

Our idea of a

Chatbot

Or the story of how we tried.

# Chapter 1

# The Idea

behind: a virtual office assistant, residing in a teamchat app, that can perform certain repetitive or “step-intensive” tasks

# Chapter 2

# THE Tools

we used

AllenNLP



slack



python™

# Chapter 3

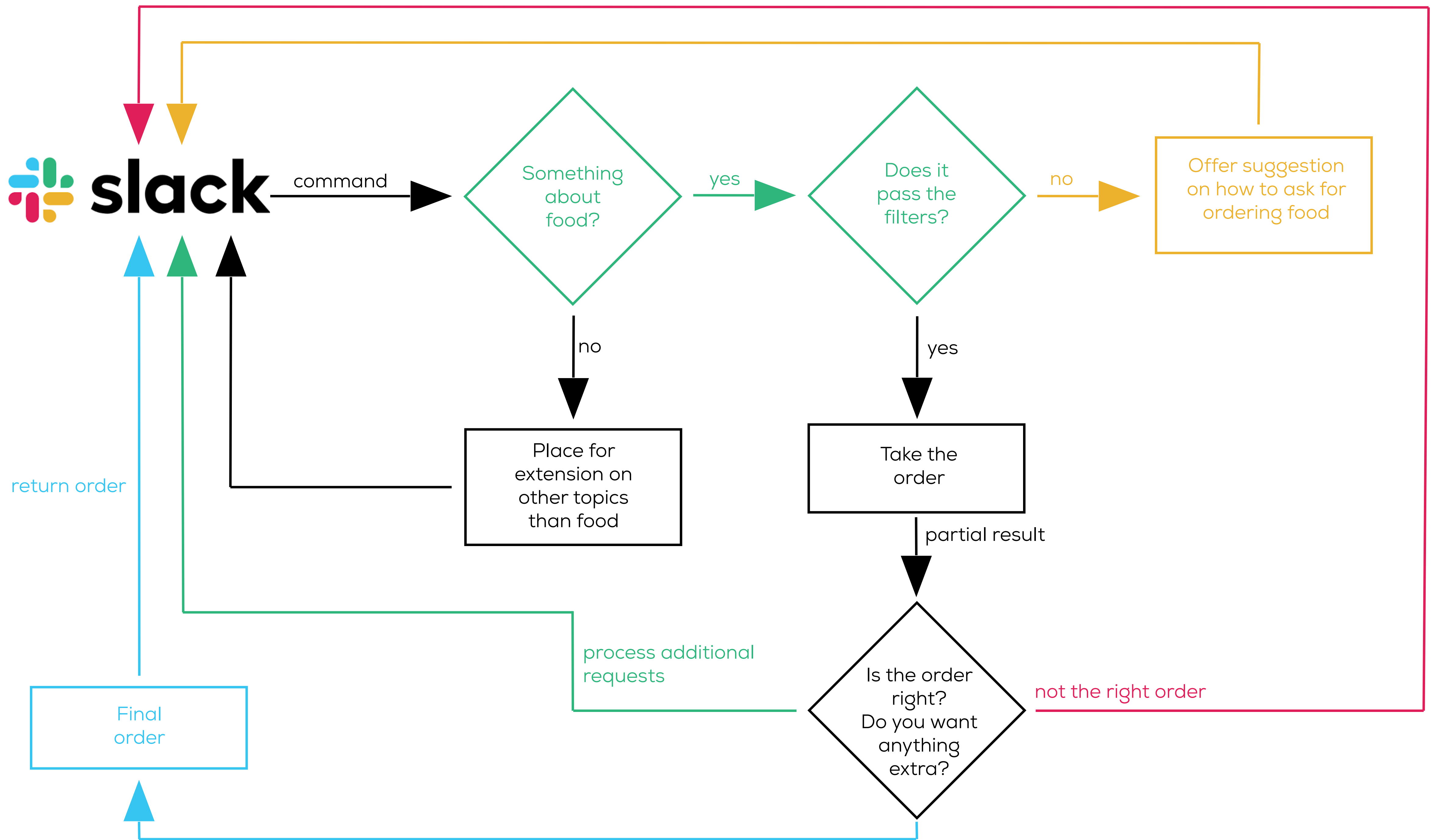
