

Exam Questions AI-900

Microsoft Azure AI Fundamentals (beta)

<https://www.2passeasy.com/dumps/AI-900/>



NEW QUESTION 1

- (Topic 5)

You use drones to identify where weeds grow between rows of crops to send an Instruction for the removal of the weeds. This is an example of which type of computer vision?

- A. scene segmentation
- B. optical character recognition (OCR)
- C. object detection

Answer: C

Explanation:

Object detection is similar to tagging, but the API returns the bounding box coordinates for each tag applied. For example, if an image contains a dog, cat and person, the Detect operation will list those objects together with their coordinates in the image.

Reference:

<https://docs.microsoft.com/en-us/ai-builder/object-detection-overview> <https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/overview-ocr>
<https://docs.microsoft.com/en-us/azure/azure-video-analyzer/video-analyzer-for-media-docs/video-indexer-overview>

NEW QUESTION 2

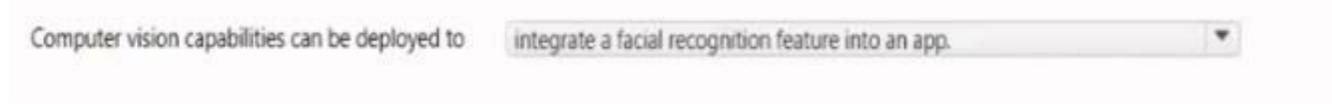
FILL IN THE BLANK - (Topic 5)

To complete the sentence, select the appropriate option in the answer area. Computer vision capabilities can be Deployed to.....

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

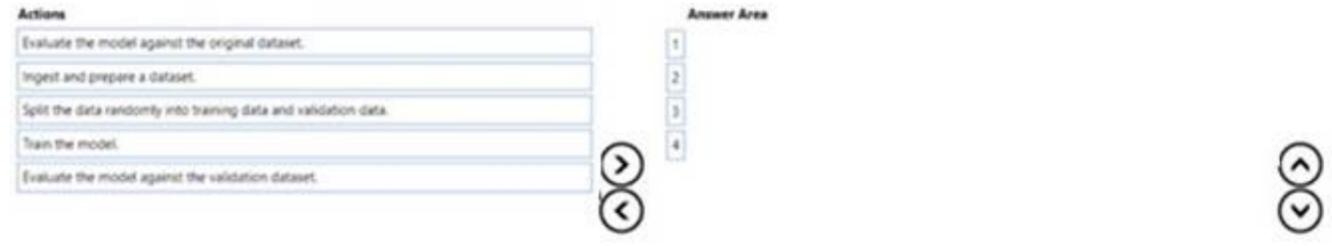


NEW QUESTION 3

DRAG DROP - (Topic 5)

You plan to deploy an Azure Machine Learning model by using the Machine Learning designer

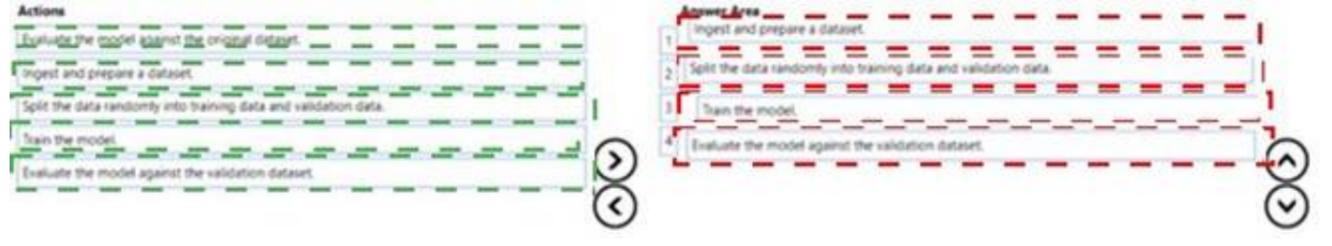
Which four actions should you perform in sequence? To answer, move the appropriate actions from the list of actions to the answer area and arrange them in the correct order.



- A. Mastered
- B. Not Mastered

Answer: A

Explanation:



NEW QUESTION 4

- (Topic 5)

You plan to build a conversational AI solution that can be surfaced in Microsoft Teams, Microsoft Cortana, and Amazon Alexa. Which service should you use?

- A. Azure Bot Service
- B. Azure Cognitive Search
- C. Language service
- D. Speech

Answer: A

NEW QUESTION 5

HOTSPOT - (Topic 5)

Select the answer that correctly completes the sentence.

Answer Area

Counting the number of animals in an area based on a video feed is an example of

- computer vision.
- forecasting.
- computer vision.
- knowledge mining.
- anomaly detection.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

Counting the number of animals in an area based on a video feed is an example of

- computer vision.
- forecasting.
- computer vision.
- knowledge mining.
- anomaly detection.

NEW QUESTION 6

HOTSPOT - (Topic 5)

Select the answer that correctly completes the sentence.

Answer Area

The interactive answering of questions entered by a user as part of an application is an example of

- anomaly detection.
- computer vision.
- natural language processing.
- forecasting.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

The interactive answering of questions entered by a user as part of an application is an example of

- anomaly detection.
- computer vision.
- natural language processing.
- forecasting.

NEW QUESTION 7

- (Topic 5)

You are developing a conversational AI solution that will communicate with users through multiple channels including email, Microsoft Teams, and webchat. Which service should you use?

- A. Text Analytics
- B. Azure Bot Service
- C. Translator
- D. Form Recognizer

Answer: B

Explanation:

Reference:

<https://docs.microsoft.com/en-us/azure/bot-service/bot-service-overview-introduction?view=azure-bot-service-4.0>

NEW QUESTION 8

DRAG DROP - (Topic 5)

Match the tool to the Azure Machine Learning task.

To answer, drag the appropriate tool from the column on the left to its tasks on the right. Each tool may be used once, more than once, or not at all
 NOTE: Each correct match is worth one point.

Tools	Answer Area
Automated machine learning (automated ML)	Tool Create a Machine Learning workspace
The Azure portal	Tool Use a drag-and-drop interface used to train and deploy models
Machine Learning designer	Tool Use a wizard to select configurations for a machine learning run

- A. Mastered

B. Not Mastered

Answer: A

Explanation:

Tools	Answer Area
Automated machine learning (automated ML)	The Azure portal
The Azure portal	Machine Learning designer
Machine Learning designer	Automated machine learning (automated ML)

Create a Machine Learning workspace
 Use a drag-and-drop interface used to train and deploy models
 Use a wizard to select configurations for a machine learning run

NEW QUESTION 9

- (Topic 5)

You have a website that includes customer reviews.

You need to store the reviews in English and present the reviews to users in their respective language by recognizing each user's geographical location.

Which type of natural language processing workload should you use?

- A. translation
- B. language modeling
- C. key phrase extraction
- D. speech recognition

Answer: C

NEW QUESTION 10

HOTSPOT - (Topic 5)

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

NOTE: Each correct selection is worth one point.

Statements	Yes	No
A webchat bot can interact with users visiting a website	<input type="radio"/>	<input type="radio"/>
Automatically generating captions for pre-recorded videos is an example of conversational AI	<input type="radio"/>	<input type="radio"/>
A smart device in the home that responds to questions such as "What will the weather like today?" is an example of conversational AI	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Statements	Yes	No
A webchat bot can interact with users visiting a website	<input checked="" type="radio"/>	<input type="radio"/>
Automatically generating captions for pre-recorded videos is an example of conversational AI	<input type="radio"/>	<input checked="" type="radio"/>
A smart device in the home that responds to questions such as "What will the weather like today?" is an example of conversational AI	<input checked="" type="radio"/>	<input type="radio"/>

NEW QUESTION 10

HOTSPOT - (Topic 5)

Select the answer that correctly completes the sentence

Answer Area

Ensuring an AI system does not provide a prediction when important fields contain unusual or missing values is a privacy and security principle for responsible AI.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:
Answer Area

Ensuring an AI system does not provide a prediction when important fields contain unusual or missing values is a privacy and security principle for responsible AI.

NEW QUESTION 11

HOTSPOT - (Topic 5)

Select the answer that correctly completes the sentence.

Answer Area

When building a regression model, labels must have a data type of numeric.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

When building a regression model, labels must have a data type of numeric.

NEW QUESTION 15

HOTSPOT - (Topic 5)

Select the answer that correctly completes the sentence.

Answer Area

Predicting how many hours of overtime a delivery person will work based on the number of orders received is an example of regression.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

Predicting how many hours of overtime a delivery person will work based on the number of orders received is an example of

classification.
 clustering.
regression.

NEW QUESTION 17

- (Topic 5)

For which two workloads can you use computer vision? Each correct answer presents a complete solution. NOTE: Each correct selection is worth one point.

- A. creating photorealistic images by using three-dimensional models
- B. assigning the color pixels in an image to object names
- C. describing the contents of an image
- D. detecting inconsistencies and anomalies in a stream of data
- E. creating visual representations of numerical data

Answer: BC

NEW QUESTION 18

- (Topic 5)

Which scenario is an example of a webchat bot?

