Build a natural language processing solution with Azure AI Service (AI-3003)

Description

Why Master Natural Language Processing with Azure AI Services?

Advancements in artificial intelligence are transforming how businesses utilize textual and vocal data. The AI-3003 course provides you with valuable expertise to develop innovative natural language processing (NLP) solutions. Through this program, you'll learn to extract key information, analyze sentiments, and even automate question-answering systems.

Designed by experts, this training offers a practical and flexible approach. You will explore tools like Azure AI Language and Speech to build custom models, enhance customer interactions, and optimize your services. Accessible and progressive, this course is perfect for developers looking to integrate NLP-based solutions into their applications.

A Practical Learning Experience with Azure AI Services

This course is tailored for those who want to excel in AI technologies. Whether you're an experienced developer or a beginner with programming knowledge, this training will equip you with the tools to succeed. Join us to explore the fascinating world of natural language processing!

Course Content
Module 1: Analyze Text with Azure AI Language

- Provision an Azure AI Language resource
- Detect language
- Extract key phrases
- Analyze sentiments
- Extract entities
- Extract linked entities

Module 2: Create Question-Answering Solutions with Azure AI Language

- Understand question-answering functionalities

- Compare question-answering with Azure AI Language Understanding
- Create a knowledge base
- Implement multi-turn prompts
- Test and publish a knowledge base
- Use a knowledge base
- Enhance question-answering performance

Module 3: Create a Natural Language Understanding Model

- Understand predefined features of Azure AI Language
- Learn about resources for creating a language understanding model
- Define intents, utterances, and entities
- Use models to differentiate similar utterances
- Leverage predefined entity components
- Train, test, publish, and validate a language understanding model

Module 4: Create a Custom Text Classification Solution

- Understand types of classification projects
- Learn how to create text classification projects

Module 5: Custom Named Entity Recognition

- Understand custom named entity recognition
- Label your data
- Train and evaluate your model

Module 6: Translate Text with Azure AI Translator

- Provision an Azure AI Translator resource
- Understand concepts of language detection, translation, and transliteration
- Specify translation options
- Define custom translations

Module 7: Create Applications with Speech Recognition Using Azure AI Services

- Provision a resource for speech recognition
- Use the Azure AI Speech-to-Text API
- Use the Text-to-Speech API
- Configure audio formats and voices
- Leverage speech synthesis markup language

Module 8: Voice Translation with Azure AI Speech

- Provision a resource for voice translation
- Translate speech recognition outputs
- Synthesize translations

Lab / Exercises

- This course provides you with exclusive access to the official Microsoft lab, enabling you to practice your skills in a professional environment.

Documentation

- Access to Microsoft Learn, Microsoft's online learning platform, offering interactive resources and educational content to deepen your knowledge and develop your technical skills.

Participant profiles

- Software developers
- Artificial intelligence engineers
- Cloud architects
- Technical leads
- Data science specialists
- IT consultants in AI solutions
- Students in IT aiming to deepen their NLP knowledge

Prerequisites

- Understanding of Microsoft Azure and ease of use with the Azure portal.
- Proficiency in the C# or Python programming language.
- Knowledge of JSON and REST programming semantics.

Objectives

- Analyze texts with Azure AI Language
- Create question-answering solutions
- Develop models for natural language understanding
- Design custom text classification projects
- Implement named entity recognition solutions
- Translate text using Azure AI Translator
- Create applications using speech recognition
- Set up voice translation solutions

Description
Build a natural language processing solution with Azure AI Service (AI-3003)
Niveau
Intermédiaire
Classroom Registration Price (CHF)
900
Virtual Classroom Registration Price (CHF)
850
Duration (in Days)
1
Reference
AI-3003