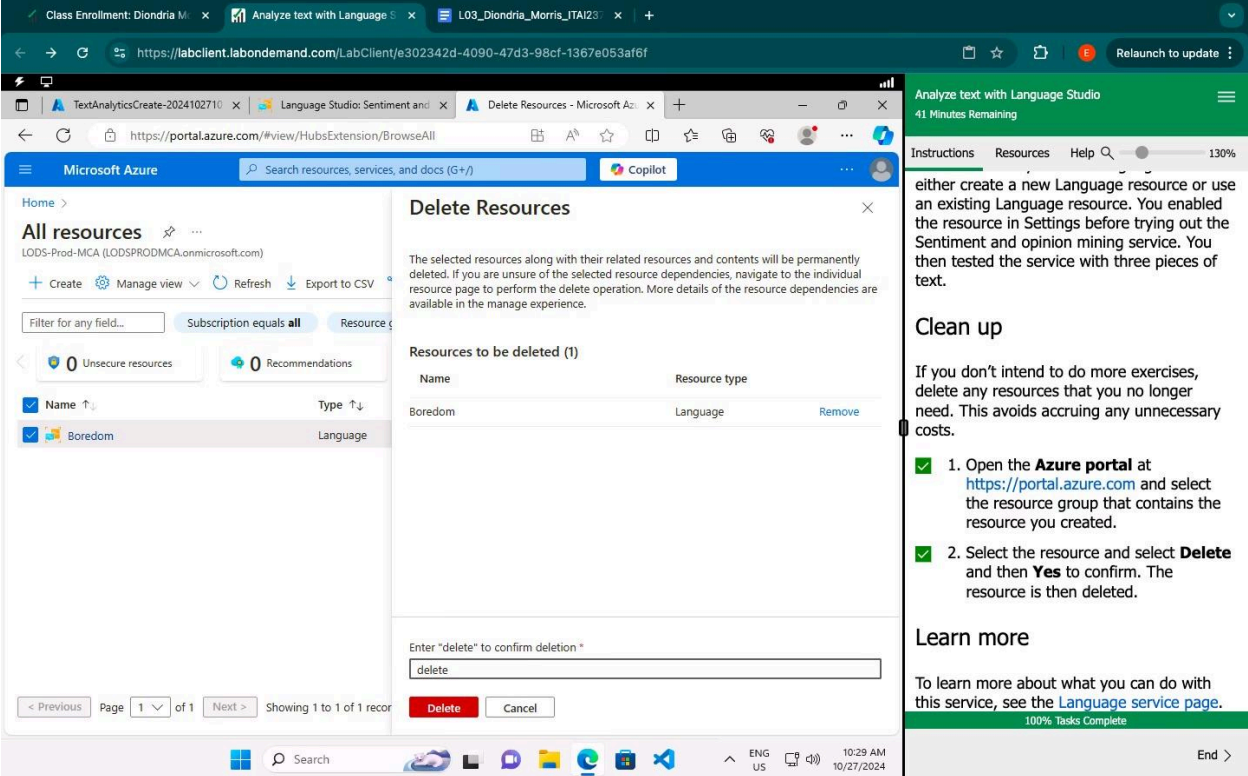


Diondria Morris

Lab 03

ITAI-2372 Artificial Intelligence Fall 2024



The screenshot displays the Microsoft Azure portal interface. On the left, the 'All resources' section shows a table with one resource: 'Boredom' of type 'Language'. The main area is a 'Delete Resources' modal dialog. It contains a warning message about permanent deletion and a table titled 'Resources to be deleted (1)' with one entry: 'Boredom' (Language). Below the table is a confirmation field where 'delete' has been entered. On the right side of the screen, there is a sidebar for 'Analyze text with Language Studio' with instructions, resources, and help sections.

**Instructions**

either create a new Language resource or use an existing Language resource. You enabled the resource in Settings before trying out the Sentiment and opinion mining service. You then tested the service with three pieces of text.

**Clean up**

If you don't intend to do more exercises, delete any resources that you no longer need. This avoids accruing any unnecessary costs.

1. Open the **Azure portal** at <https://portal.azure.com> and select the resource group that contains the resource you created.
2. Select the resource and select **Delete** and then **Yes** to confirm. The resource is then deleted.

**Learn more**

To learn more about what you can do with this service, see the [Language service page](#).

100% Tasks Complete

End >

## 1. Introduction:

- **Brief Overview:** Analyze text with Language Studio.
- **Purpose:** In this report I'll give an overview of my experience with the Natural Language Processing capabilities available in Language Studio.

## 2. Description of Experience or Topic:

To access the NLP features I needed to create a Language or Azure AI services resource. The parameters used were the same as in the previous setups for this step. Tasks in this lab focused on analyzing hotel reviews from Margie's Travel. Using NLP, I examined various reviews to determine their sentiment. Natural Language Processing is a branch of AI that enables computers to

understand and generate human language. In this context I used NLP to evaluate the sentiment of each review. This is helpful to identify how positively or negatively people feel about specific aspects of the hotels. The Language Studio interface provides tools like the “Detected Attributes” box which displays a detailed analysis of text. This includes an assessment of each sentence, showing positive, negative, and neutral sentiment percentages. It also highlights the overall opinion on key words like internet, courtyard, and staff; providing insights into guest opinions.

### **3. Personal Reflection:**

This training module gave me a solid introduction to using NLP for sentiment analysis and I can see its potential beyond this exercise. Any business that has a service or product can use this technology to analyze customer feedback to make data driven decisions. I would like to explore more advanced NLP techniques to gain deeper insights on its capabilities.

### **4. Discussion of Improvements and Learning:**

My only critique of this lab is that I wish it'd been longer and included diverse examples. More examples would've allowed me to explore a wider range of scenarios, enhancing my familiarity with Language Studio. I learned how to effectively utilize NLP to analyze sentiment in text. This helps to strengthen my understanding of how AI can interpret human language. This lab also showed me how sentiment analysis can provide perspective into individual elements of customer feedback like guest opinions on hotel amenities.

### **5. Conclusion:**

- **Summary:** Overall, this experience highlighted how AI can help us better understand and respond to human feedback.