- A. Determine whether reviews entered on a website for a concert are positive or negative, and then add a thumbs up or thumbs down emoji to the reviews.
- B. Translate into English questions entered by customers at a kiosk so that the appropriate person can call the customers back.
- C. Accept questions through email, and then route the email messages to the correct person based on the content of the message.
- D. From a website interface, answer common questions about scheduled events and ticket purchases for a music festival.

Answer: D

NEW QUESTION 22

HOTSPOT - (Topic 5)

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

NOTE: Each correct selection is worth one point.

Statements	Yes	No
Chatbots can support voice input.	<input type="radio"/>	<input type="radio"/>
A separate chatbot is required for each communication channel.	<input type="radio"/>	<input type="radio"/>
Chatbots manage conversation flows by using a combination of natural language and constrained option responses.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

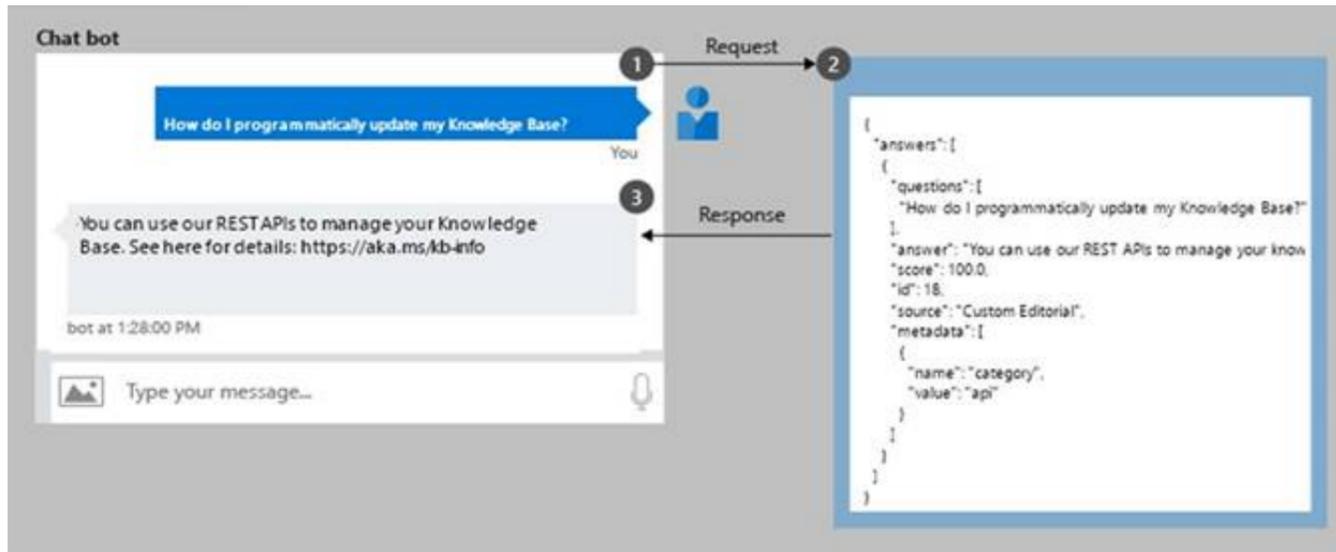
Explanation:

Statements	Yes	No
Chatbots can support voice input.	<input type="radio"/>	<input checked="" type="radio"/>
A separate chatbot is required for each communication channel.	<input type="radio"/>	<input checked="" type="radio"/>
Chatbots manage conversation flows by using a combination of natural language and constrained option responses.	<input checked="" type="radio"/>	<input type="radio"/>

NEW QUESTION 26

- (Topic 5)

You have the process shown in the following exhibit.



Which type AI solution is shown in the diagram?

- A. a sentiment analysis solution
- B. a chatbot
- C. a machine learning model
- D. a computer vision application

Answer: B

NEW QUESTION 28

HOTSPOT - (Topic 5)

Select the answer that correctly completes the sentence.

Answer Area

Creating a text transcript of a voice recording is an example of

a computer vision workload.

a knowledge mining workload.

a natural language processing (NLP) workload.

an anomaly detection workload.

Answer selections

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

Creating a text transcript of a voice recording is an example of

a computer vision workload.

a knowledge mining workload.

a natural language processing (NLP) workload.

an anomaly detection workload.

Answer selections

NEW QUESTION 33

DRAG DROP - (Topic 5)

Match the machine learning models to the appropriate descriptions.

To answer, drag the appropriate model from the column on the left to its description on the right. Each model may be used once, more than once, or not at all.

NOTE: Each correct match is worth one point.

Models	Answer Area
Classification	
Clustering	A supervised machine learning model used to predict numeric values.
Regression	A supervised machine learning model used to predict categories.
	An unsupervised machine learning model used to group similar entities based on features.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Models	Answer Area
Classification	Regression: A supervised machine learning model used to predict numeric values.
Clustering	Classification: A supervised machine learning model used to predict categories.
Regression	Clustering: An unsupervised machine learning model used to group similar entities based on features.

NEW QUESTION 35

- (Topic 5)

You need to predict the animal population of an area. Which Azure Machine Learning type should you use?

- A. clustering
- B. classification
- C. regression

Answer: C

NEW QUESTION 38

HOTSPOT - (Topic 5)

Select the answer that correctly completes the sentence.

Answer Area

According to Microsoft's principle of responsible AI,

fairness

accountability

fairness

inclusiveness

transparency

AI systems should **NOT** reflect biases from the data sets that are used to train the systems.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

According to Microsoft's principle of responsible AI,

fairness

accountability

fairness

inclusiveness

transparency

AI systems should **NOT** reflect biases from the data sets that are used to train the systems.

NEW QUESTION 41

- (Topic 5)

Your company manufactures widgets.

You have 1.000 digital photos of the widgets.

You need to identify the location of the widgets within the photos. What should you use?

- A. Computer Vision Spatial Analysis
- B. Custom Vision object detection
- C. Custom Vision classification
- D. Computer Vision Image Analysis

Answer: B

NEW QUESTION 43

HOTSPOT - (Topic 5)

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
A smart device in the home that responds to questions such as "When is my next appointment?" is an example of conversational AI.	<input type="radio"/>	<input type="radio"/>
An interactive webchat feature on a company website can be implemented by using Azure Bot Service.	<input type="radio"/>	<input type="radio"/>
Automatically generating captions for pre-recorded videos is an example of conversational AI.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

Statements	Yes	No
A smart device in the home that responds to questions such as "When is my next appointment?" is an example of conversational AI.	<input checked="" type="radio"/>	<input type="radio"/>
An interactive webchat feature on a company website can be implemented by using Azure Bot Service.	<input checked="" type="radio"/>	<input type="radio"/>
Automatically generating captions for pre-recorded videos is an example of conversational AI.	<input checked="" type="radio"/>	<input type="radio"/>

NEW QUESTION 44

HOTSPOT - (Topic 5)

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

NOTE: Each correct selection is worth one point.

Statements	Yes	No
Providing an explanation of the outcome of a credit loan application is an example of the Microsoft transparency principle for responsible AI.	<input type="radio"/>	<input type="radio"/>
A triage bot that prioritizes insurance claims based on injuries is an example of the Microsoft reliability and safety principle for responsible AI.	<input type="radio"/>	<input type="radio"/>
An AI solution that is offered at different prices for different sales territories is an example of the Microsoft inclusiveness principle for responsible AI.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Statements	Yes	No
Providing an explanation of the outcome of a credit loan application is an example of the Microsoft transparency principle for responsible AI.	<input checked="" type="radio"/>	<input type="radio"/>
A triage bot that prioritizes insurance claims based on injuries is an example of the Microsoft reliability and safety principle for responsible AI.	<input type="radio"/>	<input checked="" type="radio"/>
An AI solution that is offered at different prices for different sales territories is an example of the Microsoft inclusiveness principle for responsible AI.	<input checked="" type="radio"/>	<input type="radio"/>

NEW QUESTION 48

DRAG DROP - (Topic 5)

Match the Azure Cognitive Services to the appropriate AI workloads.

To answer, drag the appropriate service from the column on the left to its workload on the right. Each service may be used once, more than once, or not at all.

NOTE: Each correct match is worth one point.

Services	Answer Area
Custom Vision	<input type="text"/> Identify objects in an image.
Face	<input type="text"/> Automatically import data from an invoice to a database.
Form Recognizer	<input type="text"/> Identify people in an image.

- A. Mastered

B. Not Mastered

Answer: A

NEW QUESTION 50

HOTSPOT - (Topic 5)

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
A restaurant can use a chatbot to answer queries through Cortana.	<input type="radio"/>	<input type="radio"/>
A restaurant can use a chatbot to answer inquiries about business hours from a webpage.	<input type="radio"/>	<input type="radio"/>
A restaurant can use a chatbot to automate responses to customer reviews on an external website.	<input type="radio"/>	<input type="radio"/>

A. Mastered
B. Not Mastered

Answer: A

Explanation:

Answer Area

Statements	Yes	No
A restaurant can use a chatbot to answer queries through Cortana.	<input checked="" type="radio"/>	<input type="radio"/>
A restaurant can use a chatbot to answer inquiries about business hours from a webpage.	<input checked="" type="radio"/>	<input type="radio"/>
A restaurant can use a chatbot to automate responses to customer reviews on an external website.	<input checked="" type="radio"/>	<input type="radio"/>

NEW QUESTION 52

HOTSPOT - (Topic 5)

Select the answer that correctly completes the sentence.

