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ITAI-2372-Artificial Intel Applications

L03 Lab 03 On Skillable

Reflective Journal

Module Overview

In this module, I explored Azure AI Language Studio to analyze text, specifically hotel reviews, through sentiment analysis. The exercise demonstrated how businesses, such as a travel agency, could leverage sentiment analysis to evaluate customer feedback, helping to improve services based on customer sentiment.

Steps and Learning Outcome

1. **Setting Up an Azure AI Language Resource**
   I created a new Language service resource within the Azure portal, ensuring it was configured in ResourceGroup1 with a unique name and free-tier pricing. This setup allowed me to access Azure's language analysis tools, enabling NLP capabilities such as sentiment analysis and key phrase extraction.
2. **Analyzing Sentiment of Sample Texts**
   I used Language Studio to analyze three sample hotel reviews. Each review's sentiment analysis generated scores for positive, neutral, and negative sentiment, providing insight into the overall sentiment and allowing further sentence-specific sentiment assessment. This feature underscored how sentiment analysis could help businesses like hotels quickly gauge customer satisfaction.
3. **Tag Extraction and Opinion Mining**
   In addition to sentiment scores, I explored opinion mining features, which allowed the identification of key opinions within text, particularly phrases that signaled customer satisfaction or complaints. This capability demonstrated how businesses could identify recurring feedback themes and address specific issues effectively.
4. **Resource Cleanup**
   After completing the module, I navigated to the Azure portal and deleted the resource, ensuring there would be no residual costs from the exercise.

Challenge Faced

1. **Resource Selection and Configuration**

   I mistakenly chose an incorrect Language resource. Azure requires attention to settings; selecting the wrong resource or subscription led to potential misconfigurations.

Professional Application

This module provided practical guidance to Azure AI Language's NLP features, which can be applied in professional settings to analyze customer feedback in real-time. In cybersecurity, sentiment analysis could be used to monitor communications for patterns of concern or negative sentiment, which would ensure preemptive response measures in potential security scenarios.

Screenshot Of Completion: