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ITAI-2372-Artificial Intel Applications
L04 Lab 04 On Skillable

Reflective Journal

Module Overview

In this module, I used Azure AI Document Intelligence Studio to analyze and extract data from receipts. Document Intelligence builds on optical character recognition (OCR) by structuring extracted data, such as key-value pairs and tables, which makes it easier to process and store information. This exercise simulated a scenario where the fictitious retailer Northwind Traders utilized Document Intelligence to enhance data capture from transaction receipts.

Steps and Learning Outcome

1. Logging In and Setting Up the Azure Resource

I logged into the Student account and accessed Azure using the provided subscription credentials. In the Azure portal, I created a Document Intelligence resource within **ResourceGroup1** using a unique resource name and the free F0 pricing tier. This setup enabled access to Document Intelligence's capabilities for document analysis.

2. Receipt Analysis in Document Intelligence Studio

After downloading a sample Northwind Traders receipt, I opened Document Intelligence Studio and selected the prebuilt model trained for receipts. By uploading the receipt and running an analysis, I observed how the service recognized and extracted structured data fields such as the merchant's name, address, phone number, transaction date, subtotal, tax, and total. Each extracted field was accompanied by a confidence score, indicating the accuracy of recognition.

3. Exploring Additional Features and Cleanup

I tested other sample receipts, including some in different languages, to see how Document Intelligence handled diverse document types. After completing the exercises, I returned to the Azure portal to delete the created resources, ensuring no unnecessary costs would be incurred.

Challenge Faced

1. navigating between different sample receipts, especially those in other languages, required a bit more time as I adjusted to the different data output structures and confidence scores provided by the service.

Professional Application

This module reinforced my knowledge of Document Intelligence's data extraction and structuring capabilities, which can be important in automating data processing in fields that manage large volumes of documents, like retail, finance, or healthcare. From a cybersecurity perspective, these capabilities could also be adapted to monitor and analyze document-based patterns or anomalies, supporting more efficient document handling and risk management in secure environments.

The screenshot shows a web browser window with the URL msl.learnondemand.net/ClassEnrollment/4628207. The page displays a list of three items, each with a checkbox on the left and a downward arrow on the right.

- ☒ 4 Extract form data in Document Intelligence Studio (Expected Duration 1 hours) Details ▾
AI-900T00-A Microsoft Azure AI Fundamentals [Cloud Slice Provided], Learning Path 04 (CSS)
Required: Yes
Status: Complete
Started: Friday, October 25, 2024 2:00 PM (Central Standard Time)
Ended: Friday, October 25, 2024 3:04 PM (Central Standard Time)
[Launch](#)
7 of 10 launch attempts remaining
- ☒ 5 Explore Microsoft Copilot in Microsoft Edge (Expected Duration 1 hours) Details ▾
AI-900T00-A Microsoft Azure AI Fundamentals [Cloud Slice Provided], Learning Path 05 (CSS)
Required: Yes
Status: Complete
Started: Friday, October 25, 2024 4:04 PM (Central Standard Time)
Ended: Friday, October 25, 2024 5:12 PM (Central Standard Time)
[Launch](#)
9 of 10 launch attempts remaining
- ☐ 6 End Of Class Survey
This survey will be available 168 hours before the scheduled class end time.
Required: Yes
Status: Not Started

The Windows taskbar at the bottom shows the search bar, task view button, and several application icons. The system tray on the right indicates the time is 3:17 PM on 10/25/2024.