Answer Area

Detecting unusual temperature fluctuations for a large machine is an example of

- an anomaly detection workload.
- a computer vision workload.
- a knowledge mining workload.
- a natural language processing (NLP) workload.
- an anomaly detection workload.

A. Mastered
B. Not Mastered

Answer: A

Explanation:

Answer Area

Detecting unusual temperature fluctuations for a large machine is an example of

- an anomaly detection workload.
- a computer vision workload.
- a knowledge mining workload.
- natural language processing (NLP) workload.
- an anomaly detection workload.

NEW QUESTION 55

- (Topic 5)

Which machine learning technique can be used for anomaly detection?

- A. A machine learning technique that understands written and spoken language.
- B. A machine learning technique that classifies objects based on user supplied images.
- C. A machine learning technique that analyzes data over time and identifies unusual changes.
- D. A machine learning technique that classifies images based on their contents.

Answer: C

NEW QUESTION 57

- (Topic 5)

You are building a chatbot that will use natural language processing (NLP) to perform the following actions based on the text input of a user:

- Accept customer orders.
- Retrieve support documents.
- Retrieve order status updates. Which type of NLP should you use?

- A. sentiment analysis
- B. translation
- C. language modeling
- D. named entity recognition

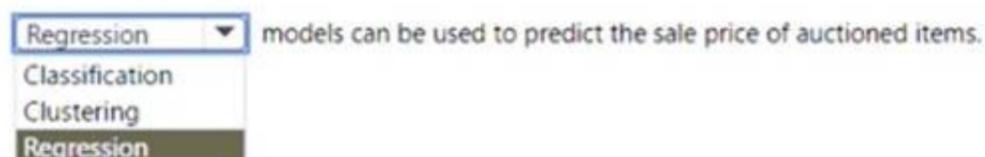
Answer: D

NEW QUESTION 61

HOTSPOT - (Topic 5)

Select the answer that correctly completes the sentence.

Answer Area

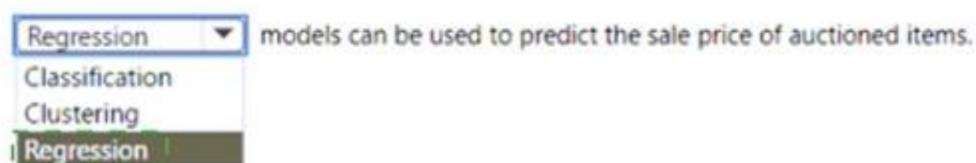


- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area



NEW QUESTION 64

- (Topic 5)

You need to reduce the load on telephone operators by implementing a Chabot to answer simple questions with predefined answers.

Which two AI services should you use to achieve the goal? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. Azure 80l Service
- B. Azure Machine Learning
- C. Translator
- D. Language Service

Answer: AD

NEW QUESTION 69

- (Topic 5)

Which Azure Cognitive Services service can be used to identify documents that contain sensitive information?

- A. Custom Vision
- B. Conversational Language Understanding
- C. Form Recognizer

Answer: C

NEW QUESTION 71

- (Topic 5)

An app that analyzes social media posts to identify their tone is an example of which type of natural language processing (NLP) workload?

- A. sentiment analysis
- B. key phrase extraction
- C. entity recognition
- D. speech recognition

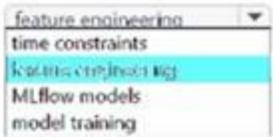
Answer: A

NEW QUESTION 75

HOTSPOT - (Topic 5)

Select the answer that correctly completes the sentence.

Answer Area

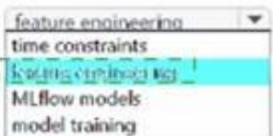
For  , you use a portion of a dataset to prepare a machine learning model and retain the balance of the dataset to verify the results.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

For  , you use a portion of a dataset to prepare a machine learning model and retain the balance of the dataset to verify the results.

NEW QUESTION 77

- (Topic 5)

You have a custom question answering solution.

You create a bot that uses the knowledge base to respond to customer requests. You need to identify what the bot can perform without adding additional skills. What should you identify?

- A. Register customer complaints.
- B. Answer questions from multiple users simultaneously.
- C. Register customer purchases.
- D. Provide customers with return materials authorization (RMA) numbers.

Answer: B

NEW QUESTION 80

- (Topic 5)

You use Azure Machine Learning designer to build a model pipeline. What should you create before you can run the pipeline?

- A. a Jupyter notebook
- B. a registered model
- C. a compute resource

Answer: C

NEW QUESTION 81

HOTSPOT - (Topic 5)

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

NOTE: Each correct selection is worth one point.

Statements	Yes	No
You can communicate with a bot by using Cortana.	<input type="radio"/>	<input type="radio"/>
You can communicate with a bot by using Microsoft Teams.	<input type="radio"/>	<input type="radio"/>
You can communicate with a bot by using a webchat interface.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Statements	Yes	No
You can communicate with a bot by using Cortana.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
You can communicate with a bot by using Microsoft Teams.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
You can communicate with a bot by using a webchat interface.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

NEW QUESTION 82

- (Topic 5)

You have a natural language processing (NLP) model that was created by using data obtained without permission. Which Microsoft principle for responsible AI does this breach?

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

Answer: C

NEW QUESTION 87

DRAG DROP - (Topic 5)

Match the Azure Cognitive Services service to the appropriate actions.

To answer, drag the appropriate service from the column on the left to its action on the right. Each service may be used once, more than once, or not at all.

NOTE: Each correct match is worth one point.

Services	Answer Area
Speech	<input type="text"/> Convert a user's speech to text.
Language service	<input type="text"/> Identify a user's intent.
Translator Text	<input type="text"/> Provide a spoken response to the user.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Services	Answer Area
Speech	Speech Convert a user's speech to text.
Language service	Language service Identify a user's intent.
Translator Text	Speech Provide a spoken response to the user.

NEW QUESTION 89

- (Topic 5)

You need to track multiple versions of a model that was trained by using Azure Machine Learning. What should you do?

- A. Provision an inference cluster.
- B. Explain the model.
- C. Register the model.
- D. Register the training data.

Answer: C

NEW QUESTION 91

DRAG DROP - (Topic 5)

Match the principles of responsible AI to the appropriate descriptions.

To answer, drag the appropriate principle from the column on the left to its description on the right. Each principle may be used once, more than once, or not at all.
 NOTE: Each correct match is worth one point.

Principles	Answer Area
Fairness	<input type="text"/> AI systems must consistently operate as intended, even under unexpected conditions.
Inclusiveness	<input type="text"/> AI systems must protect and secure personal and businesses information.
Privacy and securit	
Reliability and safe	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Principles	Answer Area
Fairness	<input type="text"/> AI systems must consistently operate as intended, even under unexpected conditions.
Inclusiveness	<input type="text"/> AI systems must protect and secure personal and businesses information.
Privacy and securit	
Reliability and safe	

NEW QUESTION 96

HOTSPOT - (Topic 5)

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
	Chatbots can only be built by using custom code.	<input type="radio"/>	<input type="radio"/>
	The Azure Bot Service provides services that can be used to host conversational bots.	<input type="radio"/>	<input type="radio"/>
	Bots built by using the Azure Bot Service can communicate with Microsoft Teams users.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area	Statements	Yes	No
	Chatbots can only be built by using custom code.	<input type="radio"/>	<input checked="" type="radio"/>
	The Azure Bot Service provides services that can be used to host conversational bots.	<input checked="" type="radio"/>	<input type="radio"/>
	Bots built by using the Azure Bot Service can communicate with Microsoft Teams users.	<input checked="" type="radio"/>	<input type="radio"/>

NEW QUESTION 98

HOTSPOT - (Topic 5)

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

NOTE: Each correct selection is worth one point.

Statements	Yes	No
You can use the Translator service to translate text between languages.	<input type="radio"/>	<input type="radio"/>
You can use the Translator service to detect the language of a given text.	<input type="radio"/>	<input type="radio"/>
You can use the Translator service to transcribe audible speech into text.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Statements	Yes	No
You can use the Translator service to translate text between languages.	<input checked="" type="radio"/>	<input type="radio"/>
You can use the Translator service to detect the language of a given text.	<input checked="" type="radio"/>	<input type="radio"/>
You can use the Translator service to transcribe audible speech into text.	<input checked="" type="radio"/>	<input type="radio"/>

NEW QUESTION 100

- (Topic 5)

You need to create a clustering model and evaluate the model by using Azure Machine Learning designer. What should you do?

- A. Split the original dataset into a dataset for features and a dataset for label
- B. Use the features dataset for evaluation.
- C. Split the original dataset into a dataset for training and a dataset for testin
- D. Use the training dataset for evaluation.
- E. Split the original dataset into a dataset for training and a dataset for testin
- F. Use the testing dataset for evaluation.
- G. Use the original dataset for training and evaluation.

