

# WIIT 7850 Natural Language Processing

## Week 10 Lab

### Learning Objectives:

- Apply Python skills to build a functioning question-answerer chatbot.
- Apply presentation planning and preparation skills to create a demonstration video.

### Background:

We have successfully built our first chatbot using the Jupyter Notebook during class. Your challenge is to change this chatbot to experience effects of changing the code.

### Week 10 Lab Instructions:

1. Start with the jupyter notebook used for this week's class.
2. Modify the notebook as follows:
  - a. Use a **different source** of data and retrain your chatbot.
  - b. In the main while loop for the chatbot, **include at least two additional cases** to generate a reply when the user asks about irrelevant topics to your chosen new source.
    - i. HINT: you can use simple if-else clauses for this purpose.
  - c. Modify **at least two** of the hyperparameters to see if you can get the model to perform better.
    - i. **Describe**, in comments in your code, which hyperparameters were changed.
    - ii. **Describe**, in comments in your code, the impact the changes made on the final result.
3. In Blackboard, in Week 10, submit:
  - a. The executed jupyter notebook file for your lab.

## Week 10 Lab Rubric, 20 Points:

	<b>Emerging</b> 0-15 points	<b>Proficient (80%+)</b> 16-17 points	<b>Exemplary</b> 18-20 points
Week 10 Lab	<p>A different source was <b>not</b> used.</p> <p><b>No</b> additional cases were provided to generate a reply for irrelevant topics.</p> <p><b>No</b> hyperparameters were modified, and/or comments were not provided in the code.</p>	<p>A different source was used.</p> <p><b>Only one</b> additional case was provided.</p> <p><b>Only one</b> hyperparameter was modified, and comments were provided in the code.</p>	<p>A different source was used.</p> <p><b>At least two</b> additional cases were provided to generate a reply for irrelevant topics.</p> <p>At least <b>two</b> <b>hyperparameters</b> were modified, and <b>comments were provided in the code.</b></p>