# Behind the scenes

processing pipeline

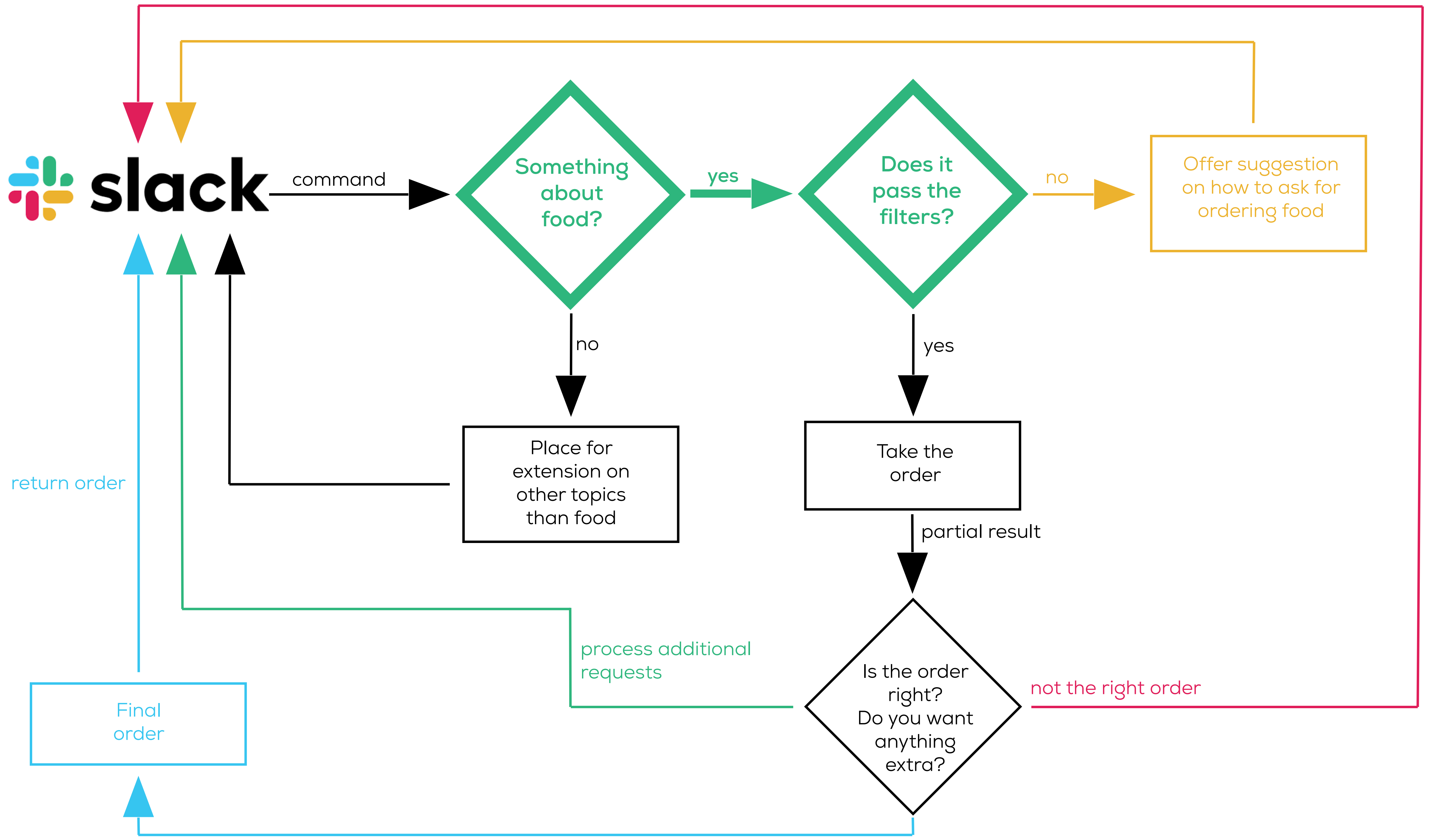
modules

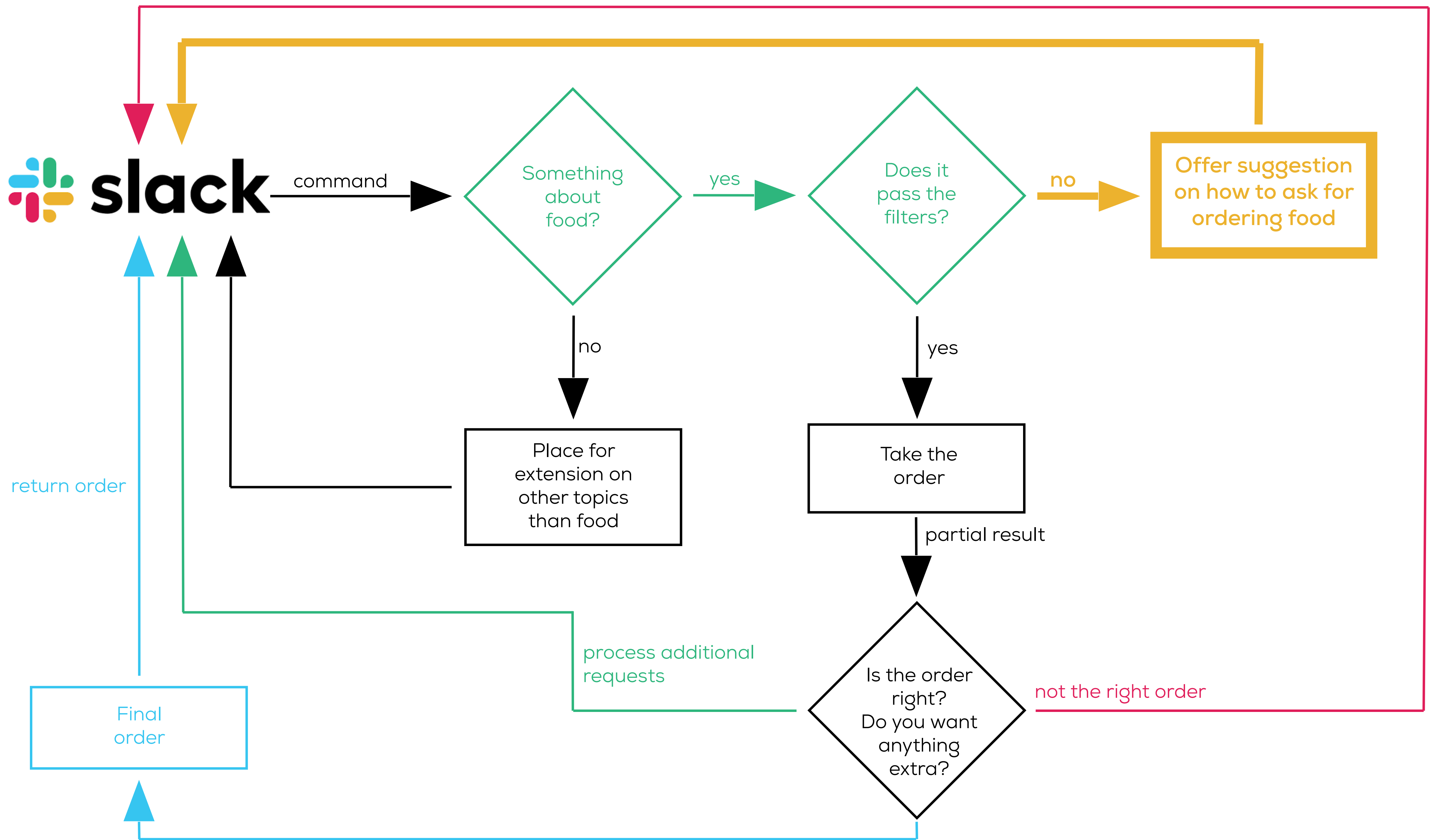