Answer: C

NEW QUESTION 103

- (Topic 5)

Which two scenarios are examples of a natural language processing workload? Each correct answer presents a complete solution.

NOTE; Each correct selection is worth one point.

- A. assembly line machinery that autonomously inserts headlamps into cars
- B. a smart device in the home that responds to questions such as, "What will the weather be like today?"
- C. monitoring the temperature of machinery to turn on a fan when the temperature reaches a specific threshold
- D. a website that uses a knowledge base to interactively respond to users' questions

Answer: BD

NEW QUESTION 104

HOTSPOT - (Topic 5)

Select the answer that correctly completes the sentence.

Answer Area

extracts text from handwritten documents.

- Object detection
- Facial recognition
- Image classification
- Optical character recognition (OCR)

A. Mastered

B. Not Mastered

Answer: A

Explanation:

Answer Area



NEW QUESTION 107

HOTSPOT - (Topic 5)

To complete the sentence, select the appropriate option in the answer area.

Answer Area

Returning a bounding box that indicates the location of a vehicle in an image is an example of



A. Mastered
 B. Not Mastered

Answer: A

Explanation:

Answer Area

Returning a bounding box that indicates the location of a vehicle in an image is an example of



NEW QUESTION 109

- (Topic 5)

You need to develop a chatbot for a website. The chatbot must answer users questions based on the information m the following documents

- A product troubleshooting guide m a Microsoft Word document
- A frequently asked questions (FAQ) list on a webpage Which service should you use to process the documents?

A. Language Undemanding
 B. Text Analytics
 C. Azure Bot Service
 D. QnA Maker

Answer: D

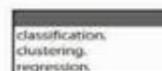
NEW QUESTION 113

HOTSPOT - (Topic 5)

Select the answer that correctly completes the sentence.

Answer Area

Predicting how many vehicles will travel across a bridge on a given day is an example of



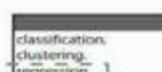
A. Mastered
 B. Not Mastered

Answer: A

Explanation:

Answer Area

Predicting how many vehicles will travel across a bridge on a given day is an example of



NEW QUESTION 118

- (Topic 5)

You have an AI solution that provides users with the ability to control smart devices by using verbal commands.

Which two types of natural language processing (NLP) workloads does the solution use? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. text-to-speech
- B. translation
- C. language modeling
- D. key phrase extraction
- E. speech-to-text

Answer: DE

NEW QUESTION 122

HOTSPOT - (Topic 5)

HOTSPOT

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

NOTE: Each correct selection is worth one point.

Statements	Yes	No
You can communicate with a bot by using email.	<input type="radio"/>	<input type="radio"/>
You can communicate with a bot by using Microsoft Teams.	<input type="radio"/>	<input type="radio"/>
You can communicate with a bot by using a webchat interface.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Statements	Yes	No
You can communicate with a bot by using email.	<input checked="" type="radio"/>	<input type="radio"/>
You can communicate with a bot by using Microsoft Teams.	<input checked="" type="radio"/>	<input type="radio"/>
You can communicate with a bot by using a webchat interface.	<input checked="" type="radio"/>	<input type="radio"/>

NEW QUESTION 123

- (Topic 5)

You have a webchat bot that provides responses from a QnA Maker knowledge base.

You need to ensure that the bot uses user feedback to improve the relevance of the responses over time.

What should you use?

- A. key phrase extraction
- B. sentiment analysis
- C. business logic
- D. active learning

Answer: D

Explanation:

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/qnamaker/how-to/improve-knowledge-base>

NEW QUESTION 128

HOTSPOT - (Topic 5)

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
A bot that responds to queries by internal users is an example of a natural language processing workload.	<input type="radio"/>	<input type="radio"/>
A mobile application that displays images relating to an entered search term is an example of a natural language processing workload.	<input type="radio"/>	<input type="radio"/>
A web form used to submit a request to reset a password is an example of a natural language processing workload.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

Statements	Yes	No
A bot that responds to queries by internal users is an example of a natural language processing workload.	<input checked="" type="radio"/>	<input type="radio"/>
A mobile application that displays images relating to an entered search term is an example of a natural language processing workload.	<input checked="" type="radio"/>	<input type="radio"/>
A web form used to submit a request to reset a password is an example of a natural language processing workload.	<input type="radio"/>	<input checked="" type="radio"/>

NEW QUESTION 132

FILL IN THE BLANK - (Topic 5)

To complete the sentence, select the appropriate option in the answer area.

Using Recency, Frequency, and Monetary (RFM) values to identify segments of a customer base is an example of _____

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Using Recency, Frequency, and Monetary (RFM) values to identify segments of a customer base is an example of .

NEW QUESTION 137

- (Topic 4)

In which scenario should you use key phrase extraction?

- A. translating a set of documents from English to German
- B. generating captions for a video based on the audio track
- C. identifying whether reviews of a restaurant are positive or negative
- D. identifying which documents provide information about the same topics

Answer: D

NEW QUESTION 142

HOTSPOT - (Topic 4)

To complete the sentence, select the appropriate option in the answer area.

Answer Area

Natural language processing can be used to

- classify email messages as work-related or personal.
- predict the number of future car rentals.
- predict which website visitors will make a transaction.
- stop a process in a factory when extremely high temperatures are registered.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Natural language processing (NLP) is used for tasks such as sentiment analysis, topic detection, language detection, key phrase extraction, and document categorization.

NEW QUESTION 147

HOTSPOT - (Topic 4)

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

NOTE: Each correct selection is worth one point.

Statements	Yes	No
You can use the Translator service to translate text between languages.	<input type="radio"/>	<input type="radio"/>
You can use the Translator service to detect the language of a given text.	<input type="radio"/>	<input type="radio"/>
You can use the Translator service to transcribe audible speech into text.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

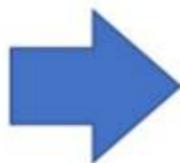
The translator service provides multi-language support for text translation, transliteration, language detection, and dictionaries. Speech-to-Text, also known as automatic speech recognition (ASR), is a feature of Speech Services that provides transcription.

NEW QUESTION 150

- (Topic 4)

You use natural language processing to process text from a Microsoft news story. You receive the output shown in the following exhibit.

For weeks now, students and teachers have been settling into the uncharted routine of distance learning. Today I want to thank all of the educators who are connecting classrooms and classmates together in the sudden shift to remote learning. This change requires everyone working together and is unlike anything we've seen in the modern history of education. We've seen countries, school districts and universities move rapidly into remote learning environments with Microsoft Teams being used in 175 countries by 183,000 institutions.



now [DateTime]
 students [PersonType]
 teachers [PersonType]
 distance learning [Skill]
 Today [DateTime-Date]
 educators [PersonType]
 classrooms [Location]
 classmates [PersonType]
 remote learning [Skill]
 history [Skill]
 education [Skill]
 remote learning [Skill]
 Microsoft [Organization]
 175 [Quantity-Number]
 183,000 [Quantity-Number]

Which type of natural languages processing was performed?

- A. entity recognition
- B. key phrase extraction
- C. sentiment analysis
- D. translation

Answer: A

Explanation:

<https://docs.microsoft.com/en-us/azure/cognitive-services/text-analytics/overview>

You can provide the Text Analytics service with unstructured text and it will return a list of entities in the text that it recognizes. You can provide the Text Analytics service with unstructured text and it will return a list of entities in the text that it recognizes. The service can also provide links to more information about that entity on the web. An entity is essentially an item of a particular type or a category; and in some cases, subtype, such as those as shown in the following table.

<https://docs.microsoft.com/en-us/learn/modules/analyze-text-with-text-analytics-service/2-get-started-azure>

NEW QUESTION 151

- (Topic 4)

You are developing a natural language processing solution in Azure. The solution will analyze customer reviews and determine how positive or negative each review is.

This is an example of which type of natural language processing workload?

- A. language detection
- B. sentiment analysis
- C. key phrase extraction
- D. entity recognition

Answer: B

Explanation:

Sentiment Analysis is the process of determining whether a piece of writing is positive, negative or neutral.

Reference:

<https://docs.microsoft.com/en-us/azure/architecture/data-guide/technology-choices/natural-language-processing>

NEW QUESTION 153

HOTSPOT - (Topic 4)

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 Text Analytics service can identify in which language text is written.	<input type="radio"/>	<input type="radio"/>
The Text Analytics service can detect handwritten signatures in a document.	<input type="radio"/>	<input type="radio"/>
The Text Analytics service can identify companies and organizations mentioned in a document.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

The Text Analytics API is a cloud-based service that provides advanced natural language processing over raw text, and includes four main functions: sentiment analysis, key phrase extraction, named entity recognition, and language detection.

Box 1: Yes

You can detect which language the input text is written in and report a single language code for every document submitted on the request in a wide range of languages, variants, dialects, and some regional/cultural languages. The language code is paired with a score indicating the strength of the score.

Box 2: No

Box 3: Yes

Named Entity Recognition: Identify and categorize entities in your text as people, places, organizations, date/time, quantities, percentages, currencies, and more. Well-known entities are also recognized and linked to more information on the web.

