

START OF QUIZ

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Question 1

Topic: Lecture 5

Source: Lecture 5

Jeopardy divides its questions into categories. Explain how this would help Watson improve the confidence in its answers. (1)

Question 2

Topic: Lecture 7

Source: Lecture 7

Generate a frame for a “recommend a movie” dialogue action. It should have at least 5 slots to fill. (2)

Question 3

Topic: Lecture 6

Source: Lecture 6

For the ELQ algorithm, we talked about how the entity encoder typically takes the title and first 128 tokens of an encyclopedia article. Imagine we were building a database from books. What might we use as the input to the entity encoder that would have a similar effect. Explain. (2)

Question 4

Topic: Lecture 6

Source: Lecture 6

Neural Q/A (even before ChatGPT) was significantly better than previous models. Beyond just the traditional benefits of deep learning that we know of, (such as longer dependencies, etc.), why is this the case? (2)

Question 5

Topic: Lecture 8

Source: Lecture 8

Why is it necessary to maintain a conversation history in a dialogue system (beyond just not asking the same question over and over again)? (1)

Question 6

Topic: Lecture 8

Source: Lecture 8

When training BERT Dialogue systems, we often delexicalize the entries. Briefly explain the benefits this can provide to the model. (1)

Question 7

Topic: Lecture 7

Source: Lecture 7

How might we use SRL in the process of slot-filling? (1)

Question 8

Topic: Lecture 5

Source: Lecture 5

Briefly describe a “factoid-based” question, and one way that a QA system might answer it.
(1)

Question 9

Topic: Long

Source: Lecture 8

As more data and computing power are becoming available, chatbots are becoming more generalists, able to answer questions in a large variety of topics. That said, specialized dialogue bots can often be very good at their jobs (such as Watson being much better at Jeopardy than ChatGPT). Can you think of a way that we might be able to leverage the strengths of each system to improve the other? Write out pseudocode for where you might inject dialogue bots into ChatGPT, and simultaneously use ChatGPT to improve the dialogue systems. This is a huge, theoretical problem, and I'm not looking for you to solve it - I'm just interested in your thought process about where the models might be able to build off each other. (3)

END OF QUIZ