

Report

The basic intent for the system is to simulate some Alexa' skills. The system is design like a finite state machine. It has 6 different states which are "Add", "Remove", "Unidentified", "Closed", "Running", "Greeting". Depend on the input, this simplified Alexa can switch to one of these states. Here are two threads to simulate the conversation between Alexa and users. One is for listening, the other is for inputting from console.

Hence, we have these slots: "greeting_synonym", "add_synonym", "remove_synonym", "close_synonym" though the lexicon is not much enough, it cannot identify when the word is not in the scale. However, once it happens, the machine state would switch to "Unidentified", Alexa will response and ask you to re-enter your command.

The conversations is like below:

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Instruction:
This Alexa allow the key word such as 'add', 'remove' and some of their synonyms, but the typo is not allow.
This Alexa cannot process the multiple command concurrently, you cannot enter such like "Hi Alexa, add the apple into the shopping list"
Because it only has one state when it receive the command.
=====
Alexa is sleeping... Enter your input (Use 'Alexa' to awake Alexa): Alexa
Alexa is running...
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Alexa received your command.
Yes, I'm here
Alexa is waiting your command, please re-enter your command
Alexa is sleeping... Enter your input (Use 'Alexa' to awake Alexa): Alexa add apples into my shopping list
Alexa received your command.
apples has been added to the shopping list.
Current shopping list is: apples []
Alexa is sleeping... Enter your input (Use 'Alexa' to awake Alexa): Alexa add pen
Alexa received your command.
pen has been added to the shopping list.
Current shopping list is: apples [] pen []
Alexa is sleeping... Enter your input (Use 'Alexa' to awake Alexa): Alexa remove pen from the shopping list
Alexa received your command.
pen has been removed from the shopping list.
Current shopping list is: apples []
Alexa is sleeping... Enter your input (Use 'Alexa' to awake Alexa): Alexa bye
Alexa received your command.
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ByeBye
Alexa is closed...
```

The constrain of this Alexa is that It lacks the capability of recognizing the typos. It seems to be difficult since the model of recognition has to be implemented. And also, the difficulty and challenges for developing the system is to be very careful when the interactions of states happen. The logic of controlling the system is dynamic, so simulation in mind is not enough, it requires lots of testing to ensure that the system has less bugs.

If we are testing other groups' project, the most interested part is to use different command to express a single meaning so that we can know if the system can understand.