NEW QUESTION 155

DRAG DROP - (Topic 4)

You plan to apply Text Analytics API features to a technical support ticketing system.

Match the Text Analytics API features to the appropriate natural language processing scenarios.

To answer, drag the appropriate feature from the column on the left to its scenario on the right. Each feature may be used once, more than once, or not at all.

NOTE: Each correct selection is worth one point.

API Features	Answer Area
Entity recognition	API Feature Understand how upset a customer is based on the text contained in the support ticket.
Key phrase extraction	API Feature Summarize important information from the support ticket.
Language detection	API Feature Extract key dates from the support ticket.
Sentiment analysis	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box1: Sentiment analysis

Sentiment Analysis is the process of determining whether a piece of writing is positive, negative or neutral.

Box 2: Broad entity extraction

Broad entity extraction: Identify important concepts in text, including key

Key phrase extraction/ Broad entity extraction: Identify important concepts in text, including key phrases and named entities such as people, places, and organizations.

Box 3: Entity Recognition

Named Entity Recognition: Identify and categorize entities in your text as people, places, organizations, date/time, quantities, percentages, currencies, and more.

Well-known entities are also recognized and linked to more information on the web.

NEW QUESTION 159

HOTSPOT - (Topic 4)

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
Monitoring online service reviews for profanities is an example of natural language processing.	<input type="radio"/>	<input type="radio"/>
Identifying brand logos in an image is an example of natural languages processing.	<input type="radio"/>	<input type="radio"/>
Monitoring public news sites for negative mentions of a product is an example of natural language processing.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: Yes

Content Moderator is part of Microsoft Cognitive Services allowing businesses to use machine assisted moderation of text, images, and videos that augment human review.

The text moderation capability now includes a new machine-learning based text classification feature which uses a trained model to identify possible abusive, derogatory or discriminatory language such as slang, abbreviated words, offensive, and intentionally misspelled words for review.

Box 2: No

Azure's Computer Vision service gives you access to advanced algorithms that process images and return information based on the visual features you're interested in. For example, Computer Vision can determine whether an image contains adult content, find specific brands or objects, or find human faces.

Box 3: Yes

Natural language processing (NLP) is used for tasks such as sentiment analysis, topic detection, language detection, key phrase extraction, and document categorization.

Sentiment Analysis is the process of determining whether a piece of writing is positive, negative or neutral.

NEW QUESTION 163

- (Topic 4)

You are developing a Chabot solution in Azure.

Which service should you use to determine a user's intent?

- A. Translator
- B. Azure Cognitive Search
- C. Speech
- D. Language

Answer: B

Explanation:

Language Understanding (LUIS) is a cloud-based API service that applies custom machine-learning intelligence to a user's conversational, natural language text to predict overall meaning, and pull out relevant, detailed information.

Design your LUIS model with categories of user intentions called intents. Each intent needs examples of user utterances. Each utterance can provide data that needs to be extracted with machine-learning entities.

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/luis/what-is-luis>

NEW QUESTION 165

DRAG DROP - (Topic 4)

Match the types of natural languages processing workloads to the appropriate scenarios.

To answer, drag the appropriate workload type from the column on the left to its scenario on the right. Each workload type may be used once, more than once, or not at all.

NOTE: Each correct selection is worth one point.

Workloads Types	Answer Area
Entity recognition	Workload Type Extracts persons, locations, and organizations from the text
Key phrase extraction	Workload Type Evaluates text along a positive-negative scale
Language modeling	Workload Type Returns text translated to the specified target language
Sentiment analysis	
Natural language processing	
Translation	
Speech recognition and speech synthesis	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: Entity recognition

Classify a broad range of entities in text, such as people, places, organisations, date/time and percentages, using named entity recognition. Whereas:- Get a list of relevant phrases that best describe the subject of each record using key phrase extraction.

Box 2: Sentiment analysis

Sentiment Analysis is the process of determining whether a piece of writing is positive, negative or neutral.

Box 3: Translation

Using Microsoft's Translator text API

This versatile API from Microsoft can be used for the following: Translate text from one language to another.

Transliterate text from one script to another. Detecting language of the input text.

Find alternate translations to specific text. Determine the sentence length.

NEW QUESTION 169

- (Topic 3)

You need to determine the location of cars in an image so that you can estimate the distance between the cars.

Which type of computer vision should you use?

- A. optical character recognition (OCR)
- B. object detection
- C. image classification
- D. face detection

Answer: B

Explanation:

Object detection is similar to tagging, but the API returns the bounding box coordinates (in pixels) for each object found. For example, if an image contains a dog, cat and person, the Detect operation will list those objects together with their coordinates in the image. You can use this functionality to process the relationships between the objects in an image. It also lets you determine whether there are multiple instances of the same tag in an image.

The Detect API applies tags based on the objects or living things identified in the image.

There is currently no formal relationship between the tagging taxonomy and the object detection taxonomy. At a conceptual level, the Detect API only finds objects and living things, while the Tag API can also include contextual terms like "indoor", which can't be localized with bounding boxes.

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/concept-object-detection>

NEW QUESTION 174

- (Topic 3)

You need to build an image tagging solution for social media that tags images of your friends automatically. Which Azure Cognitive Services service should you use?

- A. Computer Vision
- B. Face
- C. Text Analytics
- D. Form Recognizer

Answer: B

NEW QUESTION 176

- (Topic 3)

What are two tasks that can be performed by using the Computer Vision service? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. Train a custom image classification model.
- B. Detect faces in an image.
- C. Recognize handwritten text.
- D. Translate the text in an image between languages.

Answer: BC

Explanation:

B: Azure's Computer Vision service provides developers with access to advanced algorithms that process images and return information based on the visual features you're interested in. For example, Computer Vision can determine whether an image contains adult content, find specific brands or objects, or find human faces.

C: Computer Vision includes Optical Character Recognition (OCR) capabilities. You can use the new Read API to extract printed and handwritten text from images and documents.

Reference:

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

Detect faces in an image - Face API

Microsoft Azure provides multiple cognitive services that you can use to detect and analyze faces, including:

Computer Vision, which offers face detection and some basic face analysis, such as determining age.

Video Indexer, which you can use to detect and identify faces in a video.

Face, which offers pre-built algorithms that can detect, recognize, and analyze faces. Recognize hand written text - Read API

The Read API is a better option for scanned documents that have a lot of text. The Read API also has the ability to automatically determine the proper recognition model

NEW QUESTION 178

- (Topic 3)

In which two scenarios can you use the Form Recognizer service? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. Extract the invoice number from an invoice.
- B. Translate a form from French to English.
- C. Find image of product in a catalog.
- D. Identity the retailer from a receipt.

Answer: AD

Explanation:

Reference:

<https://azure.microsoft.com/en-gb/services/cognitive-services/form-recognizer/#features>

NEW QUESTION 182

- (Topic 3)

You need to develop a mobile app for employees to scan and store their expenses while travelling.

Which type of computer vision should you use?

- A. semantic segmentation
- B. image classification
- C. object detection
- D. optical character recognition (OCR)

Answer: D

Explanation:

Azure's Computer Vision API includes Optical Character Recognition (OCR) capabilities that extract printed or handwritten text from images. You can extract text from images, such as photos of license plates or containers with serial numbers, as well as from documents - invoices, bills, financial reports, articles, and more.

Reference:

<https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/concept-recognizing-text>

NEW QUESTION 185

DRAG DROP - (Topic 3)

Match the facial recognition tasks to the appropriate questions.

To answer, drag the appropriate task from the column on the left to its question on the right. Each task may be used once, more than once, or not at all.

NOTE: Each correct selection is worth one point.

Tasks

- grouping
- identification
- similarity
- verification

Answer Area

- Task Do two images of a face belong to the same person?
- Task Does this person look like other people?
- Task Do all the faces belong together?
- Task Who is this person in this group of people?

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: verification

Face verification: Check the likelihood that two faces belong to the same person and receive a confidence score.

Box 2: similarity

Box 3: Grouping

Box 4: identification

Face detection: Detect one or more human faces along with attributes such as: age, emotion, pose, smile, and facial hair, including 27 landmarks for each face in the image.

NEW QUESTION 190

HOTSPOT - (Topic 3)

You have a database that contains a list of employees and their photos. You are tagging new photos of the employees.

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 Face service can be used to group all the employees who have similar facial characteristics.	<input type="radio"/>	<input type="radio"/>
The Face service will be more accurate if you provide more sample photos of each employee from different angles.	<input type="radio"/>	<input type="radio"/>
If an employee is wearing sunglasses, the Face service will always fail to recognize the employee.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

Statements	Yes	No
The Face service can be used to group all the employees who have similar facial characteristics.	<input checked="" type="radio"/>	<input type="radio"/>
The Face service will be more accurate if you provide more sample photos of each employee from different angles.	<input checked="" type="radio"/>	<input type="radio"/>
If an employee is wearing sunglasses, the Face service will always fail to recognize the employee.	<input type="radio"/>	<input checked="" type="radio"/>

NEW QUESTION 193

DRAG DROP - (Topic 3)

Match the types of computer vision to the appropriate scenarios.

