

Tilde.AI Training



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Development of a virtual assistant

Dialog scenarios

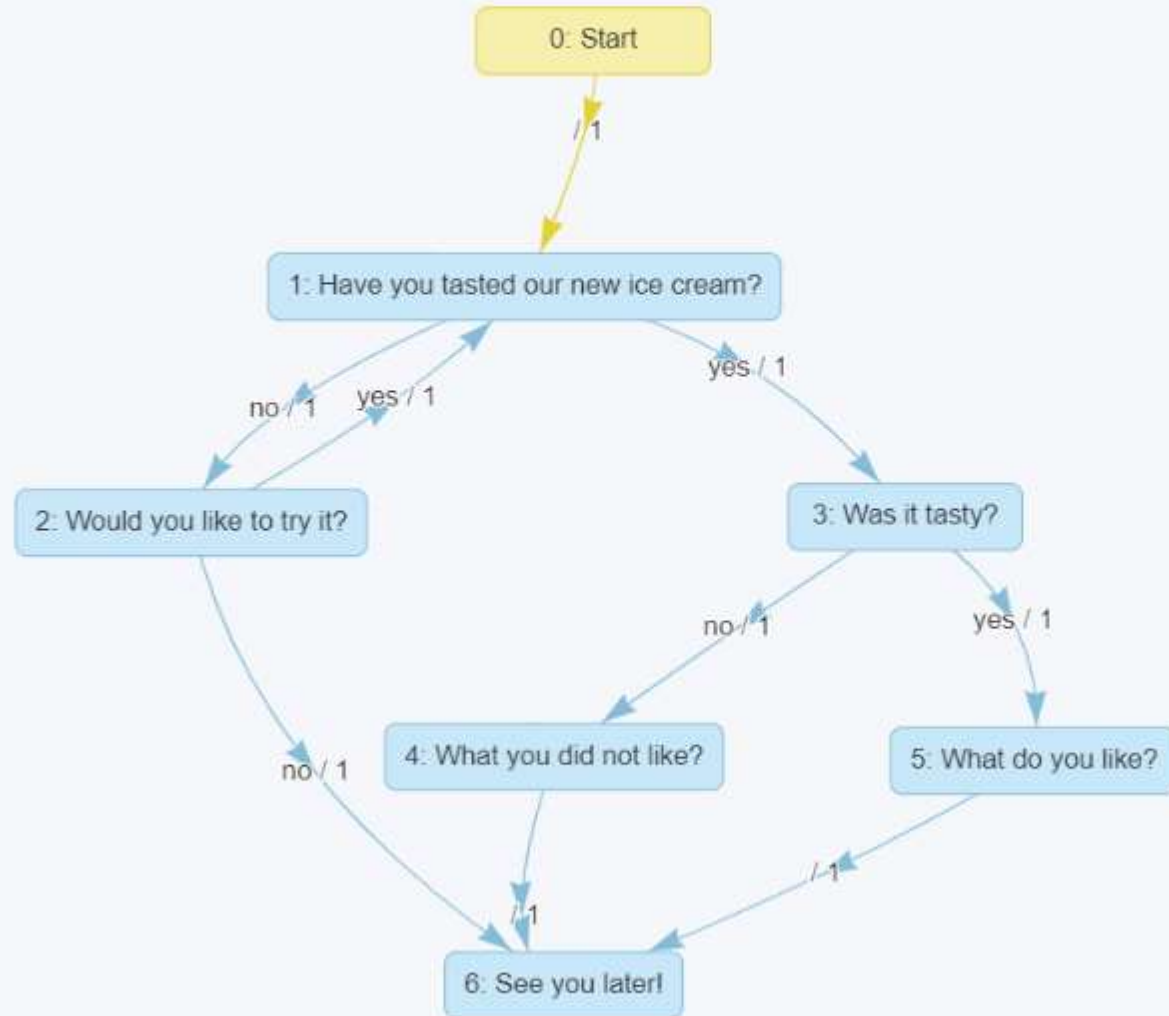
- Bots Talk by Scenario
- As in a shop
 - Good afternoon
 - Do you have a discount card?
 - Would you like to purchase our special offer today?
 - Do you need a bag?
 - Bye!

