

START OF QUIZ

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Question 1

Topic: Lecture 7

Source: Lecture 7

In class, we built a POS tagger that tries to give a majority tag to a word; if it's out-of-vocabulary, it backs-off to Regexes. This is clearly overly simplistic. List two assumptions that are being violated by this model. (1)

Question 2

Topic: Lecture 6

Source: Lecture 6

Beautiful Soup parses the children of a tag as a list. Why do you think they didn't use a set, instead, given the faster access times? Give 2 reasons, and briefly explain. (1)

Question 3

Topic: Lecture 5

Source: Lecture 5

Describe the purpose of the various types of brackets in regexes, and how they differ. (1)

Question 4

Topic: Lecture 6

Source: Lecture 6

Why is XML well-suited to representing linguistic data? (1)

Question 5

Topic: Lecture 7

Source: Lecture 7

What might the training data for a sentence segmenter look like? Do you think it would be easy or hard to train? Explain briefly. (1)

Question 6

Topic: Lecture 5

Source: Lecture 5

Imagine you are processing a text document where dates are written in multiple formats, such as "12-05-2024", "05/12/2024", or "12 December 2024". How would you write a regex to capture these date formats (just the logic)? What assumptions would you make? (2)

Question 7

Topic: Lecture 8

Source: Lecture 8

In class, I mentioned that we always want to close a file correctly. Beyond freeing up system resources, it also "flushes the buffer", which ensures that any current read or write operations that are in the job queue, but haven't yet been processed, are completed. Knowing what you do about encodings, what is a possible ramification of not flushing the buffer? Explain at least 2. (2)

Question 8

Topic: Lecture 8

Source: Lecture 8

Imagine that you're working with a linguist who is not very good with technology. They store all of their data in .docx files, scattered across their desktop. What arguments would you make for them to convert to .tsv or .json, and how would you alleviate their worries that they wouldn't be able to access or modify their information (no, you can't teach them Python)? (2)

Question 9

Topic: Long

Source: Lecture 7

Suppose you're building a text classification model for a highly inflected language like Finnish. How might you approach preprocessing tasks such as lemmatization or stemming? Would you perform these tasks before or after feature extraction, and why? Discuss how the choice of sequence may impact the quality of the features and model accuracy. Would you make the same decision for sentiment analysis? (3)

END OF QUIZ