Build AI Apps with Azure Database for PostgreSQL (AI-3019)

Description

Discover how to harness the power of artificial intelligence with our specialized training on Azure AI and Azure Machine Learning Services. This course will guide you through integrating Azure AI with Azure Database for PostgreSQL – Flexible Server, enabling you to create intelligent and innovative applications. Through detailed modules and practical exercises, you will acquire the skills necessary to master generative AI, semantic search, sentiment analysis, and much more.

By taking the course "Creating AI Applications with Azure Database for PostgreSQL (AI-3019)" you will learn to use the Azure AI extension to transform data into actionable insights. From opinion mining to text translation, each section is designed to provide you with in-depth knowledge and practical skills. Whether you are a beginner or an experienced professional, this training will help you become an expert in the field of artificial intelligence and machine learning on Azure.

Niveau
Intermédiaire
Course Content
Module 1: Getting Started with Generative AI in Azure Database for PostgreSQL

- Introduction
- Understanding Generative AI Language Models
- Describing the Azure AI Extension
- Exploring the Azure OpenAI Schema
- Reviewing the Azure Cognitive Schema
- Examining the Azure Machine Learning Schema
- Exercise: Exploring the Azure AI Extension

Module 2: Enabling Semantic Search in Azure Database for PostgreSQL

- Introduction
- Understanding Semantic Search
- Storing Vectors in Azure Database for PostgreSQL
- Creating Embeddings with the Azure AI Extension
- Exercise: Generating Vector Embeddings with Azure OpenAI
- Exploring Use Cases for Semantic Search

- Exercise: Creating a Search Function for a Recommendation System

Module 3: Summarizing Data with Azure AI Services and Azure Database for PostgreSQL

- Introduction
- Explaining Extractive Summarization
- Exploring Abstractive Summarization
- Exercise: Performing Extractive and Abstractive Summarization

Module 4: Performing Sentiment Analysis and Opinion Mining with Azure Database for PostgreSQL

- Introduction
- Exploring Sentiment Analysis
- Describing Opinion Mining
- Exercise: Sentiment Analysis

Module 5: Extracting Insights using Azure AI Language and Azure Database for PostgreSQL

- Introduction
- Extracting Key Phrases
- Recognizing Entities
- Recognizing Entities with Personally Identifiable Information
- Exercise: Extracting Insights using Azure AI Language Service

Module 6: Translating Text with Azure AI Translator and Azure Database for PostgreSQL

- Introduction
- Exploring the Azure AI Translator Service
- Translating Data in Azure DB for PostgreSQL
- Exercise: Translating Text

Module 7: Using Azure Machine Learning to Infer from Azure Database for PostgreSQL

- Introduction
- Exploring Azure Machine Learning
- Calling Azure Machine Learning Models
- Exercise: Inferring with Azure Machine Learning

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

- Developer
- Azure Database for PostgreSQL
- Azure AI Services

Prerequisites

- Having experience with PostgreSQL databases
- Having experience in writing SQL queries
- A good general understanding of AI and ML concepts

Objectives

- Understanding Generative AI Language Models
- Enabling Semantic Search in Azure Database for PostgreSQL
- Summarizing Data with Azure AI Services
- Performing Sentiment Analysis and Opinion Mining
- Extracting Insights Using Azure AI Language
- Using Azure Machine Learning for Inferences

Description
Build AI Apps with Azure Database for PostgreSQL (AI-3019)
Classroom Registration Price (CHF)
900
Virtual Classroom Registration Price (CHF)
850
Duration (in Days)
1
Reference
AI-3019