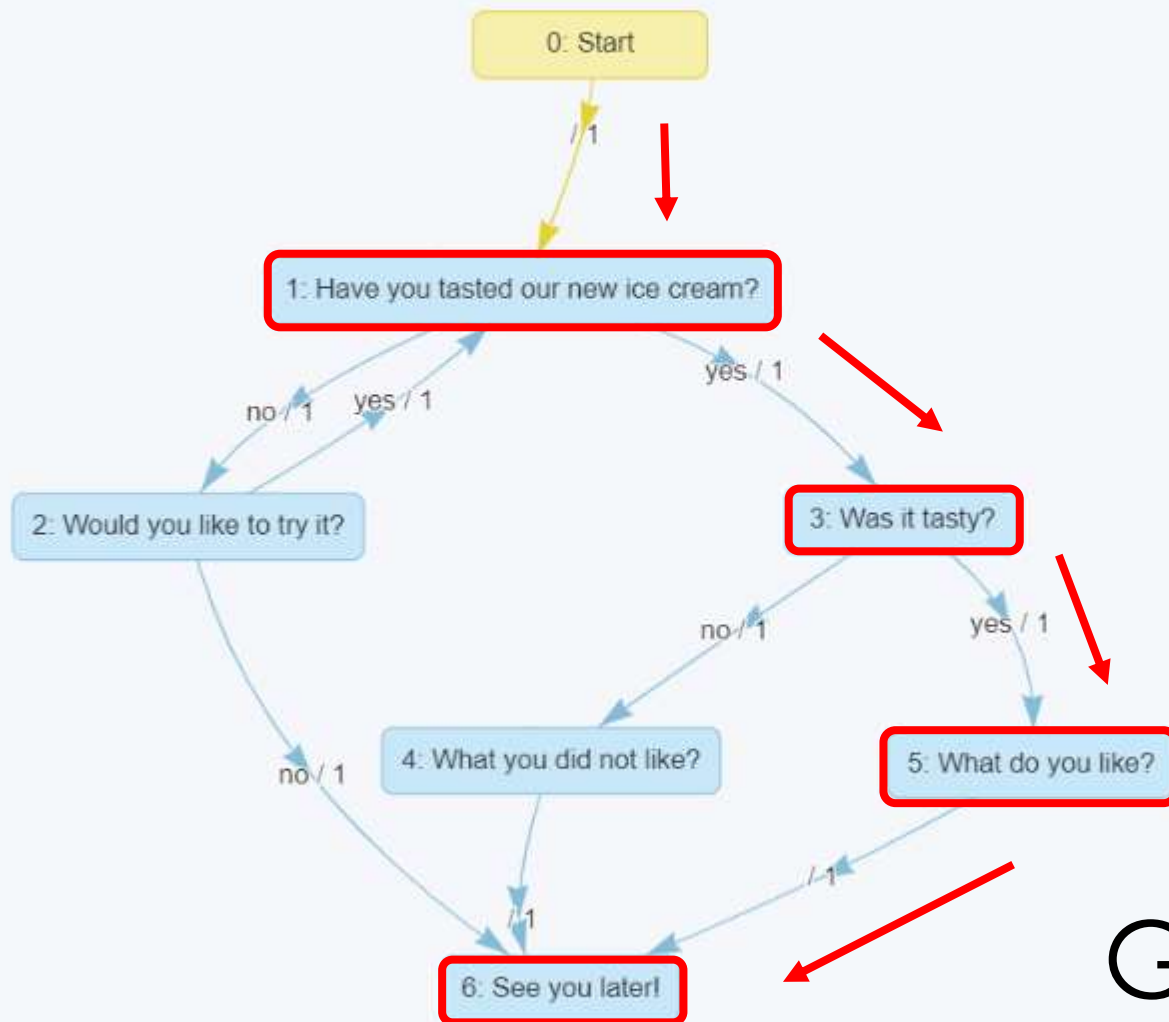
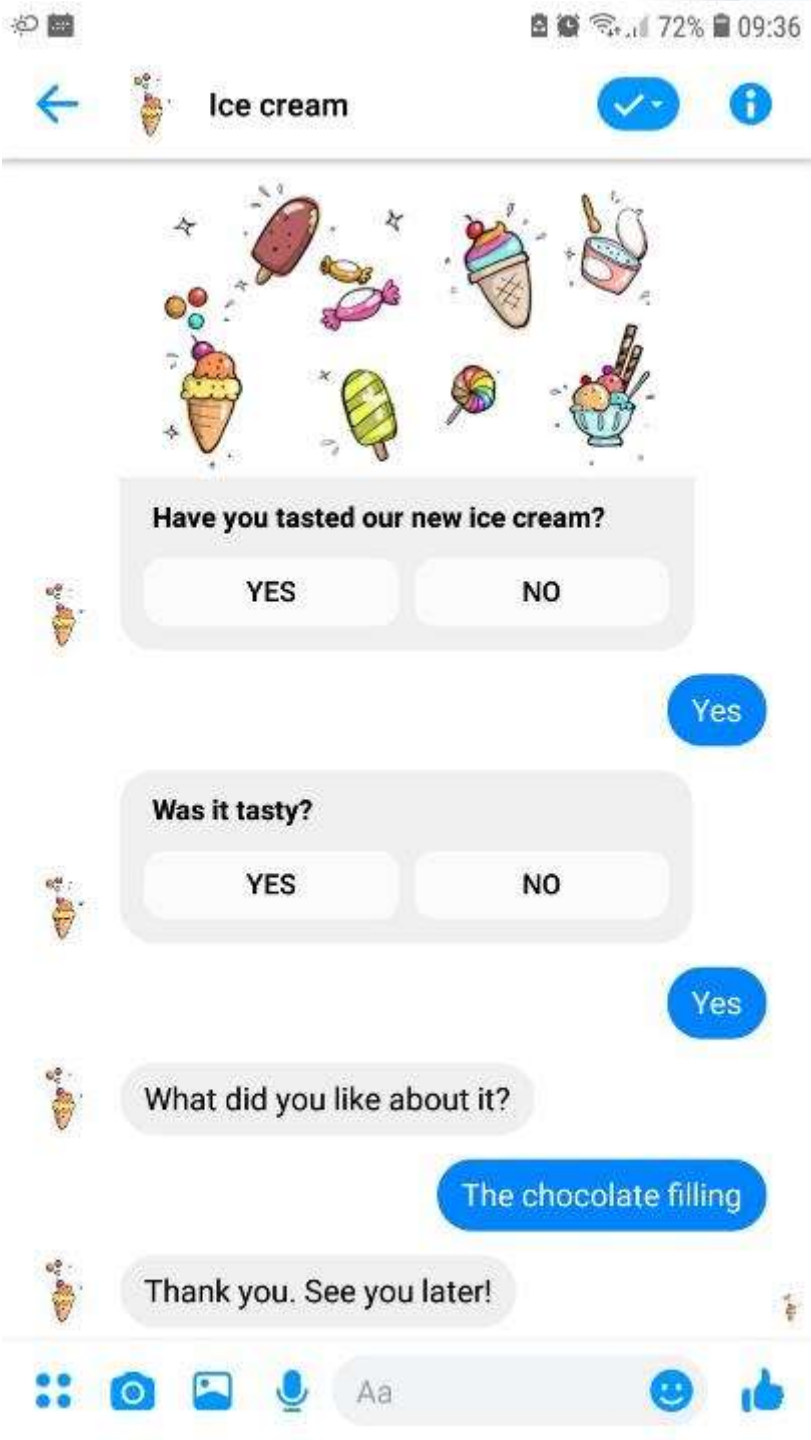


