✓ **Congratulations! You passed!**

| Grade received 100% | Latest Submission Grade 100% | To pass 80% or higher | Retake the assignment in **7h 59m** | **Go to next item** |

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1. Which of the following statements is true about entities mentioned in a text?

1 / 1 point

◉ They refer to specific, named objects, people, locations, dates, or other relevant elements.

○ They refer to abstract concepts.

○ They are not important for understanding a text.

○ They never include dates or locations.

✓ **Correct**
Correct. This statement accurately describes what entities refer to in a text.

For more information, please refer to the video lecture "Analyze Text : Entities"

2. What is the Azure Cognitive Services Language API used for?

1 / 1 point

○ Facial recognition feature

○ Image recognition feature

◉ Language detection feature

○ Audio transcription feature

✓ **Correct**
Correct! The Azure Cognitive Services Language API provides a language detection feature that supports numerous programming languages and frameworks.

For more information, please refer to the video lecture "Analyze Text : Language Detection"

3. Which of the following statements is true about sentiment analysis?

1 / 1 point

○ Sentiment analysis only involves identifying positive or negative sentiments in a text.

◉ Sentiment analysis can involve detecting emotions expressed in a text.

○ Emotion detection is not a part of sentiment analysis.

○ Sentiment analysis is limited to identifying only four basic emotions.

✓ **Correct**
Correct. This statement is true because sentiment analysis can go beyond simple positive or negative sentiment classification and identify emotions like happiness, anger, sadness, or surprise within the text.

For more information, please refer to the video lecture "Analyze Text : Sentiment"

4. Which API is suitable for most interactive speech-enabled applications?

1 / 1 point

◉ The Text-to-Speech API

○ The Translation API

○ The Natural Language Processing API

○ The Speech-to-Text API

✓ **Correct**
Correct. The Text-to-Speech API is suitable for most interactive speech-enabled applications.

For more information, please refer to the video lecture "Process Speech: Text-to-Speech"

5. Which API is ideal for speech recognition tasks?

1 / 1 point

◉ Speech-to-Text API

○ Vision API

○ Translation API

○ Text-to-Speech API

✓ **Correct**

Correct - Speech-to-Text API is the ideal choice for speech recognition tasks as it supports both interactive speech recognition and batch transcription, making it suitable for scenarios involving longer audio streams.

For more information, please refer to the video lecture "Process Speech: Speech-to-Text"

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6. How can developers create a new LUIS application?

`1 / 1 point`

○ Using Google Spreadsheets

○ Using Microsoft Word

◉ Using the LUIS portal or APIs

○ Using Adobe Photoshop

✓ **Correct**
Correct! Developers can create a new LUIS application using the LUIS portal or APIs.

For more information, please refer to the video lecture "Process Speech: Keyword & Intent Recognition"

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7. Which technology has revolutionized the field of language translation?

`1 / 1 point`

○ Machine learning algorithms

◉ AI and NLP techniques

○ Speech recognition techniques

○ Data Analytics

✓ **Correct**
Correct. AI and NLP techniques, such as Neural Machine Translation, have revolutionized the field of language translation by providing faster and more accurate translation solutions.

For more information, please refer to the video lecture "Azure Translator Service"

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8. What is speech-to-text translation?

`1 / 1 point`

○ A process of converting written text into spoken language.

◉ A process of converting spoken language into written text.

○ A process of converting images of text into machine-readable text.

○ A process of converting one spoken language into another spoken language.

✓ **Correct**
Correct! Speech-to-text translation also known as automatic speech recognization converts spoken language into written text.

For more information, please refer to the video lecture "Azure Speech-to-Text Translation"

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9. Which of the following statements is true about custom translation models?

`1 / 1 point`

○ They compromise data privacy and security

○ They are solely beneficial for improving translation accuracy

◉ They improve data privacy and security

○ They have no effect on data privacy and security

✓ **Correct**
This statement is correct. As organizations can train models using their own data, sensitive information remains within their control and does not leave their infrastructure.

For more information, please refer to the video lecture "Custom Translation Models"

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10. What is the purpose of annotating entities with utterances in app development?

`1 / 1 point`

○ To enhance the accuracy of speech recognition

◉ To enable the app to extract specific information from user input

○ To optimize the performance of the application

○ To improve the user interface of the application

✓ **Correct**
Correct. Annotating entities with utterances allows the application to extract specific information, such as dates, locations, or product names, from user input.

For more information, please refer to the video lecture "For more information, please refer to the video lecture "Language Understanding Model : Create Intents and Add Utterances"

11. How can entities be created in LUIS?

1 / 1 point

- ◯ Entities cannot be created in LUIS
- ◯ Only through the LUIS API
- ⦿ Both through the LUIS portal and the LUIS API
- ◯ Only through the LUIS portal

✓ **Correct**
Correct. Entities can be created both through the LUIS portal and the LUIS API.

For more information, please refer to the video lecture "For more information, please refer to the video lecture "Language Understanding Model : Create Entities"

12. Which metrics should be evaluated to determine the effectiveness of a model in predicting intents and extracting entities?

1 / 1 point

- ◯ Mean squared error
- ⦿ Precision, recall, and F1 score
- ◯ Accuracy
- ◯ Confusion matrix

✓ **Correct**
Correct. Precision, recall, and F1 score are important metrics that should be evaluated to determine how effectively the model predicts intents and extracts entities.

For more information, please refer to the video lecture "For more information, please refer to the video lecture "Language Understanding Model : Train, Evaluate, Deploy, and Test"

13. Which of the following statements accurately describes the purpose of chit-chat functionality in a conversational system?

1 / 1 point

- ⦿ It creates a more natural and conversational experience for users.
- ◯ It provides users with a platform to share personal experiences.
- ◯ It improves the security and privacy of user interactions.
- ◯ It enhances system performance and efficiency.

✓ **Correct**
Correct. Chit-chat functionality aims to create a more natural and conversational experience for users, making them feel more comfortable interacting with the system.

For more information, please refer to the video lecture "For more information, please refer to the video lecture "Add chit-chat to a Knowledge Base"

14. Why are multi-turn conversations important in enhancing user experience in chatbot interactions?

1 / 1 point

- ◯ They eliminate the need for clarifications or additional information.
- ◯ They restrict the conversation to only the initial queries.
- ⦿ They enable users to have more natural and seamless interactions.
- ◯ They provide predefined responses for personalized queries.

✓ **Correct**
Correct. Multi-turn conversations are important because they enable users to have more natural and seamless interactions with chatbots, allowing them to seek clarifications, request additional information, or refine their initial queries, resulting in a better user experience.

For more information, please refer to the video lecture "For more information, please refer to the video lecture "Create a multi-turn conversation"