To answer, drag the appropriate workload type from the column on the left to its scenario on the right. Each workload type may be used once, more than once, or not at all.

NOTE: Each correct selection is worth one point.

Workloads Types

- Facial recognition
- Image classification
- Object detection
- Optical character recognition (OCR)

Answer Area

- Workload Type Identify celebrities in images.
- Workload Type Extract movie title names from movie poster images.
- Workload Type Locate vehicles in images.

A. Mastered

B. Not Mastered

Answer: A

Explanation:

Box 1: Facial recognition

Face detection that perceives faces and attributes in an image; person identification that matches an individual in your private repository of up to 1 million people; perceived emotion recognition that detects a range of facial expressions like happiness, contempt, neutrality, and fear; and recognition and grouping of similar faces in images.

Box 2: OCR

Box 3: Objection detection

Object detection is similar to tagging, but the API returns the bounding box coordinates (in pixels) for each object found. For example, if an image contains a dog, cat and person, the Detect operation will list those objects together with their coordinates in the image. You can use this functionality to process the relationships between the objects in an image. It also lets you determine whether there are multiple instances of the same tag in an image.

The Detect API applies tags based on the objects or living things identified in the image. There is currently no formal relationship between the tagging taxonomy and the object detection taxonomy. At a conceptual level, the Detect API only finds objects and living things, while the Tag API can also include contextual terms like "indoor", which can't be localized with bounding boxes.

NEW QUESTION 194

DRAG DROP - (Topic 3)

Match the types of machine learning to the appropriate scenarios.

To answer, drag the appropriate machine learning type from the column on the left to its scenario on the right. Each machine learning type may be used once, more than once, or not at all.

NOTE: Each correct selection is worth one point.

Machine Learning Types	Answer Area
Facial detection	Machine Learning Type Separate images of polar bears and brown bears.
Facial recognition	Machine Learning Type Determine the location of a bear in a photo.
Image classification	Machine Learning Type Determine which pixels in an image are part of a bear.
Object detection	
Optical character recognition (OCR)	
Semantic segmentation	

A. Mastered
 B. Not Mastered

Answer: A

Explanation:

Box 1: Image classification

Image classification is a supervised learning problem: define a set of target classes (objects to identify in images), and train a model to recognize them using labeled example photos.

Box 2: Object detection

Object detection is a computer vision problem. While closely related to image classification, object detection performs image classification at a more granular scale. Object detection both locates and categorizes entities within images.

Box 3: Semantic Segmentation

Semantic segmentation achieves fine-grained inference by making dense predictions inferring labels for every pixel, so that each pixel is labeled with the class of its enclosing object ore region.

NEW QUESTION 196

HOTSPOT - (Topic 3)

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

NOTE: Each correct selection is worth one point.

Statements	Yes	No
The Custom Vision service can be used to detect objects in an image.	<input type="radio"/>	<input type="radio"/>
The Custom Vision service requires that you provide your own data to train the model.	<input type="radio"/>	<input type="radio"/>
The Custom Vision service can be used to analyze video files.	<input type="radio"/>	<input type="radio"/>

A. Mastered
 B. Not Mastered

Answer: A

Explanation:

Box 1: Yes

Custom Vision functionality can be divided into two features. Image classification applies one or more labels to an image. Object detection is similar, but it also returns the coordinates in the image where the applied label(s) can be found.

Box 2: Yes

The Custom Vision service uses a machine learning algorithm to analyze images. You, the developer, submit groups of images that feature and lack the characteristics in question. You label the images yourself at the time of submission. Then, the algorithm trains to this data and calculates its own accuracy by testing itself on those same images.

Box 3: No

Custom Vision service can be used only on graphic files.

NEW QUESTION 197

- (Topic 2)

You have a dataset that contains information about taxi journeys that occurred during a given period.

You need to train a model to predict the fare of a taxi journey. What should you use as a feature?

- A. the number of taxi journeys in the dataset
- B. the trip distance of individual taxi journeys
- C. the fare of individual taxi journeys
- D. the trip ID of individual taxi journeys

Answer: B

Explanation:

The label is the column you want to predict. The identified Features are the inputs you give the model to predict the Label.

Example:

The provided data set contains the following columns:

vendor_id: The ID of the taxi vendor is a feature. rate_code: The rate type of the taxi trip is a feature.

passenger_count: The number of passengers on the trip is a feature.

trip_time_in_secs: The amount of time the trip took. You want to predict the fare of the trip before the trip is completed. At that moment, you don't know how long the trip would take.

Thus, the trip time is not a feature and you'll exclude this column from the model. trip_distance: The distance of the trip is a feature.

payment_type: The payment method (cash or credit card) is a feature. fare_amount: The total taxi fare paid is the label.

Reference:

<https://docs.microsoft.com/en-us/dotnet/machine-learning/tutorials/predict-prices>

NEW QUESTION 198

HOTSPOT - (Topic 2)

To complete the sentence, select the appropriate option in the answer area.

Answer Area

The ability to extract subtotals and totals from a receipt is a capability of the service.

Custom Vision
Form Recognizer
Ink Recognizer
Text Analytics

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Accelerate your business processes by automating information extraction. Form Recognizer applies advanced machine learning to accurately extract text, key/value pairs, and tables from documents. With just a few samples, Form Recognizer tailors its understanding to your documents, both on-premises and in the cloud. Turn forms into usable data at a fraction of the time and cost, so you can focus more time acting on the information rather than compiling it.

NEW QUESTION 199

- (Topic 2)

What are two metrics that you can use to evaluate a regression model? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. coefficient of determination (R2)
- B. F1 score
- C. root mean squared error (RMSE)
- D. area under curve (AUC)
- E. balanced accuracy

Answer: AC

Explanation:

A: R-squared (R2), or Coefficient of determination represents the predictive power of the model as a value between -inf and 1.00. 1.00 means there is a perfect fit, and the fit can be arbitrarily poor so the scores can be negative.

C: RMS-loss or Root Mean Squared Error (RMSE) (also called Root Mean Square Deviation, RMSD), measures the difference between values predicted by a model and the values observed from the environment that is being modeled.

Reference:

<https://docs.microsoft.com/en-us/dotnet/machine-learning/resources/metrics>

NEW QUESTION 203

HOTSPOT - (Topic 2)

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
Automated machine learning provides you with the ability to include custom Python scripts in a training pipeline.	<input type="radio"/>	<input type="radio"/>
Automated machine learning implements machine learning solutions without the need for programming experience.	<input type="radio"/>	<input type="radio"/>
Automated machine learning provides you with the ability to visually connect datasets and modules on an interactive canvas.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Answer Area

Statements	Yes	No
Automated machine learning provides you with the ability to include custom Python scripts in a training pipeline.	<input checked="" type="radio"/>	<input type="radio"/>
Automated machine learning implements machine learning solutions without the need for programming experience.	<input checked="" type="radio"/>	<input type="radio"/>
Automated machine learning provides you with the ability to visually connect datasets and modules on an interactive canvas.	<input checked="" type="radio"/>	<input type="radio"/>

NEW QUESTION 207

HOTSPOT - (Topic 2)

You have the following dataset.

Household Income	Postal Code	House Price Category
20,000	55555	Low
23,000	20541	Middle
80,000	87960	High

You plan to use the dataset to train a model that will predict the house price categories of houses.

What are Household Income and House Price Category? To answer, select the appropriate option in the answer area.

NOTE: Each correct selection is worth one point.

Answer Area

Household Income:

House Price Category:

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: A feature Box 2: A label

NEW QUESTION 210

HOTSPOT - (Topic 2)

To complete the sentence, select the appropriate option in the answer area.

Answer Area

Predicting how many hours of overtime a delivery person will work based on the number of order received is an example of

- classification.
- clustering.
- regression.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

In the most basic sense, regression refers to prediction of a numeric target. Linear regression attempts to establish a linear relationship between one or more independent variables and a numeric outcome, or dependent variable.

You use this module to define a linear regression method, and then train a model using a labeled dataset. The trained model can then be used to make predictions.

NEW QUESTION 212

HOTSPOT - (Topic 2)

To complete the sentence, select the appropriate option in the answer area.

- Classification
- Clustering
- Regression

models can be used to predict the sale price of auctioned items.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Regression is a machine learning task that is used to predict the value of the label from a set of related features.

NEW QUESTION 214

- (Topic 2)

You need to predict the income range of a given customer by using the following dataset.

First Name	Last Name	Age	Education Level	Income Range
Orlando	Gee	45	University	25,000-50,000
Keith	Harris	36	High school	25,000-50,000
Donna	Carreras	52	University	50,000-75,000
Janet	Gates	21	University	75,000-100,000
Lucy	Harrington	68	High school	50,000-75,000

Which two fields should you use as features? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. Education Level
- B. Last Name
- C. Age
- D. Income Range
- E. First Name

Answer: AC

Explanation:

First Name, Last Name, Age and Education Level are features. Income range is a label (what you want to predict). First Name and Last Name are irrelevant in that they have no bearing on income. Age and Education level are the features you should use.

NEW QUESTION 218

HOTSPOT - (Topic 2)

To complete the sentence, select the appropriate option in the answer area.