Guided Dialog

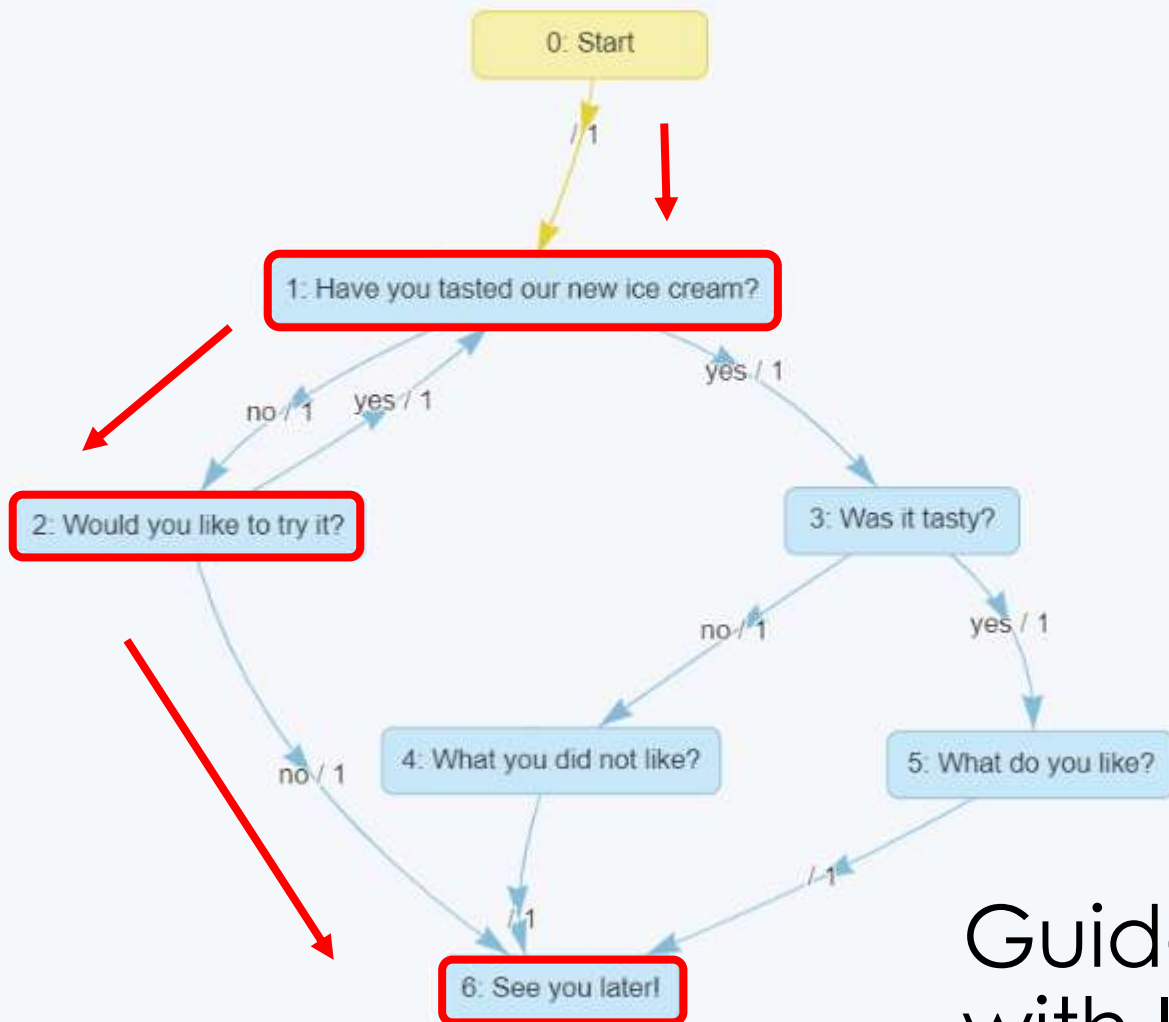
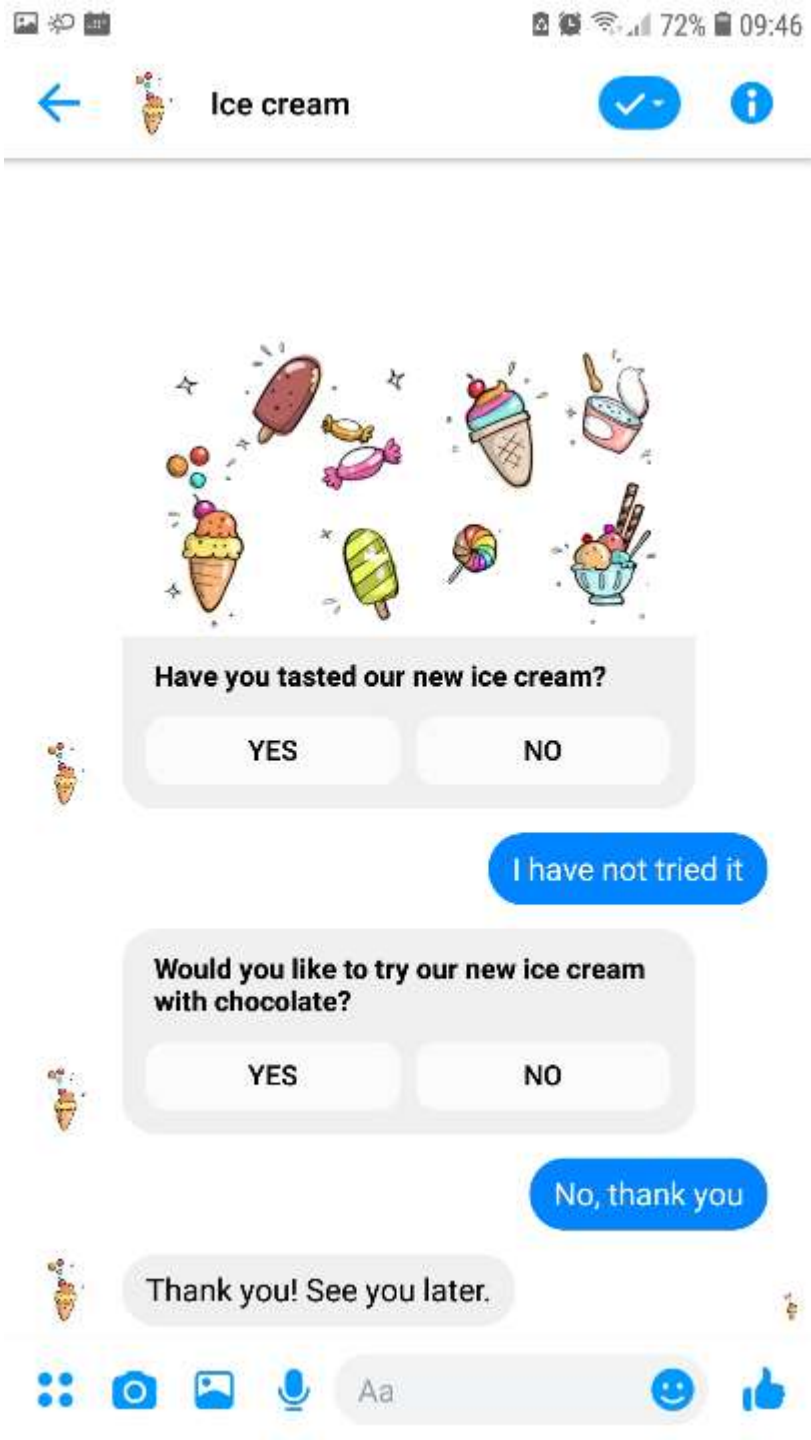
- Basic elements of the dialog scenario