semantic & sentimental analysis

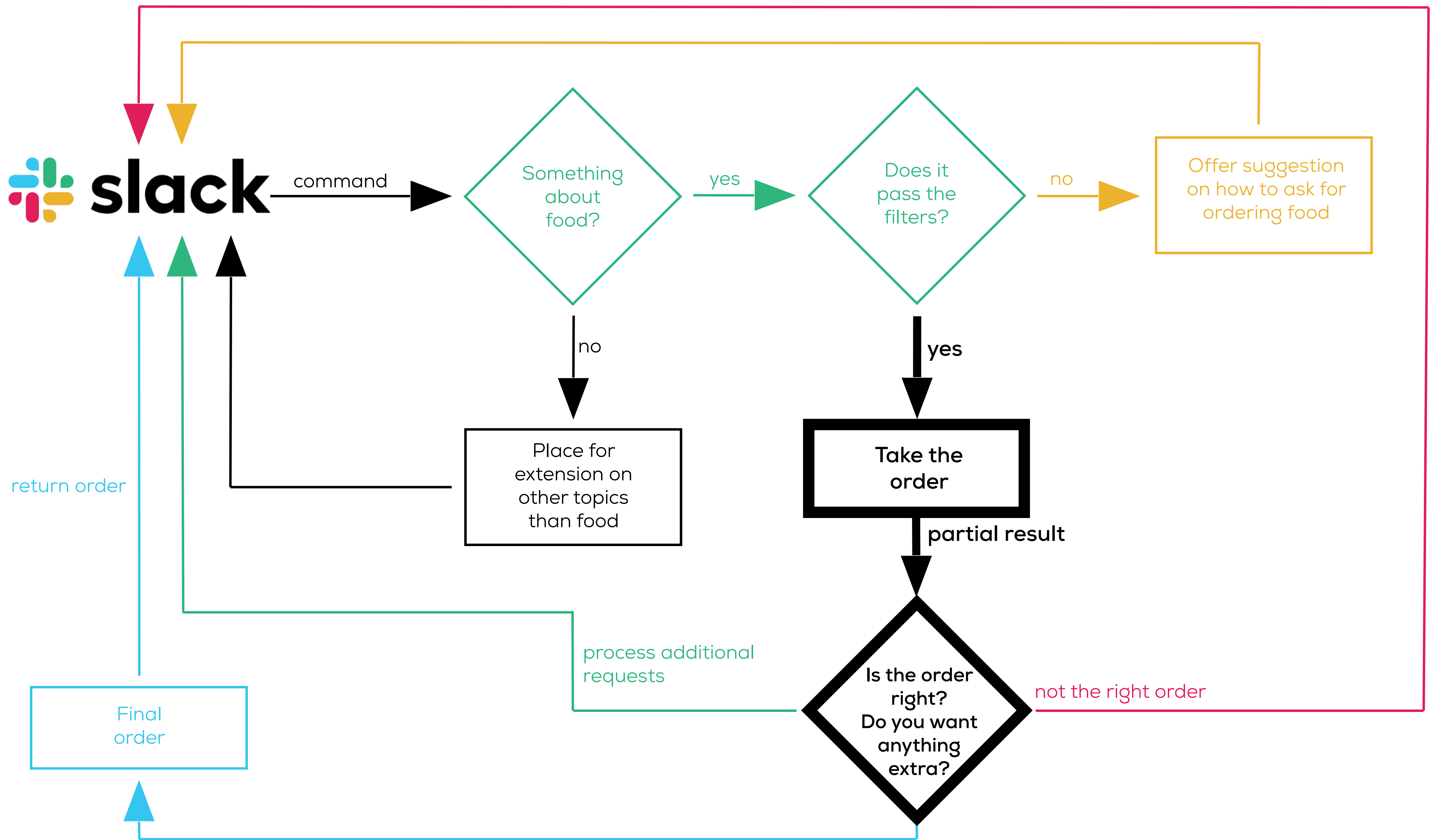
parts of speech

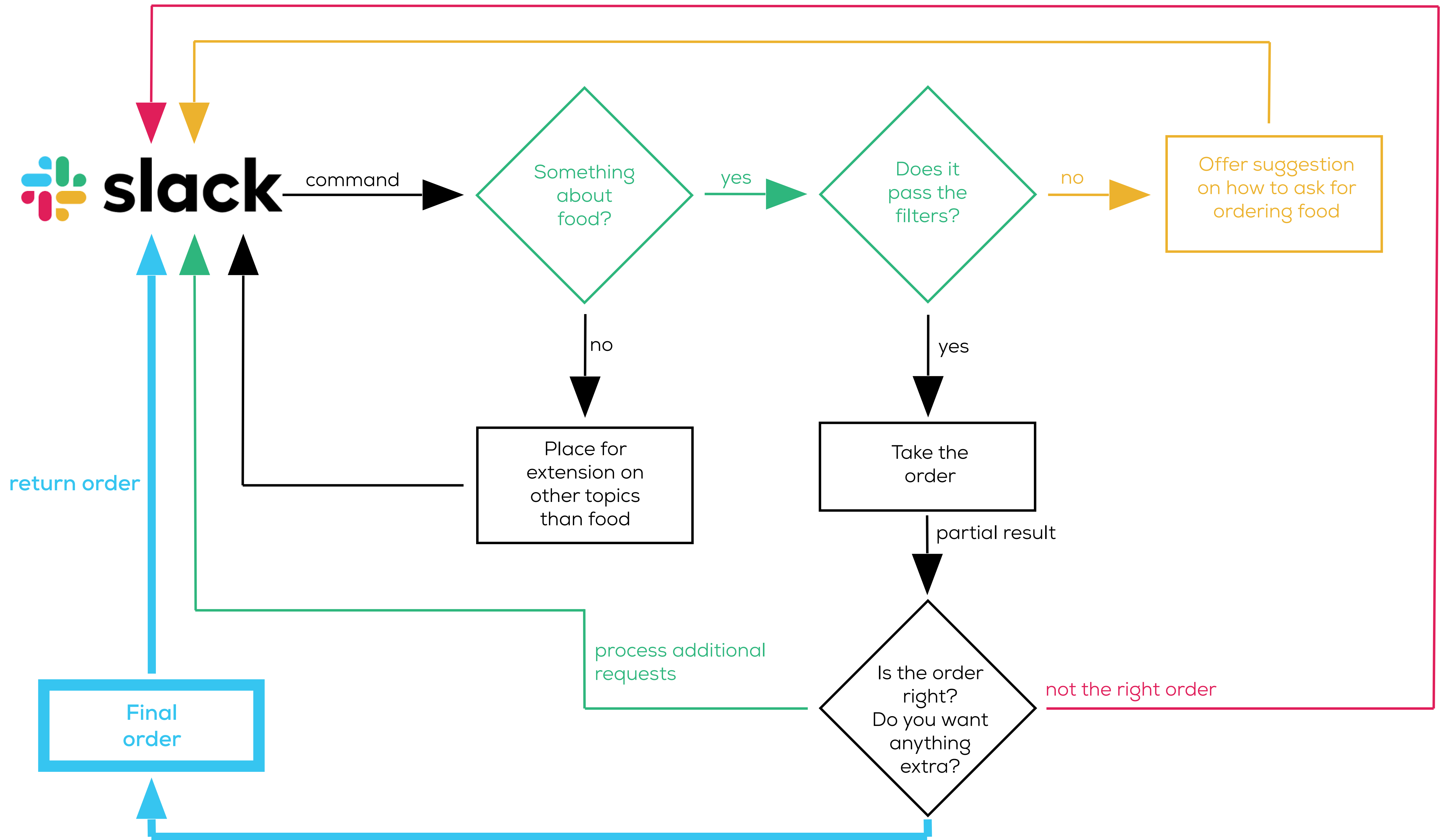


