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QUESTION 1

HOTSPOT

You are planning the product creation project.

You need to build the REST endpoint to create the multilingual product descriptions.

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

NOTE: Each correct selection is worth one point.

Hot Area:

Answer Area

▼	▼	?api-version=3.0&to=es&to=pt
api.cognitive.microsofttranslator.com	/detect	
api-nam.cognitive.microsofttranslator.com	/languages	
westus.tts.speech.microsoft.com	/text-to-speech	
wwics.cognitiveservices.azure.com/translator	/translate	

Correct Answer:

Answer Area

▼	▼	?api-version=3.0&to=es&to=pt
api.cognitive.microsofttranslator.com	/detect	
api-nam.cognitive.microsofttranslator.com	/languages	
westus.tts.speech.microsoft.com	/text-to-speech	
wwics.cognitiveservices.azure.com/translator	/translate	

Box 1: api.cognitive.microsofttranslator.com Translator 3.0: Translate. Send a POST request to:
https://api.cognitive.microsofttranslator.com/translate?api-version=3.0

Box 2: /translate Reference: https://docs.microsoft.com/en-us/azure/cognitive-services/translator/reference/v3-0-translate

QUESTION 2

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

Correct Answer: B

https://learn.microsoft.com/en-us/azure/bot-service/bot-activity-handler-concept?view=azure-bot-service-4.0andtabs=csharp

---

QUESTION 3

HOTSPOT

You are building a bot and that will use Language Understanding.

You have a LUDown file that contains the following content.

```
## Confirm
- confirm
- ok
- yes

## ExtractName
- call me steve !
- i am anna
- (i'm|i am) {@PersonName.Any}[.]
- my name is {@PersonName.Any}[.]

## Logout
- forget me
- log out

## SelectItem
- choose last
- choose the {@DirectionalReference=bottom left}
- choose {@DirectionalReference=top right}
- i like {@DirectionalReference=left} one

## SelectNone
- none

@ ml DirectionalReference
@ prebuilt personName
```

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.

Hot Area:

Answer Area

SelectItem is [answer choice].

| a domain |
| an entity |
| an intent |
| an utterance |

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

| a domain |
| an entity |
| an intent |
| an utterance |

Correct Answer:

Answer Area

SelectItem is [answer choice].

| a domain |
| an entity |
| an intent |
| an utterance |

Choose {@DirectionalReference=top right} is [answer choice].
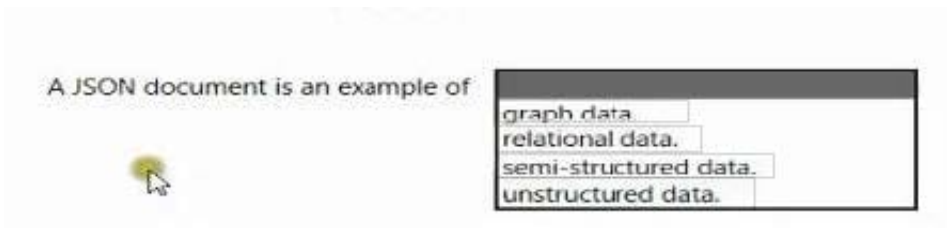
| a domain |
| an entity |
| an intent |
| an utterance |

Reference: https://github.com/solliancenet/tech-immersion-data-ai/blob/master/ai-exp1/README.md
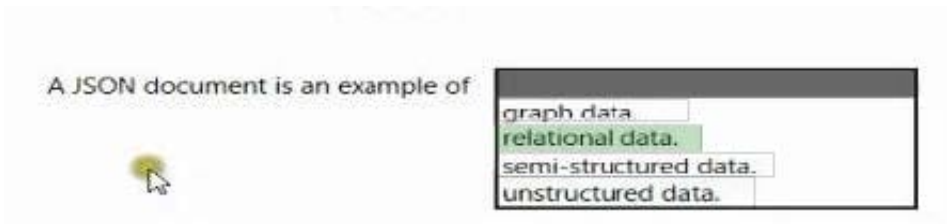
QUESTION 4

HOTSPOT

Select the answer that correctly completes the sentence.

Hot Area:

A JSON document is an example of

graph data
relational data.
semi-structured data.
unstructured data.

Correct Answer:

A JSON document is an example of

graph data
relational data.
semi-structured data.
unstructured data.

QUESTION 5

HOTSPOT

You are developing a service that records lectures given in English (United Kingdom).

You have a method named AppendToTranscriptFile that takes translated text and a language identifier.

You need to develop code that will provide transcripts of the lectures to attendees in their respective language. The supported languages are English, French, Spanish, and German.