- states
- transitions





Guided
Dialog



Guided Dialog
with Intents

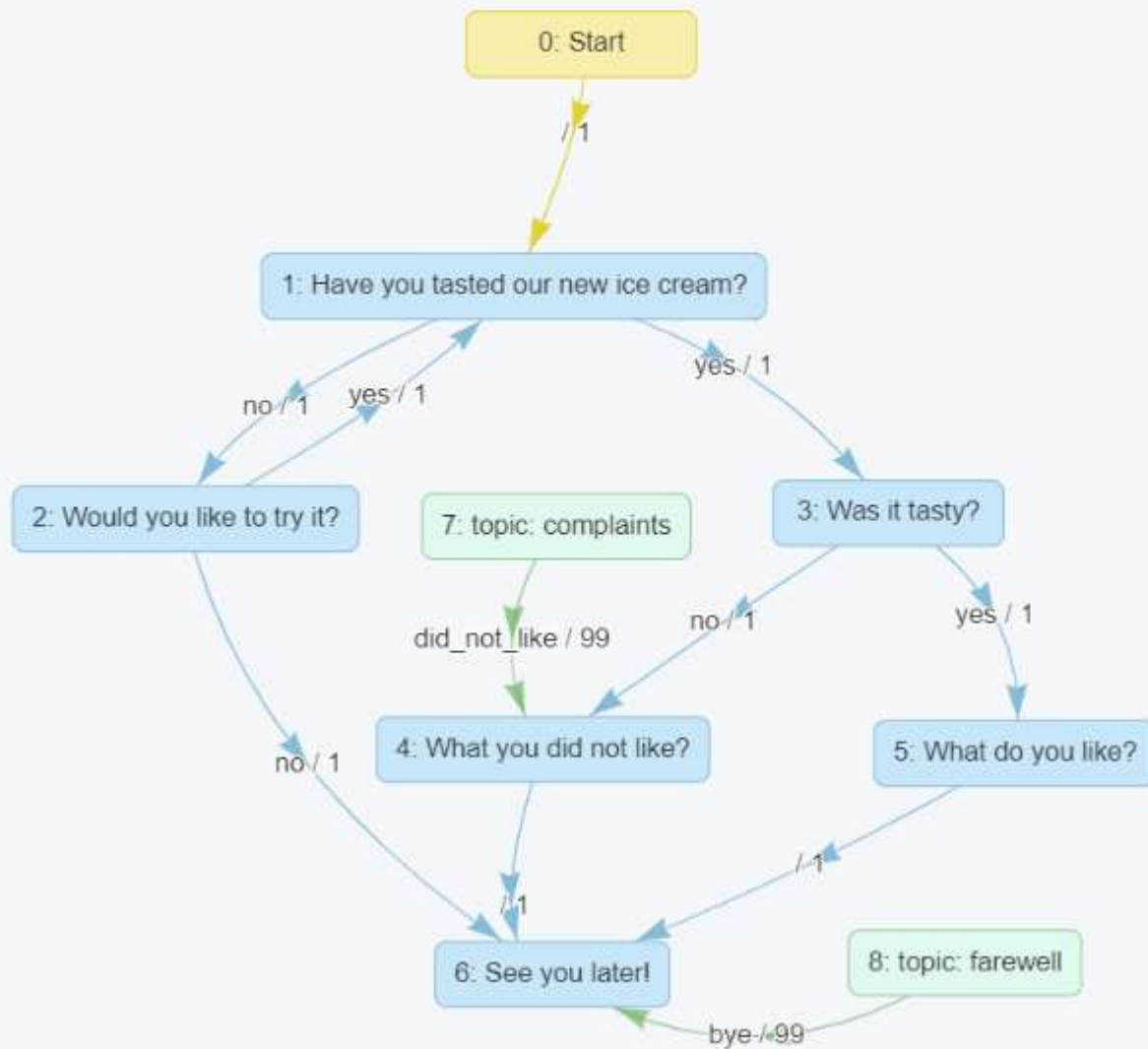
Intents

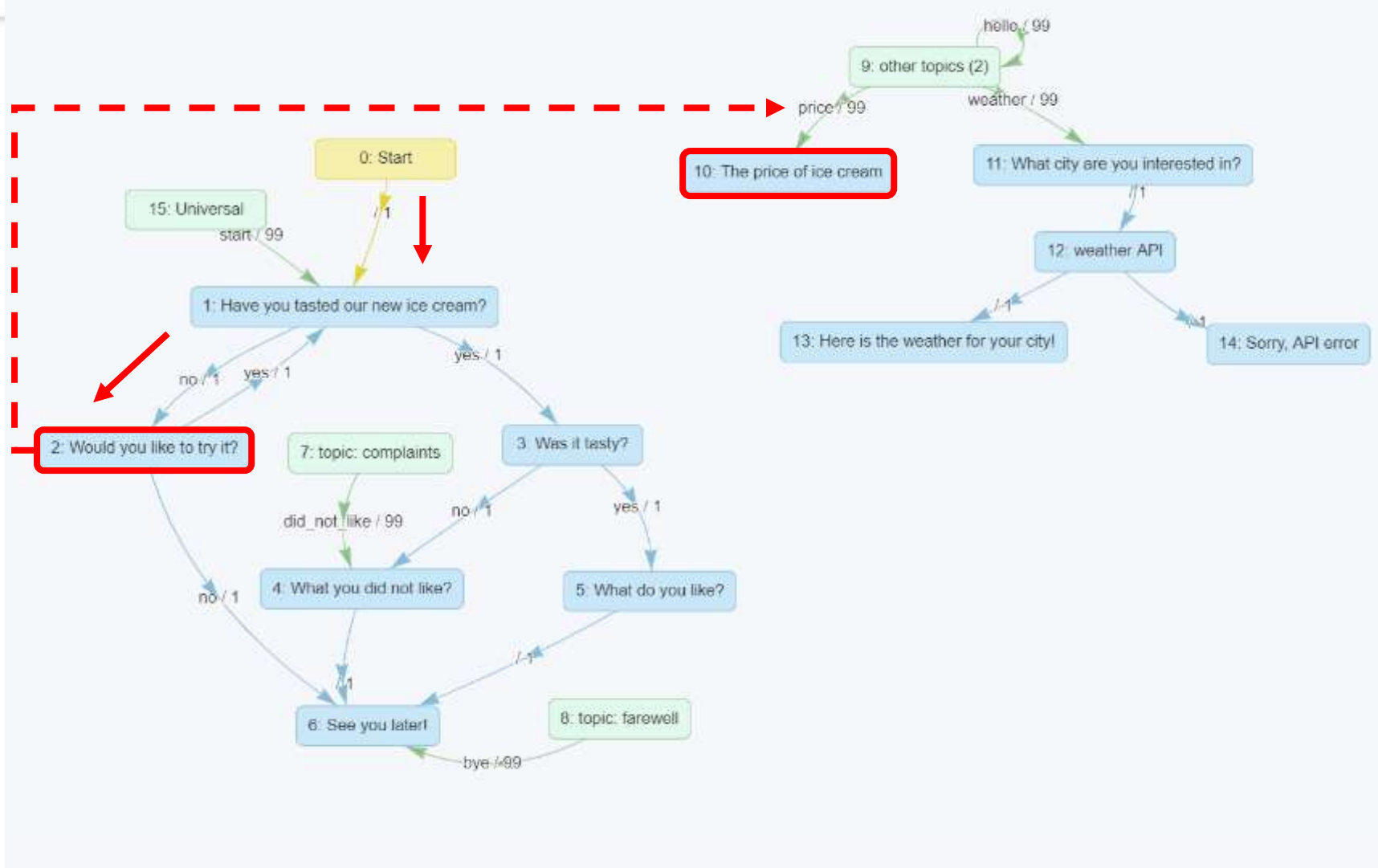
- Bot determines the intent of each user input
- **Intents** might be very different
 - Greetings
 - Confirmation/denial
 - Commands
 - Questions
 - Information
 - Farewell
 - Thanking etc.
- User can express the intent in very **different ways**



