeatureTypes.Description
        VisualFeatureTypes.ImageType
        VisualFeatureTypes.Objects
        VisualFeatureTypes.Tags
    };
    ImageAnalysis results = await client.AnalyzeImageAsync(image, features);
    var c = results.Brands.DetectedBrands[0]
    var c = results.Description.Captions[0]
    var c = results.Metadata[0]
    var c = results.Objects[0]
    if(c.Confidence > 0.5) return(c.Text);
}

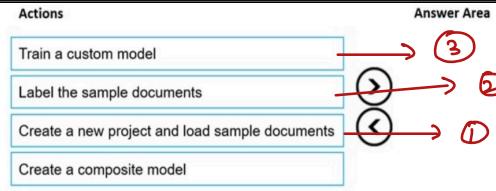
```

Dictionary
stream
string

Imp.
= Captions

✓ Q318

Case Study



✓ Q319

Case Study

Can search content in different formats, including video
Provides relevant links to external resources for further research
Question You are developing the knowledgebase.
You use Azure Video Analyzer for Media (previously Video indexer) to obtain transcripts of webinars.
What should you do?

A. Create a custom language model → correct (book keeping)
B. Configure audio indexing for videos only
C. Enable multi-language detection for videos
D. Build a custom Person model for webinar presenters

✓ Q320

Case Study

Hot Area:

Answer Area

api.cognitive.microsofttranslator.com
api-nam.cognitive.microsofttranslator.com
westus.tts.speech.microsoft.com
wwics.cognitiveservices.azure.com/translator

?api-version=3.0&to=es&to=pt
/detect
/languages
/text-to-speech
/translate

→ ' Tip: Contoso is in NA

Explanation:

Box 1: api-nam.cognitive.microsofttranslator.com

this is because the case study specifically states under Business Requirements "Data storage and processing must occur in datacenters located in the United States."

see reference documentation for base urls per geo region:

<https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-reference>

Box 2: /translate -

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-translate>

✓ Q321

Case
Study

Which expression should you use to trigger a manual review of the extracted information by a member of the Consultant-Bookkeeper group?

- A. documentResults.docType == "prebuilt:receipt"
- B. documentResults.fields.*.confidence < 0.7
- C. documentResults.fields.ReceiptType.confidence > 0.7
- D. documentResults.fields.MerchantName.confidence < 0.7

Tip: we normally prefer confidence > 0.7
if low, then it is reviewed

Q322

Q322

Question You are developing the smart e-commerce project.
You need to implement autocomplete as part of the Cognitive Search solution.
Which three actions should you perform? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

- A. Make API queries to the autocomplete endpoint and include suggesterName in the body.
- B. Add a suggester that has the three product name fields as source fields.
- C. Make API queries to the search endpoint and include the product name fields in the searchFields query parameter.
- D. Add a suggester for each of the three product name fields.
- E. Set the searchAnalyzer property for the three product name variants.
- F. Set the analyzer property for the three product name variants.

Answer: ABF

✓ Q323

Q323

- A. /vision/v3.1/read/analyzeResults
- ✓ B. /formrecognizer/v2.0/custom/models/ modelId /analyze
- ✓ C. /formrecognizer/v2.0/prebuilt/receipt/analyze
- D. /vision/v3.1/describe Tip 2 Doc processing
- E. /vision/v3.1/read/analyze

Q324

Q324

Recita

```
@odata.type": "#Microsoft.Skills.Text.EntityRecognitionSkill",
  "categories": [],
  "categories": [ "Email", "Persons", "Organizations"],
  "categories": [ "Locations", "Persons", "Organizations"], ←
    "defaultLanguageCode": "en",
    "includeTypelessEntities": true,
    "minimumPrecision": 0.7,
    "inputs": [
      { "name": "text",
        "source": "/document/content")
    ],
    "outputs": [
      { "name": "persons", "targetName": "people"),
      { "name": "locations", "targetName": "locations"),
      { "name": "organizations", "targetName": "organizations"),
      { "name": "entities" } ←
      { "name": "categories" }
      { "name": "namedEntities" }
    ]
}
```

Q325 Ratta - Document extraction

Core study

Knowledgebase Requirements -
Contoso identifies the following requirements for the knowledgebase:
Supports searches for equivalent terms
Can transcribe jargon with high accuracy
• Can search content in different formats, including video
Provides relevant links to external resources for further research Question You are developing the knowledgebase by using Azure Cognitive Search.
You need to process wiki content to meet the technical requirements.
What should you include in the solution?
A. an indexer for Azure Blob storage attached to a skillset that contains the language detection skill and the text translation skill
B. an indexer for Azure Blob storage attached to a skillset that contains the language detection skill
✓ C. an indexer for Azure Cosmos DB attached to a skillset that contains the document extraction skill and the text translation skill
D. an indexer for Azure Cosmos DB attached to a skillset that contains the language detection skill and the text translation skill

326 Synonym maps Ratta

Core study

Hotspot Q327

Core study

```
"type": "TextBlock",
"size": "Medium",
"weight": "Bolder",
"text": "${if(language == 'en', 'en', name)}  
Ratta
},
{
  "type": "TextBlock",
  "text": "${when: ${stockLevel != 'OK'}}  
${when: ${stockLevel == 'OK'}}  
${when: ${stockLevel.OK}}  
Tip: Language
},
{
  "type": "Image",
  "url": "${image.uri}",
  "size": "Medium",
  "altText": "${image.altText.en}  
image.altText.language  
image.altText.[language]  
image.altText.[language]
}
```

Hotspot Q328



AllUsers:
Cognitive Service User
Contributor
Owner
QnA Maker Editor
QnA Maker Read

LeadershipTeam:
Cognitive Service User
Contributor
Owner
QnA Maker Editor
QnA Maker Read