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

```
static async Task TranslateSpeechAsync()
{
    var config =SpeechTranslationConfig.FromSubscription("69cad5cc-0ab3-4704-bdff-afbf4aa07d85", "uksouth");

    var lang = new List<string>  ▼
                  ("en-GB")
                  ("fr", "de", "es")
                  ("French", "Spanish", "German")
                  (languages)

    config.SpeechRecognitionLanguage = "en-GB";
    lang.ForEach(config.AddTargetLanguage);

    using var audioConfig = AudioConfig.FromDefaultMicrophoneInput();
    using var recognizer = new                 ▼ (config, audioConfig);
                  IntentRecognizer
                  SpeakerRecognizer
                  SpeechSynthesizer
                  TranslationRecognizer

    var result = awit recognizer.RecognizeOnceAsync();
    if (result.Reason == ResultReason.TranslatedSpeech)
```

Correct Answer:

Answer Area

```
static async Task TranslateSpeechAsync()
{
    var config =SpeechTranslationConfig.FromSubscription("69cad5cc-0ab3-4704-bdff-afbf4aa07d85", "uksouth");

    var lang = new List<string>  ▼
                  ("en-GB")
                  ("fr", "de", "es")
                  ("French", "Spanish", "German")
                  (languages)

    config.SpeechRecognitionLanguage = "en-GB";
    lang.ForEach(config.AddTargetLanguage);

    using var audioConfig = AudioConfig.FromDefaultMicrophoneInput();
    using var recognizer = new                 ▼ (config, audioConfig);
                  IntentRecognizer
                  SpeakerRecognizer
                  SpeechSynthesizer
                  TranslationRecognizer

    var result = awit recognizer.RecognizeOnceAsync();
    if (result.Reason == ResultReason.TranslatedSpeech)
```

Box 1: {"fr", "de", "es"}

A common task of speech translation is to specify target translation languages, at least one is required but multiples are supported. The following code snippet sets both French and German as translation language targets.

static async Task TranslateSpeechAsync() { var translationConfig = SpeechTranslationConfig.FromSubscription(SPEECH__SUBSCRIPTION__KEY, SPEECH__SERVICE__REGION);

translationConfig.SpeechRecognitionLanguage = "it-IT";

// Translate to languages. See, https://aka.ms/speech/sttt-languages

translationConfig.AddTargetLanguage("fr");

translationConfig.AddTargetLanguage("de");

}

Box 2: TranslationRecognizer

After you\\'ve created a SpeechTranslationConfig, the next step is to initialize a TranslationRecognizer.

Example code:

static async Task TranslateSpeechAsync()

{

 var translationConfig =

 SpeechTranslationConfig.FromSubscription(SPEECH__SUBSCRIPTION__KEY, SPEECH__SERVICE__REGION);

 var fromLanguage = "en-US";

 var toLanguages = new List { "it", "fr", "de" };

 translationConfig.SpeechRecognitionLanguage = fromLanguage;

 toLanguages.ForEach(translationConfig.AddTargetLanguage);

 using var recognizer = new TranslationRecognizer(translationConfig); }

QUESTION 6

You are designing a conversational interface for an app that will be used to make vacation requests. The interface must gather the following data:

1.

 The start date of a vacation

2.

 The end date of a vacation

3.

 The amount of required paid time off The solution must minimize dialog complexity. Which type of dialog should you use?

A. Skill

B. waterfall

C. adaptive

D. component

Correct Answer: B

QUESTION 7

You use the Custom Vision service to build a classifier.

After training is complete, you need to evaluate the classifier.

Which two metrics are available for review? Each correct answer presents a complete solution. (Choose two.)

NOTE: Each correct selection is worth one point.

A. recall

B. F-score

C. weighted accuracy

D. precision

E. area under the curve (AUC)

Correct Answer: AD

Custom Vision provides three metrics regarding the performance of your model: precision, recall, and AP.

Reference: https://www.tallan.com/blog/2020/05/19/azure-custom-vision/

QUESTION 8

You have an Azure Cognitive Services model named Model1 that identifies the intent of text input.

You develop an app in C# named App1.

You need to configure App1 to use Model1.

Which package should you add to App1?

A. Universal.Microsoft.CognitiveServices.Speech

B. SpeechServicesToolkit

C. Azure.AI.Language.Conversations

D. Xamarin.Cognitive.Speech

Correct Answer: C

https://learn.microsoft.com/en-us/dotnet/api/overview/azure/ai.language.conversations-readme?view=azure-dotnet

Conversational Language Understanding - aka CLU for short - is a cloud-based conversational AI service which provides many language understanding capabilities like:

-Conversation App: It\\'s used in extracting intents and entities in conversations

Start by importing the namespace for the ConversationAnalysisClient and related class:

-using Azure.AI.Language.Conversations;

QUESTION 9

HOTSPOT

You are developing the knowledgebase by using Azure Cognitive Search.