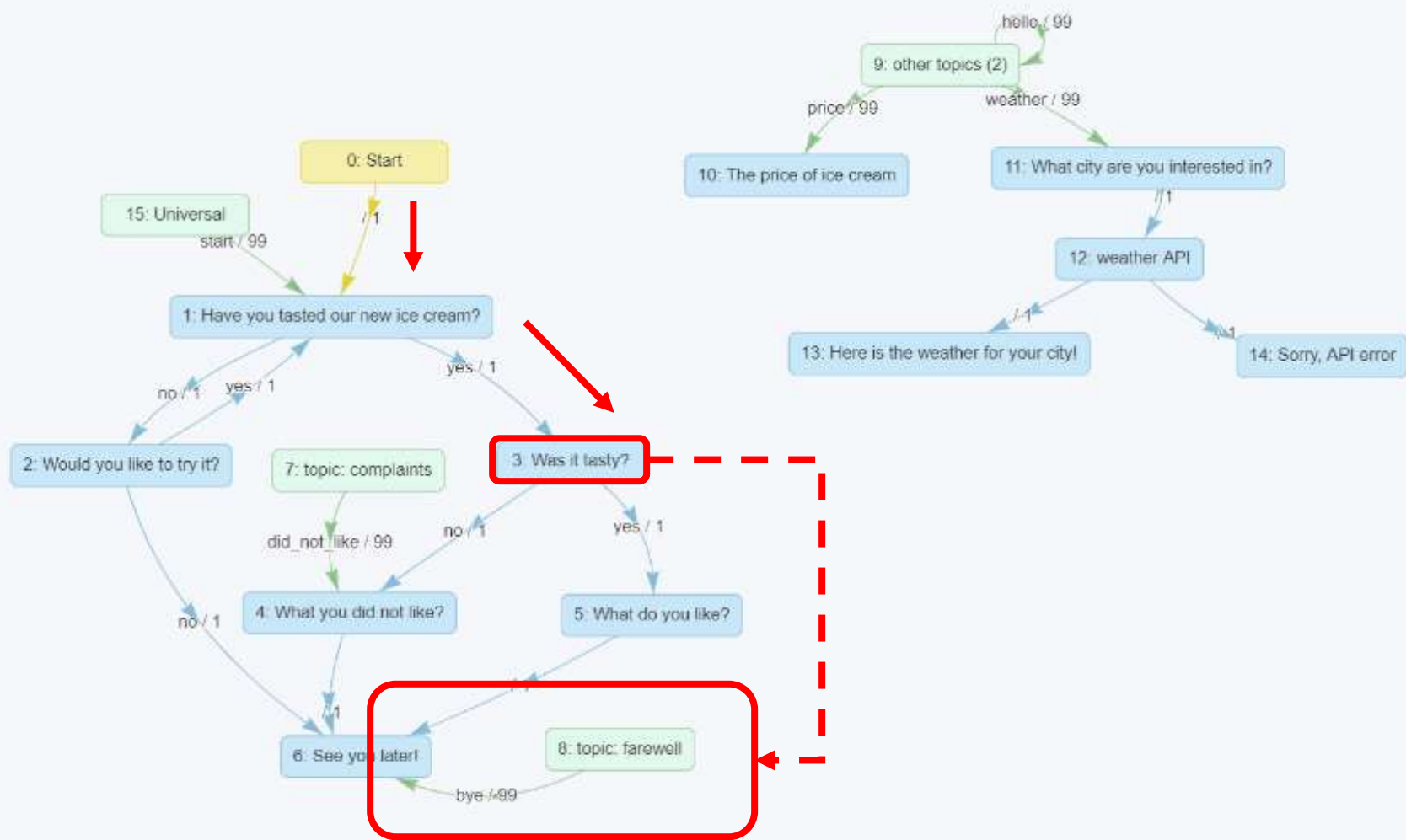
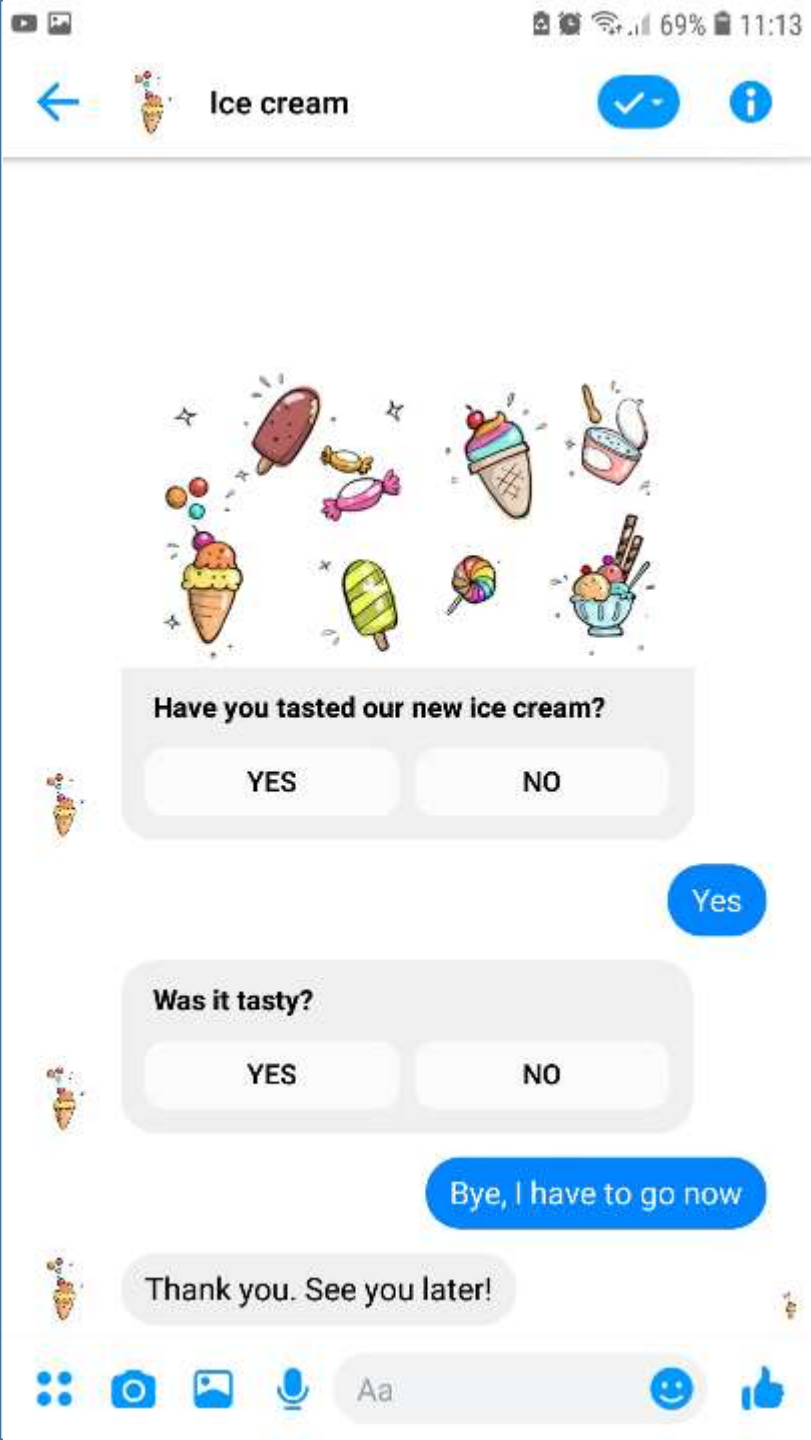
Topics

