START OF QUIZ
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Question 1

Topic: Lecture 4
Source: Lecture 4

If we were to attempt joint NER and SRL, how would we set up the model? Describe the input, the architecture, and the output. (2)

Question 2

Topic: Lecture 4
Source: Lecture 4

We talked about a few other contraints for the ILP solver, such as making sure that "ARG0 must occur before ARG1". How would you implement this as an ILP constraint? (You don't need to write the pulp code - just explain how you would force the constraint.) (2)

Question 3

Topic: Lecture 3
Source: Lecture 3

Thinking in terms of vector semantics, do you think that each dimension of word embeddings could be considered a "semantic fundamental" (like "speaking", "load", "incoherent", etc.). Briefly explain. (1)

Question 4

Topic: Lecture 2
Source: Lecture 2

How can we use POS/morphological tagging to aid in temporal relation extraction? (1)

Question 5

Topic: Lecture 1
Source: Lecture 1

Imagine that we were using the Viterbi algorithm to ensure that our sequence of NER tags is valid. What might the scores in the transition matrix look like? (2)

Question 6

Topic: Lecture 3
Source: Lecture 3

The sentences "The man ate a sandwich" and "The sandwich ate a man" are both syntactically correct (DET NN VB DT NN), but only the first one is semantically correct. With reference to theta roles, explain why this is the case. (1)

Question 7

Topic: Lecture 2
Source: Lecture 2

If we're building a CRF for relation extraction, what other NLP tools might be useful for generating feature vectors? (At least 3) (1)

Question 8

Topic: Lecture 1
Source: Lecture 1

Briefly describe the difference between micro- and macro-F1, which one is more appropriate for NER tagging, and why. (1)

Question 9

Topic: Coding
Source: Lecture 1

In class, we briefly mentioned that F1 score may be too harsh for NER (If our model finds part of an entity, it should get partial credit). Write code that calculates this more generous measure. If the system discovers the first word in the entity (ie, "Charles" for "Charles M. Burns"), it should get 0.5 points, instead of the full 1 point it would get for the whole name. (We'll stick to the first word, only - if we consider any part, it gets tricky: what if our system identifies "Charles" and "M. Burns" as two separate entities?) (3)

END OF QUIZ