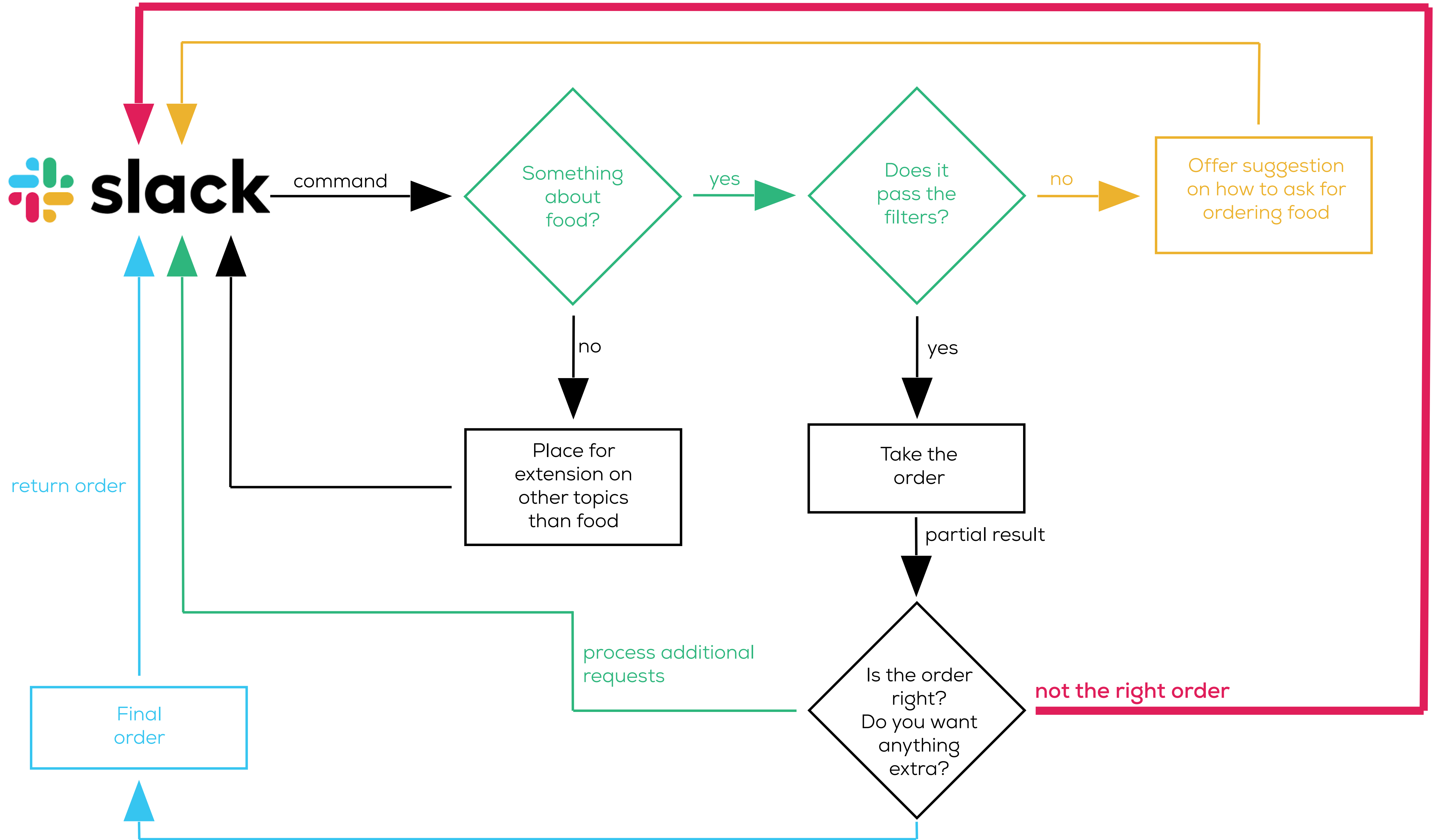


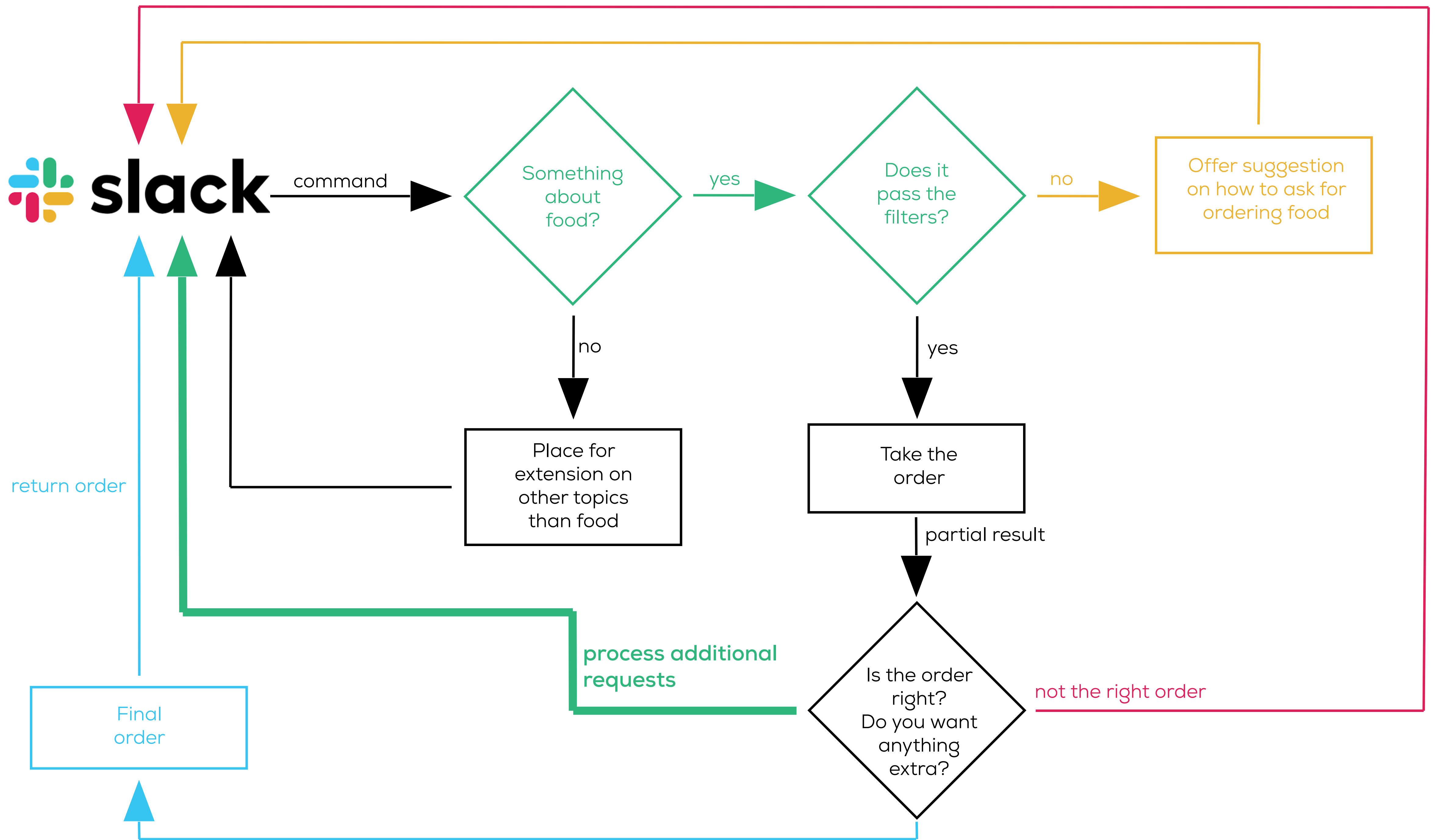












arg 0

I **want** to order a pizza from Toscana

arg 1

## Semantic Role Labeling

short: splits the sentence by verbs and their arguments to the left and right

arg 0

I want to **order** a pizza from Toscana

arg 1

**DT NN IN NNP**

a pizza from Toscana

## Dependency parsing

evaluates each word as a part of speech  
gives the relationships between these parts of speech

