# Task-oriented dialog systems [ Solution by Karthikeyan.S ]

**LATEST SUBMISSION GRADE**

## 100%

1.Question 1
What is considered a part of NLU?

- [ ] State tracker
- [x] Slot tagger
- [x] Intent classifier

**Correct**

2.Question 2
What metrics do we use for NLU evaluation?

- [x] Intent accuracy
- [ ] Number of turns in the dialog
- [x] Slots F1
- [ ] Task success rate

**Correct**

3.Question 3
Choose correct statements about NLU.

- [x] You can use 1D convolutions for intent classification.
- [ ] Joint NLU model can't produce predictions faster than two separate models combined (one for intent classification and another for slot tagging)
- [x]

Training a joint NLU model helps intent classifier and slot tagger.

☑

You can use Convolutional Networks for slot tagging.

**Correct**

4.Question 4

Choose correct statements about dialog context.

☐

We need dialog context in single-turn dialogs.

☑

We can add a simple feature like "previous utterance intent" as a categorical feature to NLU to start taking into account the context of the dialog.

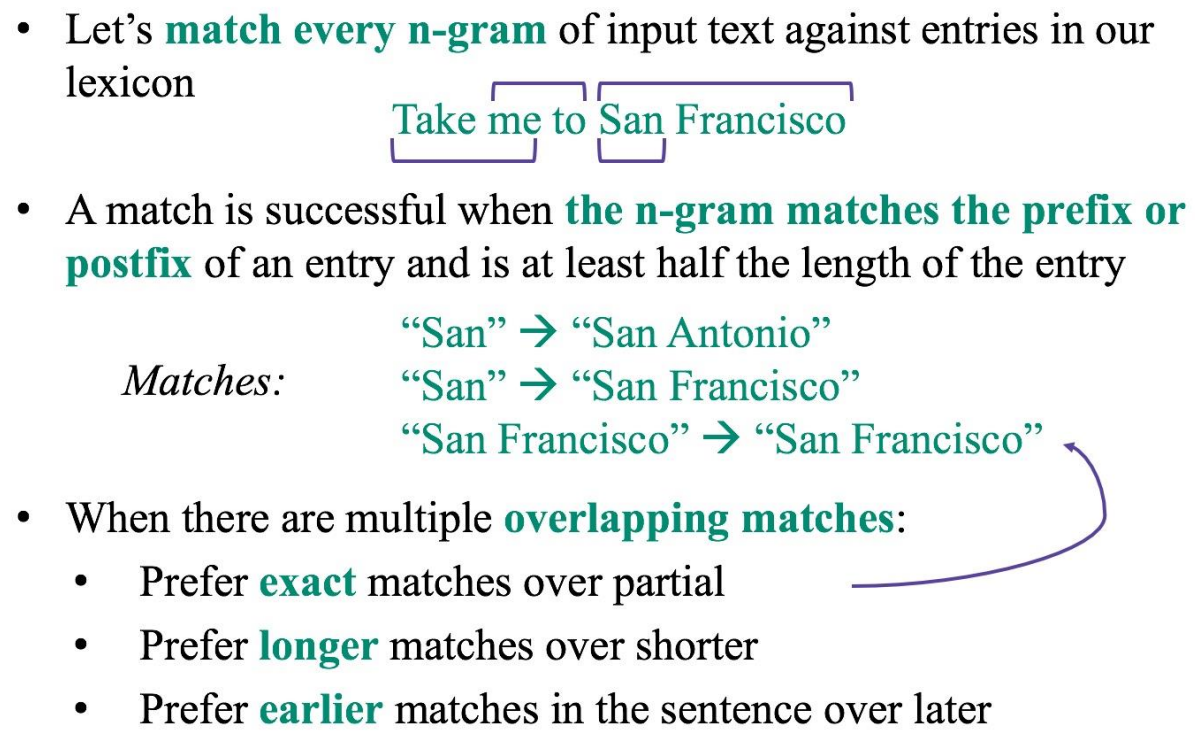
☑

We can use memory networks to deal with context.

**Correct**

5.Question 5

Let me remind you the BIOES lexicon encoding algorithm:



We will use **BIOES** coding (Begin, Inside, Outside, End, Single)

- B – if token matches the beginning of some entity
- B, I – if two tokens match as prefix
- I, E – if two tokens match as postfix
- S – if matched single token entity
- …

Suppose you have a **lexicon** of 3 places:

- Los Angeles
- San Francisco
- San Francisco Airport

Let's encode the text **"Los Francisco Airport"**.

What encoding will we have?

B E E

B I E

B B E

**Correct**

6.Question 6

What is considered a part of a dialog state in DSTC 2 challenge?

The intent of previous utterance

Goals

Requested slots

Method

**Correct**

7.Question 7
How Frames dataset was collected?

Computer-computer dialogs

Human-human dialogs

Human-computer dialogs

**Correct**

8.Question 8
Choose correct statements about dialog policy.

This is a mapping from a dialog state to a system action.

We need some kind of NLG (at least with hand-crafted rules) to convert a system policy to a human readable utterance.

We can't learn a dialog manager end-to-end.

**Correct**