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ITAI 2372 AI Apps.

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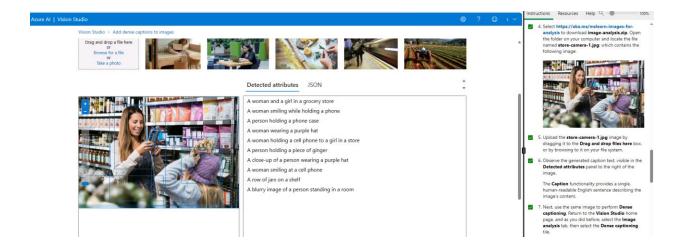
Lab L02

## Reflection Journal: Analyze images in Vision Studio

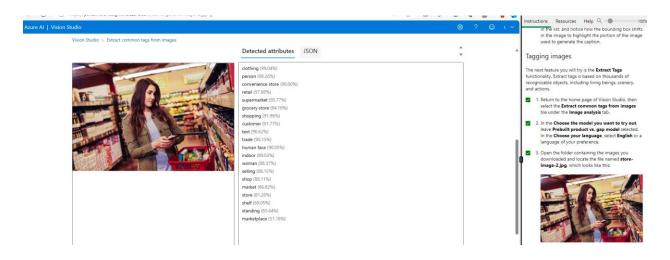
In this journal entry, I reflect on my experience completing the second introductory lab in a series of five labs in preparation for the Azure AI-900 certification exam. This lab focused on exploring the Azure AI Services more deeply, particularly the Vision Studio. It was a chance to build on the skills I gained from the first lab and push myself to work more independently. One of the first key tasks was creating an Azure AI resource. This time, I was able to create one without step by-step guidance, although the instructions were still provided. This was encouraging and showed how much I've learned in a short time.

After provisioning the resource and connecting it to Azure Vision Studio, I explored its features and learned the basics of the studio. I had the chance to interact with various AI tools for analyzing images, and I appreciated how user friendly and versatile the studio was. During the lab, I investigated the different areas included, such as spatial analysis, image analysis, and character recognition. We primarily focused on image analysis, and the hands on "try it out" exercises made the lab feel practical and engaging.

The lab centered on a "smart store" simulation for a fictional retailer, Northwind Traders. The goal was to use the AI services in Vision Studio to analyze images taken by cameras in the store and provide actionable insights. One cool example I found interesting was the idea of the AI being able to identify customers who might need assistance and guide employees to help them just by analyzing an image. In the lab, I explored several Vision Studio features in this scenario, starting with captioning images. It was impressive to see how accurately the AI described objects and scenes in an image. Dense captioning took it further by providing more detailed observations.



I also explored tagging images, where the AI assigned confidence scores to detected objects and actions. This feature highlighted activities like shopping and selling while identifying items. Adjusting the confidence threshold for object detection was especially interesting because it demonstrated how AI prioritizes accuracy. For example, increasing the threshold excluded less likely predictions, focusing on highly probable objects.



Throughout the lab, I felt a mix of curiosity and excitement. It was awesome to see AI in action and think about its real-world applications and how I could use these tools for future projects or in my everyday work. While it was exciting, I reflected on the importance of using these capabilities responsibly. Vision Studio is powerful, though I still question how well it accounts for privacy and ethical considerations, especially in contexts where AI might impact people's lives.

This experience was a significant plus for me. It demonstrated that I could navigate complex tools like Azure AI Vision Studio on my own and gave me a deeper understanding of AI's practical applications. I connected theoretical concepts like confidence scores and machine learning that I have learned in my AI courses to hands on tasks, which helped reinforce my learning.

Looking ahead, I'm excited to continue exploring AI tools and applying what I've learned. The skills I developed in this lab, like navigating Azure and analyzing data in images with AI, are valuable for my academic and career goals. I can see myself using these skills in future projects or contributing to innovative solutions in areas like security or in my daily IT job.

Overall, this lab was a rewarding experience that left me feeling more confident in my abilities and inspired to learn more about AI. I'm looking forward to the next steps in my career and academic journey.