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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

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Lab L04

Reflection Journal: Extract form data in Document Intelligence Studio

This journal reflects on my experience completing the fourth lab in a five-part lab series in preparation for the Azure AI-900 certification exam. This lab focused on Azure AI Document Intelligence Studio, a tool designed to process and analyze documents using prebuilt AI models. Through this reflection, I want to explore the insights I gained, the skills I developed, and the ways this lab contributed to my academic, professional, and personal growth.

The lab began with the task of creating an Azure AI resource using the Document Intelligence Studio. This involved exploring its interface and using pretrained AI models to analyze sample receipts. The tool identified key fields, such as merchant details, transaction dates, subtotals, and totals, while providing confidence percentages for each prediction. I also experimented with different language receipts to evaluate how the tool manages diverse inputs, offering a deeper understanding of its potential applications across.

Prebuilt Receipts

API version: 2024-07-31 (Preview) Service resource: Joseph-Hiller-L04

Drag & drop file here or Browse for files or Fetch from URL

Run analysis Query fields Analyze options

9:41

Receipt

Thanks for ordering!

1822 S Purplecat Island Ave
Chicago, IL 60608, USA
March 19, 2024 • 8:58 PM

Order Details

Subtotal	\$61.48
Delivery fee	\$1.50
Service fee	\$2.00
Tax	\$2.50
Tip	\$1.50
Total	\$68.98

Payment method: Credit card
Credit card: **** 1234

Note: We would like to meet at door.

Fields Result Code

DocType: receiptRetailMeal

Items (3) #1

MerchantAddress #1 95.80%

1822 S Purplecat Island Ave, Chicago, IL 60608, USA

HouseNumber: 1822

Road: S Purplecat Island Ave

PostalCode: 60608

City: Chicago

State: IL

CountryRegion: USA

StreetAddress: 1822 S Purplecat Island Ave

MerchantName #1 97.80%

Contoso

Subtotal #1 96.50%

USD 48.98

Tip #1 96.50%

USD 4.5

Total #1 98.00%

USD 68.48

Analyze a receipt in Document Intelligence Studio

You are now ready to analyze a receipt for the fictitious Northwind Traders retail company.

1. Select <https://aka.ms/malware-receipt> to download a sample document to your computer. Open the folder.
2. Select **Document Intelligence Studio** to return to the **Get Started with Document Intelligence Studio** page, and under Receipts select **Try it out**.
3. In the Prebuilt drop-down list, make sure that **Receipts** is selected.
4. Select **Browse for files** and navigate to the folder where you saved the picture. Select the picture of the receipt and then **Open**. The image appears on the left side of the screen.

Northwind Traders

123 Main Street

555-123-4567

2/17/2020 13:07

1 Apple	\$0.90
1 Orange	\$0.80
Sub-Total	\$1.70
Tax	\$0.17
Total	\$1.87

5. On the right, select **Run analysis**.

6. When the analysis has run, the results are returned. Notice that the service has recognized specific data fields such as the merchant's name, the address, phone number, and the transaction date and time, as well as the line items, subtotal, tax, and total amounts. Next to each field is a percentage probability that the field is correct.

100% Test Complete

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Initially, I was impressed by the simplicity of the interface and intrigued to see how AI could handle real-world tasks, such as analyzing large documents or, in the lab, receipts as an example. Running analyses on these receipts highlighted the practicality of AI tools, and I was struck by their accuracy and efficiency. However, the lab also raised questions about how well the model performs with ambiguous or non-standard receipt formats, prompting me to consider its limitations and opportunities for improvement. I plan to revisit this tool to further explore its capabilities and increase my understanding.

This experience is directly connected to concepts I've learned in my courses, such as the strengths of machine learning in processing structured data and its challenges with contextual interpretation. Observing confidence probabilities in the analyses reinforced my understanding of prediction accuracy and model reliability. While the lab effectively demonstrated AI's ability to automate data extraction tasks, it also emphasized the need for improvement when handling unstructured or inconsistent data.

Working through this lab enhanced my confidence in using AI tools and expanded my perspective on their real-world applications. I developed technical skills in creating Azure AI resources, interacting with the Document Intelligence Studio, and analyzing outputs. Additionally, this experience strengthened my ability to evaluate technology, balancing its potential against its limitations. It was interesting to see how everyday tasks, such as receipt scanning, could be automated to save time and reduce human error while reflecting on the ethical implications of AI in understanding context and intent.

This experience has practical implications for my everyday work as an IT technician. In my role, I often handle tasks that require data organization, troubleshooting, and automation. Leveraging tools like Document Intelligence could streamline repetitive processes, such as inventory management or processing technical documentation. Automating these workflows would allow me to focus on more complex, value-added tasks, improving both efficiency and productivity. For instance, I could use AI to extract and analyze asset information from invoices or reports, ensuring accuracy and speeding up project timelines.

The skills and insights gained from this lab are highly relevant to both academic and professional contexts. Learning to automate data processing and extract meaningful information efficiently is invaluable for enhancing workflows and ensuring precision in tasks. This

experience has increased a desire to explore more advanced AI applications, equipping me with tools to tackle real-world challenges with innovation and confidence. It also deepened my appreciation for how AI can address complex problems and streamline operations in different industry sectors.

Overall, this lab was a great learning experience, bridging theoretical concepts with practical applications. It broadened my understanding of AI's potential while highlighting areas where further research and application is needed. As I continue to engage with Azure AI tools in these labs, I look forward to leveraging this knowledge to drive my expertise using these technologies and contribute to impactful projects in both my academic and professional life.