Ensuring that the numeric variables in training data are on a similar scale is an example of

	▼
data ingestion.	
feature engineering.	
feature selection.	
model training.	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Ensuring that the numeric variables in training data are on a similar scale is an example of

	▼
data ingestion.	
feature engineering.	
feature selection.	
model training.	

NEW QUESTION 220

HOTSPOT - (Topic 2)

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

NOTE: Each correct selection is worth one point.

Statements	Yes	No
A validation set includes the set of input examples that will be used to train a mode.	<input type="radio"/>	<input type="radio"/>
A validation set can be used to determine how well a model predicts labels.	<input type="radio"/>	<input type="radio"/>
A validation set can be used to verify that all the training data was used to train the model.	<input type="radio"/>	<input type="radio"/>

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: No

The validation dataset is different from the test dataset that is held back from the training of the model.

Box 2: Yes

A validation dataset is a sample of data that is used to give an estimate of model skill while tuning model's hyperparameters.

Box 3: No

The Test Dataset, not the validation set, used for this. The Test Dataset is a sample of data used to provide an unbiased evaluation of a final model fit on the training dataset.

NEW QUESTION 222

- (Topic 2)

Which two components can you drag onto a canvas in Azure Machine Learning designer? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. dataset
- B. compute
- C. pipeline
- D. module

Answer: AD

Explanation:

You can drag-and-drop datasets and modules onto the canvas. Reference: <https://docs.microsoft.com/en-us/azure/machine-learning/concept-designer>

NEW QUESTION 223

HOTSPOT - (Topic 2)

To complete the sentence, select the appropriate option in the answer area.

Assigning classes to images before training a classification model is an example of

	▼
evaluation.	
feature engineering	
hyperparameter tuning.	
labeling.	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Assigning classes to images before training a classification model is an example of

	▼
evaluation.	
feature engineering	
hyperparameter tuning.	
labeling.	

NEW QUESTION 225

- (Topic 2)

You use Azure Machine Learning designer to publish an inference pipeline.

Which two parameters should you use to consume the pipeline? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. the model name
- B. the training endpoint
- C. the authentication key
- D. the REST endpoint

Answer: CD

Explanation:

<https://docs.microsoft.com/en-in/learn/modules/create-regression-model-azure-machine-learning-designer/deploy-service>

NEW QUESTION 229

- (Topic 2)

Which service should you use to extract text, key/value pairs, and table data automatically from scanned documents?

- A. Form Recognizer
- B. Text Analytics
- C. Ink Recognizer
- D. Custom Vision

Answer: A

Explanation:

Accelerate your business processes by automating information extraction. Form Recognizer applies advanced machine learning to accurately extract text, key/value pairs, and tables from documents. With just a few samples, Form Recognizer tailors its understanding to your documents, both on-premises and in the cloud. Turn forms into usable data at a fraction of the time and cost, so you can focus more time acting on the information rather than compiling it.

Reference:

<https://azure.microsoft.com/en-us/services/cognitive-services/form-recognizer/>

NEW QUESTION 232

HOTSPOT - (Topic 2)

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
Labelling is the process of tagging training data with known values.	<input type="radio"/>	<input type="radio"/>
You should evaluate a model by using the same data used to train the model.	<input type="radio"/>	<input type="radio"/>
Accuracy is always the primary metric used to measure a model's performance.	<input type="radio"/>	<input type="radio"/>

- A. Mastered

B. Not Mastered

Answer: A

Explanation:

Box 1: Yes

In machine learning, if you have labeled data, that means your data is marked up, or annotated, to show the target, which is the answer you want your machine learning model to predict.

In general, data labeling can refer to tasks that include data tagging, annotation, classification, moderation, transcription, or processing.

Box 2: No

Box 3: No

Accuracy is simply the proportion of correctly classified instances. It is usually the first metric you look at when evaluating a classifier. However, when the test data is unbalanced (where most of the instances belong to one of the classes), or you are more interested in the performance on either one of the classes, accuracy doesn't really capture the effectiveness of a classifier.

NEW QUESTION 233

HOTSPOT - (Topic 2)

To complete the sentence, select the appropriate option in the answer area.

Ensuring an AI system does not provide a prediction when important fields contain unusual or missing values is principle for responsible AI.

<input type="text"/>	▼
an inclusiveness	
a privacy and security	
a reliability and safety	
a transparency	

A. Mastered
 B. Not Mastered

Answer: A

Explanation:

Ensuring an AI system does not provide a prediction when important fields contain unusual or missing values is principle for responsible AI.

<input type="text"/>	▼
an inclusiveness	
a privacy and security	
a reliability and safety	
a transparency	

NEW QUESTION 235

HOTSPOT - (Topic 2)

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
Automated machine learning is the process of automating the time-consuming, iterative tasks of machine learning model development.	<input type="radio"/>	<input type="radio"/>
Automated machine learning can automatically infer the training data from the use case provided.	<input type="radio"/>	<input type="radio"/>
Automated machine learning works by running multiple training iterations that are scored and ranked by the metrics you specify.	<input type="radio"/>	<input type="radio"/>
Automated machine learning enables you to specify a dataset and will automatically understand which label to predict.	<input type="radio"/>	<input type="radio"/>

A. Mastered
 B. Not Mastered

Answer: A

Explanation:

Box 1: Yes

Automated machine learning, also referred to as automated ML or AutoML, is the process of automating the time consuming, iterative tasks of machine learning model development. It allows data scientists, analysts, and developers to build ML models

with high scale, efficiency, and productivity all while sustaining model quality.

Box 2: No

Box 3: Yes

During training, Azure Machine Learning creates a number of pipelines in parallel that try different algorithms and parameters for you. The service iterates through ML algorithms paired with feature selections, where each iteration produces a model with a training score. The higher the score, the better the model is considered to "fit" your data. It will stop once it hits the exit criteria defined in the experiment.

Box 4: No

Apply automated ML when you want Azure Machine Learning to train and tune a model for you using the target metric you specify. The label is the column you want to predict.

NEW QUESTION 239

DRAG DROP - (Topic 1)

You plan to deploy an Azure Machine Learning model as a service that will be used by client applications.

Which three processes should you perform in sequence before you deploy the model? To answer, move the appropriate processes from the list of processes to the answer area and arrange them in the correct order.

Processes	Answer Area
data encryption	
model retraining	
model training	➤
data preparation	➤
model evaluation	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Processes	Answer Area
data encryption	data preparation
model retraining	model training
model training	model evaluation
data preparation	
model evaluation	

NEW QUESTION 241

- (Topic 1)

For a machine learning progress, how should you split data for training and evaluation?

- A. Use features for training and labels for evaluation.
- B. Randomly split the data into rows for training and rows for evaluation.
- C. Use labels for training and features for evaluation.
- D. Randomly split the data into columns for training and columns for evaluation.

Answer: B

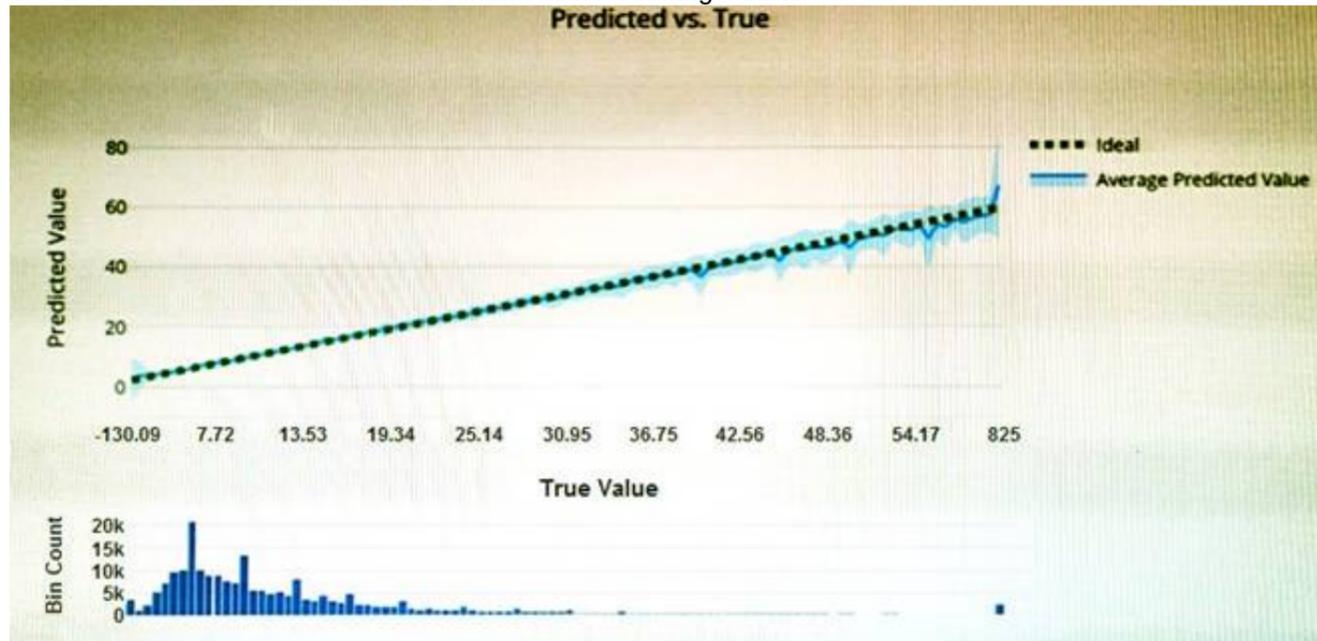
Explanation:

<https://docs.microsoft.com/en-us/azure/machine-learning/algorithm-module-reference/split-data>

NEW QUESTION 246

- (Topic 2)

You have the Predicted vs. True chart shown in the following exhibit.