**DT** determiner

**NN** noun, singular

**IN** preposition/subordinating conjunction

**NNP** proper noun, singular



# Chapter 4

# Some Results

test cases

ways of talking to the bot

bot's answers



**Tudor** 11:38 AM

@Starter Bot I love ordering burgers



**Starter Bot** APP 11:38 AM

If you want me to order some food, try:  
@Starter Bot I want to order <<food>>



**Tudor** 11:38 AM

@Starter Bot I hate ordering burgers



**Starter Bot** APP 11:38 AM

If you want me to order some food, try:  
@Starter Bot I want to order <<food>>

Really, it's not a love/hate relationship



**Romina Baila** 11:47 AM

@Starter Bot Tell me how the weather is



**Starter Bot** APP 11:47 AM

Not sure what you mean



**Romina Baila** 11:48 AM

@Starter Bot Tell me how to bake a pizza



**Starter Bot** APP 11:48 AM

Not sure what you mean

Let's stick to  
ordering some  
food.  
Okay?

I said,  
let's stick to  
ordering  
food



**Romina Baila** 11:45 AM

@Starter Bot I want to order 2 pizzas  
and 3 cats



**Starter Bot** APP 11:45 AM

Would you like me to order: 2 pizzas  
from LOCATION NOT SET?  
<Yes/No/I also want to order...>



**Romina Baila** 11:45 AM

I also want to order 3 burgers and tell me  
how the weather is

@Starter Bot I also want to order 3  
burgers and tell me how the weather is



**Starter Bot** APP 11:46 AM

Would you like me to order: 2 pizzas, 3  
burgers from LOCATION NOT SET?  
<Yes/No/I also want to order...>



**Tudor** 11:34 AM

@Starter Bot I want to order 3 hotdogs



**Starter Bot** APP 11:34 AM

Would you like me to order: 3 hotdogs  
from LOCATION NOT SET?  
<Yes/No/I also want to order...>

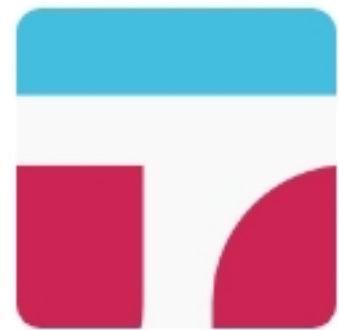
More like it ...





**Starter Bot** APP 11:34 AM

Would you like me to order: 3 hotdogs  
from LOCATION NOT SET?  
<Yes/No/I also want to order...>



**Tudor** 11:34 AM

@Starter Bot Yes



**Starter Bot** APP 11:34 AM

Please set the location from which to  
order by: I want to order from <location>

Okay, I can  
do that,  
but first  
I need a very  
important detail



**Starter Bot** APP 11:34 AM

Please set the location from which to order by: I want to order from <location>



**Tudor** 11:34 AM

@Starter Bot I want to order from Hotdog Town



**Starter Bot** APP 11:34 AM

Would you like me to order: 3 hotdogs from Hotdog Town?  
<Yes/No/I also want to order...>

... on the right track ...





**Starter Bot** APP 11:34 AM

Would you like me to order: 3 hotdogs  
from Hotdog Town?  
<Yes/No/I also want to order...>



**Tudor** 11:34 AM

@Starter Bot Yes



**Starter Bot** APP 11:34 AM

I will order: 3 hotdogs from  
Hotdog Town

... aaannd, you got it! 🎉

# Chapter 5

# Our Conclusion

so far, what's done is done  
it's not a bug, it's a feature  
what does the future bring?

Thanks