- You can move to a topic from any state



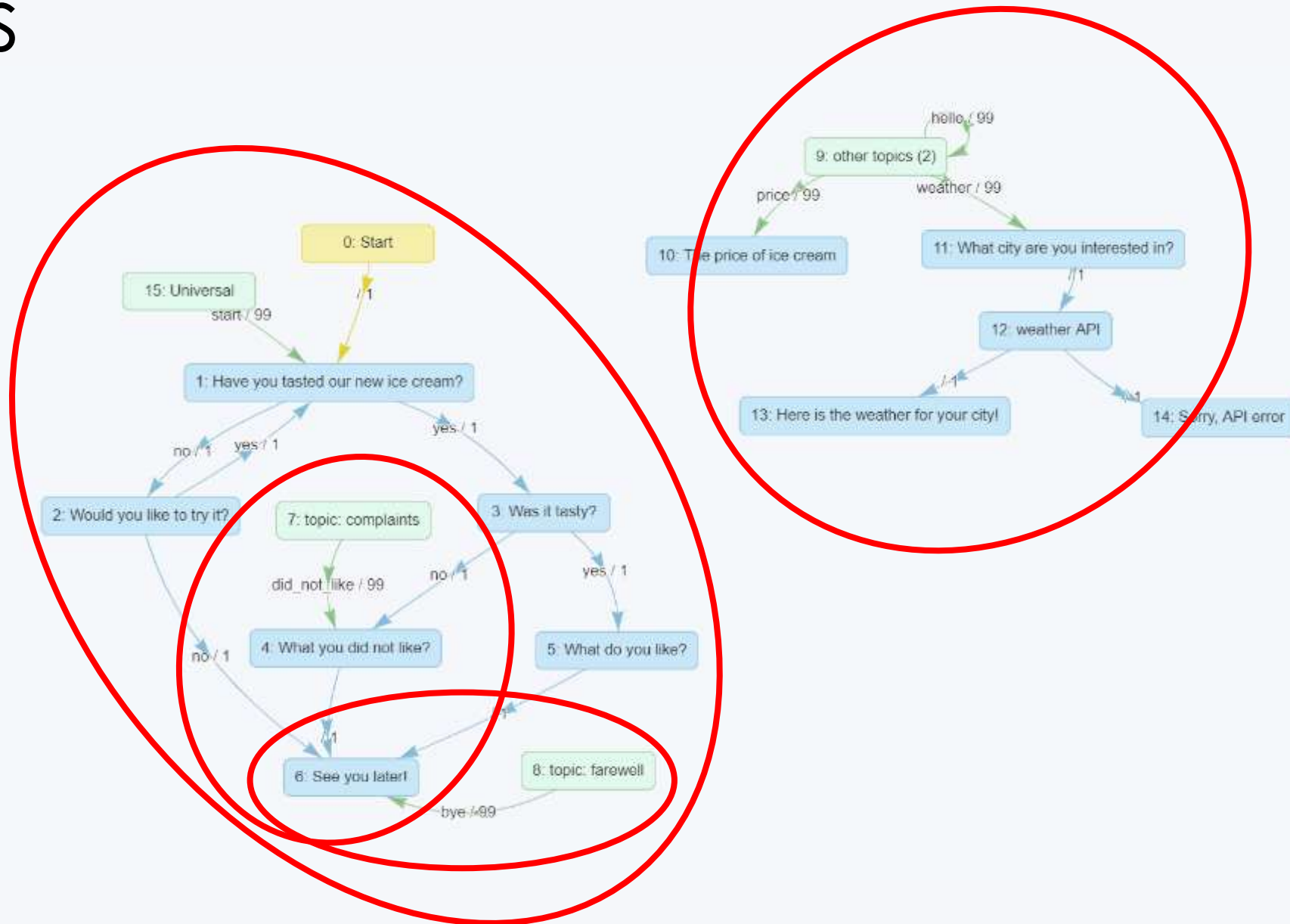


Topics



Topics

Topics



Activities

- provide a response to the user
- ask an additional question
- call an external function