Which type of model is the chart used to evaluate?

- A. classification
- B. regression
- C. clustering

Answer: B

Explanation:

What is a Predicted vs. True chart?

Predicted vs. True shows the relationship between a predicted value and its correlating true value for a regression problem. This graph can be used to measure performance of a model as the closer to the $y=x$ line the predicted values are, the better the accuracy of a predictive model.

Reference:

<https://docs.microsoft.com/en-us/azure/machine-learning/how-to-understand-automated-m>

NEW QUESTION 249

DRAG DROP - (Topic 1)

Match the types of AI workloads to the appropriate scenarios.

To answer, drag the appropriate workload type from the column on the left to its scenario on the right. Each workload type may be used once, more than once, or not at all.

NOTE: Each correct selection is worth one point.

Workload Types

- Anomaly detection
- Computer vision
- Machine Learning (Regression)
- Natural language processing

Answer Area

- Workload Type Identify handwritten letters.
- Workload Type Predict the sentiment of a social media post.
- Workload Type Identify a fraudulent credit card payment.
- Workload Type Predict next month's toy sales.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Workload Types

- Anomaly detection
- Computer vision
- Machine Learning (Regression)
- Natural language processing

Answer Area

- Computer vision Identify handwritten letters.
- Natural language processing Predict the sentiment of a social media post.
- Anomaly detection Identify a fraudulent credit card payment.
- Machine Learning (Regression) Predict next month's toy sales.

NEW QUESTION 252

DRAG DROP - (Topic 1)

Match the principles of responsible AI to appropriate requirements.

To answer, drag the appropriate principles from the column on the left to its requirement on the right. Each principle 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.

Principles	Answer Area
Fairness	The system must not discriminate based on gender, race
Privacy and security	Personal data must be visible only to approve
Reliability and safety	Automated decision-making processes must be recorded so that approved users can identify why a decision was made
Transparency	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Principles	Answer Area
Fairness	The system must not discriminate based on gender, race
Privacy and security	Personal data must be visible only to approve
Reliability and safety	Automated decision-making processes must be recorded so that approved users can identify why a decision was made
Transparency	

NEW QUESTION 257

- (Topic 1)

You build a machine learning model by using the automated machine learning user interface (UI). You need to ensure that the model meets the Microsoft transparency principle for responsible AI. What should you do?

- A. Set Validation type to Auto.
- B. Enable Explain best model.
- C. Set Primary metric to accuracy.
- D. Set Max concurrent iterations to 0.

Answer: B

Explanation:

Model Explain Ability.

Most businesses run on trust and being able to open the ML "black box" helps build transparency and trust. In heavily regulated industries like healthcare and banking, it is critical to comply with regulations and best practices. One key aspect of this is understanding the relationship between input variables (features) and model output. Knowing both the magnitude and direction of the impact each feature (feature importance) has on the predicted value helps better understand and explain the model. With model explain ability, we enable you to understand feature importance as part of automated ML runs.

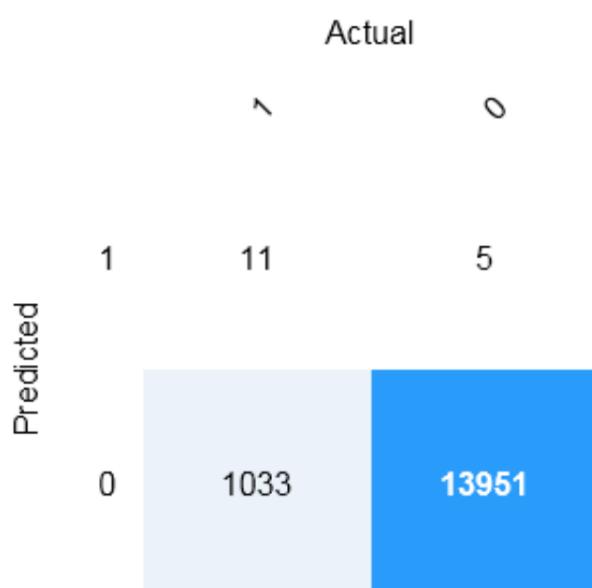
Reference:

<https://azure.microsoft.com/en-us/blog/new-automated-machine-learning-capabilities-in-azure-machine-learning-service/>

NEW QUESTION 259

HOTSPOT - (Topic 1)

You are developing a model to predict events by using classification. You have a confusion matrix for the model scored on test data as shown in the following exhibit.



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

There are [answer choice] correctly predicted positives.

There are [answer choice] false negatives.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: 11

	Predicted	
	Positive	Negative
Actual True	TP	FN
Actual False	FP	TN

TP = True Positive.

The class labels in the training set can take on only two possible values, which we usually refer to as positive or negative. The positive and negative instances that a classifier predicts correctly are called true positives (TP) and true negatives (TN), respectively. Similarly, the incorrectly classified instances are called false positives (FP) and false negatives (FN).

Box 2: 1,033

FN = False Negative

NEW QUESTION 260

DRAG DROP - (Topic 1)

Match the Microsoft guiding principles for responsible AI to the appropriate descriptions.

To answer, drag the appropriate principle from the column on the left to its description on the right. Each principle may be used once, more than once, or not at all.

NOTE: Each correct selection is worth one point.

Principles	Answer Area
Accountability	Principle Ensure that AI systems operate as they were originally designed, respond to unanticipated conditions, and resist harmful manipulation.
Fairness	Principle Implementing processes to ensure that decisions made by AI systems can be overridden by humans.
Inclusiveness	Principle Provide consumers with information and controls over the collection, use, and storage of their data.
Privacy and security	
Reliability and safety	

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

Box 1: Reliability and safety

To build trust, it's critical that AI systems operate reliably, safely, and consistently under normal circumstances and in unexpected conditions. These systems should be able to operate as they were originally designed, respond safely to unanticipated conditions, and resist harmful manipulation.

Box 2: accountability

Box 3: Privacy and security

As AI becomes more prevalent, protecting privacy and securing important personal and business information is becoming more critical and complex. With AI,

privacy and data security issues require especially close attention because access to data is essential for AI systems to make accurate and informed predictions and decisions about people. AI systems must comply with privacy laws that require transparency about the collection, use, and storage of data and mandate that consumers have appropriate controls to choose how their data is used
<https://docs.microsoft.com/en-us/learn/modules/responsible-ai-principles/4-guiding-principles>

NEW QUESTION 262

HOTSPOT - (Topic 1)

To complete the sentence, select the appropriate option in the answer area.

According to Microsoft's

	▼
accountability	
fairness	
inclusiveness	
transparency	

 principle of responsible AI,

AI systems should **NOT** reflect biases from the data sets that are used to train the systems.

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

According to Microsoft's

	▼
accountability	
fairness	
inclusiveness	
transparency	

 principle of responsible AI,

AI systems should **NOT** reflect biases from the data sets that are used to train the systems.

NEW QUESTION 263

- (Topic 1)

You are building an AI system.

Which task should you include to ensure that the service meets the Microsoft transparency principle for responsible AI?

- A. Ensure that all visuals have an associated text that can be read by a screen reader.
- B. Enable autoscaling to ensure that a service scales based on demand.
- C. Provide documentation to help developers debug code.
- D. Ensure that a training dataset is representative of the population.

Answer: C

Explanation:

Reference:

<https://docs.microsoft.com/en-us/learn/modules/responsible-ai-principles/4-guiding-principles>

NEW QUESTION 267

- (Topic 1)

A company employs a team of customer service agents to provide telephone and email support to customers.

The company develops a webchat bot to provide automated answers to common customer queries.

Which business benefit should the company expect as a result of creating the webchat bot solution?

- A. increased sales
- B. a reduced workload for the customer service agents
- C. improved product reliability

Answer: B

NEW QUESTION 269

- (Topic 1)

You are building an AI-based app.

You need to ensure that the app uses the principles for responsible AI.

Which two principles should you follow? Each correct answer presents part of the solution.

NOTE: Each correct selection is worth one point.

- A. Implement an Agile software development methodology
- B. Implement a process of AI model validation as part of the software review process
- C. Establish a risk governance committee that includes members of the legal team, members of the risk management team, and a privacy officer
- D. Prevent the disclosure of the use of AI-based algorithms for automated decision making

Answer: BC

Explanation:

Reference:

<https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/innovate/best-practices/trusted-ai>

<https://docs.microsoft.com/en-us/learn/modules/responsible-ai-principles/3-implications-responsible-ai-practical>

NEW QUESTION 274

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