You need to build a skill that will be used by indexers.

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

```
{
    "@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"}

    ]
}
```

Correct Answer:

Answer Area

```
{
        "@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"}
        ]
}
```

Box 1: "categories": ["Locations", "Persons", "Organizations"],

Locations, Persons, Organizations are in the outputs.

Scenario: Contoso plans to develop a searchable knowledgebase of all the intellectual property

Note: The categories parameter is an array of categories that should be extracted. Possible category types: "Person", "Location", "Organization", "Quantity", "Datetime", "URL", "Email". If no category is provided, all types are returned.

Box 2: {"name": " entities"}

The include wikis, so should include entities in the outputs.

Note: entities is an array of complex types that contains rich information about the entities extracted from text, with the following fields

name (the actual entity name. This represents a "normalized" form)

wikipediaId

wikipediaLanguage

wikipediaUrl (a link to Wikipedia page for the entity)

etc.

Reference:

https://docs.microsoft.com/en-us/azure/search/cognitive-search-skill-entity-recognition

Box 1: "categories": ["Locations", "Persons", "Organizations"],

Locations, Persons, Organizations are in the outputs.

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name (the actual entity name. This represents a "normalized" form)

wikipediaId

wikipediaLanguage

wikipediaUrl (a link to Wikipedia page for the entity)

etc.

Reference:

QUESTION 10

You build a Language Understanding model by using the Language Understanding portal. You export the model as a JSON file as shown in the following sample.

```
{
  "text": "average amount of rain by month at chicago last year",
  "intent": "Weather.CheckWeatherValue",
  "entities": [
    {
      "entity": "Weather.WeatherRange",
      "startPos": 0,
      "endPos": 6,
      "children": []
    },
    {
      "entity": "Weather.WeatherCondition",
      "startPos": 18,
      "endPos": 21,
      "children": []
    },
    {
      "entity": "Weather.Historic",
      "startPos": 23,
      "endPos": 30,
      "children": []
    }
  ]
}
```

To what does the Weather.Historic entity correspond in the utterance?

A. by month

B. chicago

C. rain

D. location

Correct Answer: A

QUESTION 11

DRAG DROP

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

You need to test the bot interactively on a local machine.

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 cor\\'ect order.

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

Register the bot with the Azure Bot Service.

Open the Bot Framework Composer.

Build and run the bot.

Open the Bot Framework Emulator.

Connect to the bot endpoint.

Answer Area

Correct Answer:

Actions

Register the bot with the Azure Bot Service.

Open the Bot Framework Composer.

Answer Area

Build and run the bot.

Open the Bot Framework Emulator.

Connect to the bot endpoint.

QUESTION 12

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")

Correct Answer: A

https://azure.microsoft.com/en-us/pricing/details/cognitive-services/computer-vision/

QUESTION 13

DRAG DROP

You are developing a webpage that will use the Video Indexer service to display videos of internal company meetings.

You embed the Player widget and the Cognitive Insights widget into the page.

You need to configure the widgets to meet the following requirements:

1.

Ensure that users can search for keywords.

2.

Display the names and faces of people in the video.

3.

Show captions in the video in English (United States).

How should you complete the URL for each widget? 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

en-US	people,search
false	search
people,keywords	true

Answer Area

Cognitive Insights Widget

https://www.videoindexer.ai/embed/insights/<accountId>/<videoId>/?widgets=

Value	controls=	Value

Player Widget

https://www.videoindexer.ai/embed/player/<accountId>/<videoId>/? showcaptions=

Value	captions=	Value

Correct Answer:

Values

	people,search
false	

Answer Area

Cognitive Insights Widget

https://www.videoindexer.ai/embed/insights/<accountId>/<videoId>/?widgets=

people,keywords	controls=	search

Player Widget

https://www.videoindexer.ai/embed/player/<accountId>/<videoId>/? showcaptions=

true	captions=	en-US

Reference: https://docs.microsoft.com/en-us/azure/azure-video-analyzer/video-analyzer-for-media-docs/video-indexer-embed-widgets

---

QUESTION 14

You have a Language service resource that performs the following:

1.

 Sentiment analysis

2.

 Named Entity Recognition (NER)

3.

 Personally Identifiable Information (PII) identification

You need to prevent the resource from persisting input data once the data is analyzed.

Which query parameter in the Language service API should you configure?

A. loggingOptOut

B. piiCategories

C. showStats

D. Model-version

Correct Answer: A

QUESTION 15

You have an Azure Cognitive Search instance that indexes purchase orders by using Form Recognizer

You need to analyze the extracted information by using Microsoft Power BI. The solution must minimize development effort.

What should you add to the indexer?

A. a table projection

B. a projection group

C. an object projection

D. a file projection

Correct Answer: A