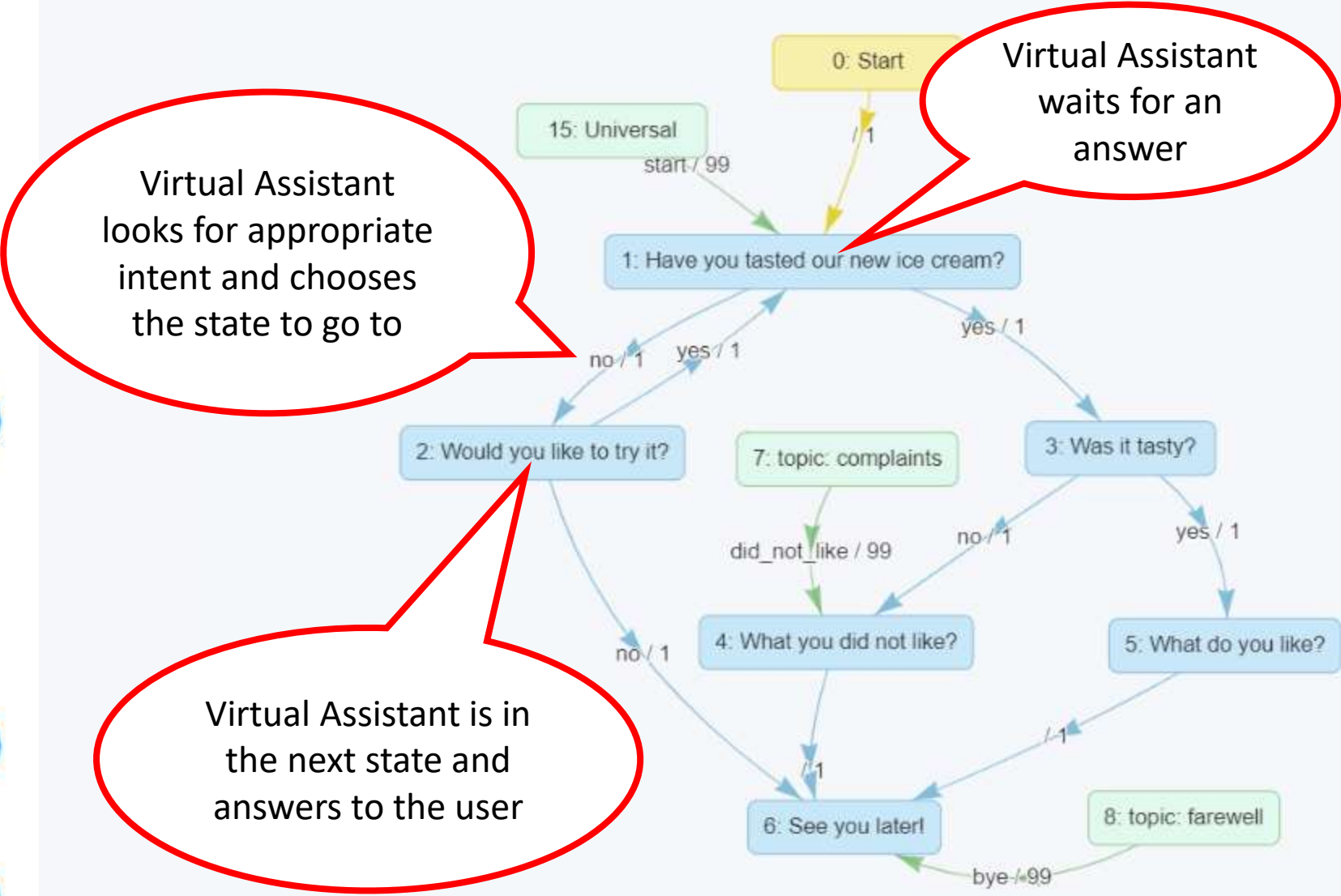
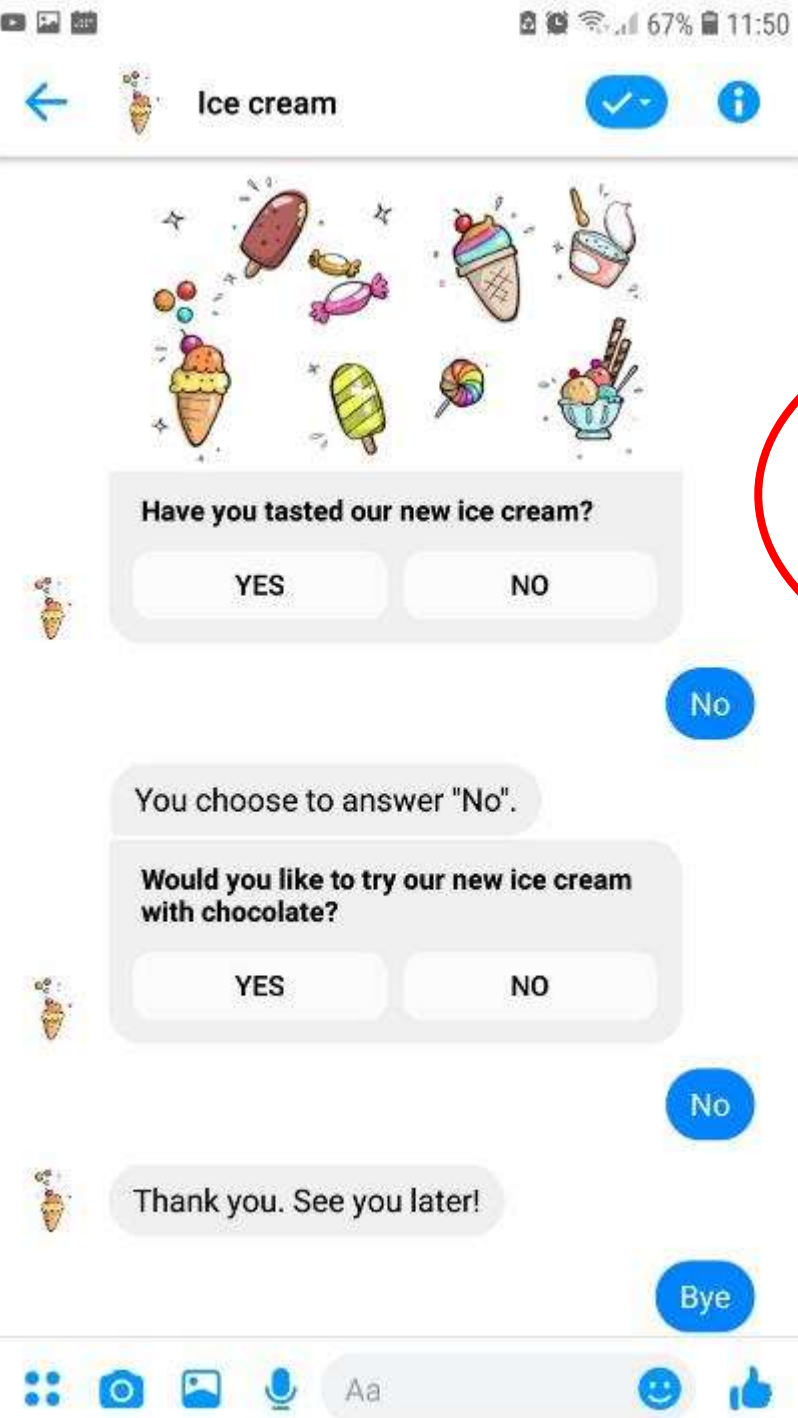


Activities

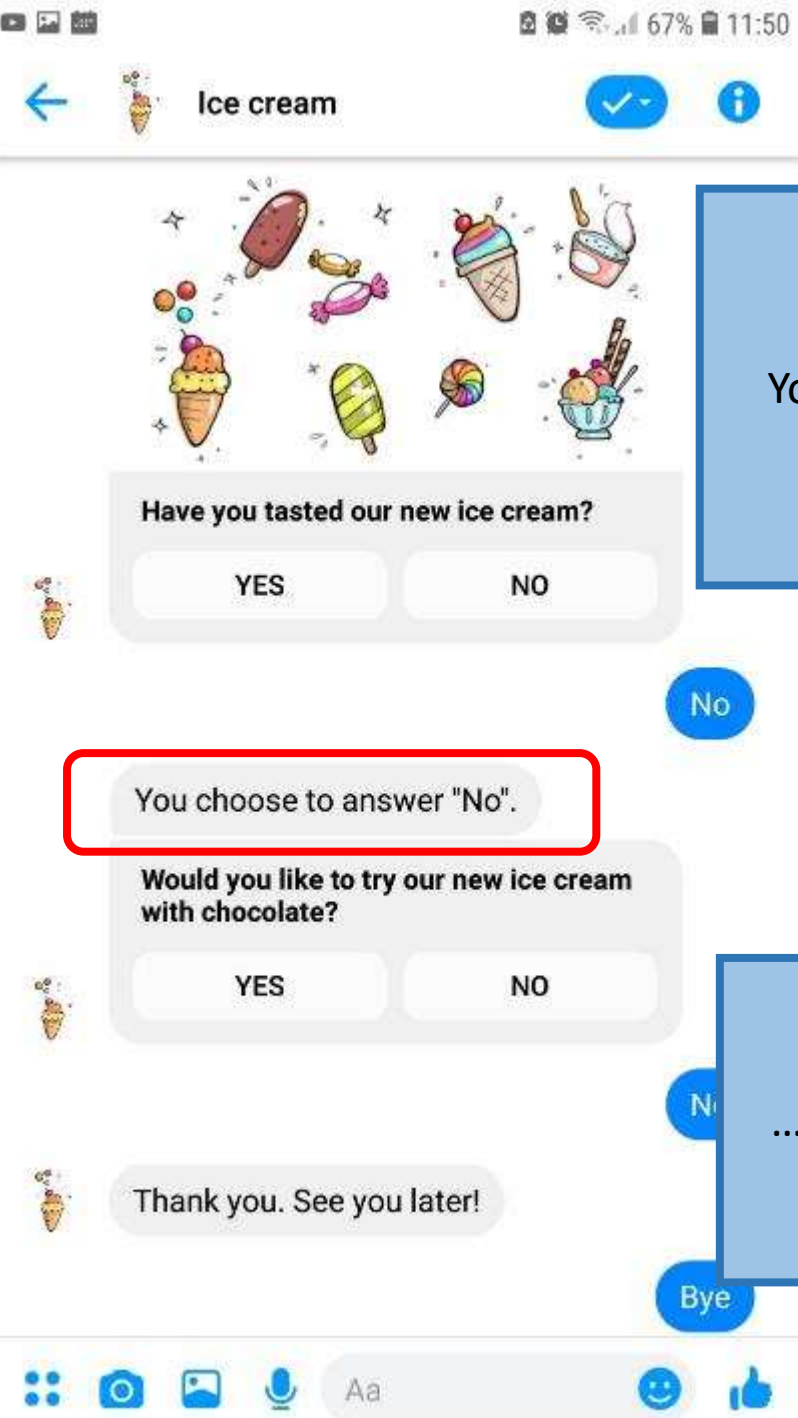
when the conversation gets into a state, the bot:

- perform an action,
- allows or requests the user to enter something,
- detects the intent of the user's input,
- goes to another state, depending on the intent.





Activities



You chose to answer «No»

...but would you like to try it?



Activities in States & Transitions

Entities

- **Entity** is a designation of any particular or abstract object that can be recognized in user messages
- Names, addresses, numbers, telephone numbers, e-mail addresses, addresses, times, dates, cities, postal codes, URLs, miscellaneous codes, etc.

Questions & Answers

other topics

Topic description

2 Questions and answers ⓘ

User types (27) ✎

good evening

Virtual assistant replies (1) ✎

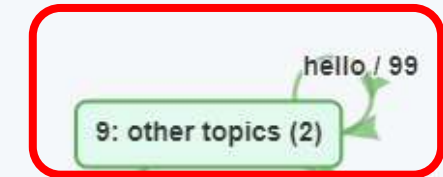
Hi!

User types (11) ✎

what is the best ice cream

Virtual assistant replies (1) ✎

I love vanilla ice cream a lot! 🍦



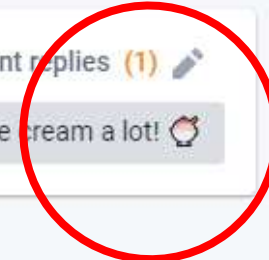
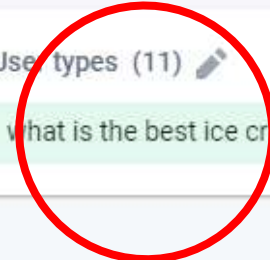
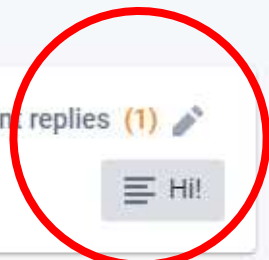
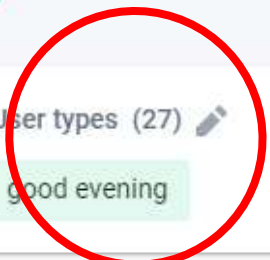
10: The price of ice cream

11: What city are you interested in?

12: weather API

13: Here is the weather for your city!










14: Sor




Data tables

- Bot's knowledge

price 5 entries

Parameter	Value		
Häagen-Dazs	3.70 Euro		
Pols	1.70 Euro		
Landliebe	2.35 Euro		
chocolate	1.50 Euro		
vanilla	1.10 Euro		

 Add parameter





Training Data Preparation

Outputs or Answers

- Understandable
- Targeted
- Short
- With a full thought
- Grammatically correct
- Appropriate to the bot's personality
- If necessary, links to additional information



Training data

- User may ask the same thing in very different ways
- We need to provide as much examples as we can

- The examples must be **really** different
- The more, the better.
**5 examples are the minimum,
but we recommend at least 10**



Example

- Intent: address
- What's your address?
- Where do I find your office?
- Which street are you located on?
- Where are you?
- Tell me where to go!
- I'll need your address.
- Are you in Madrid?
- Will you say the address?
- What's your legal address?
- Where do I have to go?
- How do I get to you?
- Say, please, where to find you
- Do you have an address, too?
- I already have your home page, I'm interested in the real address
- ...



Integration with external systems

- Opportunity to acquire additional knowledge
- Ability to perform actions on external systems
- Examples
 - e-Commerce system
 - Open Data Portals
 - Weather forecast etc.
- REST JSON Web Services





Virtual Assistant Management Site

<https://tilde.ai>



Welcome to your
VA management site

 User name

 Password

Enter >

Conversations

Rating



ID

Select date range...



Export

	User	1s
	User	34m
	User	34m
	User	35m
	User	1h
	User	3h
	Ralvis Skadiņš	1mth
	User	3mth
	Walter O'Brien	3mth
	User	3mth
	User	3mth
	Inese Vira	3mth

13:05:10 06.07.2020.

Have you tasted our new ice cream?

Yes No

Was it tasty?

Yes No

What did you like about it?

Thank you! Bye!

Yes

Yes

Chocolate filling

User
ID: DM440273kuC9dWUafh

13:05:10 06.07.2020.

Intent
Confidence: 0.99929523
ID: yes

Transfers
3: Was it tasty? -> 5: What do you like?

Intents

```
[
  {
    "intentid": "yes",
    "confidence": 0.999295235
  },
  {
    "intentid": "no",
    "confidence": 0.00050702825
  },
  {
    "intentid": "hello",
    "confidence": 0.000110866087
  },
  {
    "intentid": "best_icecream",
    "confidence": 0.0000299540188
  },
  {
    "intentid": "did_not_like",
    "confidence": 0.0000139218773
  }
]
```

Entities

Context

```
{
  "@@locale": "en-en",
  "@@host": "https://botdashboard.tilde.ai",
  "@@media": "https://prodbotpublicresources.blob.core.windows.net/prod-bot-public-resources/prodboticecrea637655650/live/",
  "@@input": "Yes",
  "@@channel": "directline",
  "@@returnfromuniversal": "False",
}
```


Analytics

Jan 1, 2020 - Jul 6, 2020

Users

65

Users that sent a message

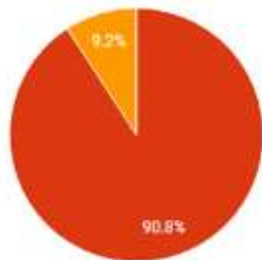
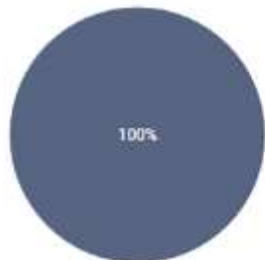
50

Language

Count

lv-lv 34

en-en 16



- New users
- Returning users

Messages

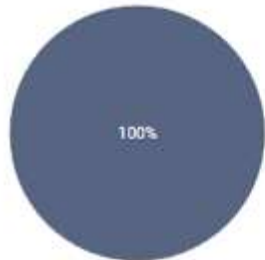
295

Language

Count

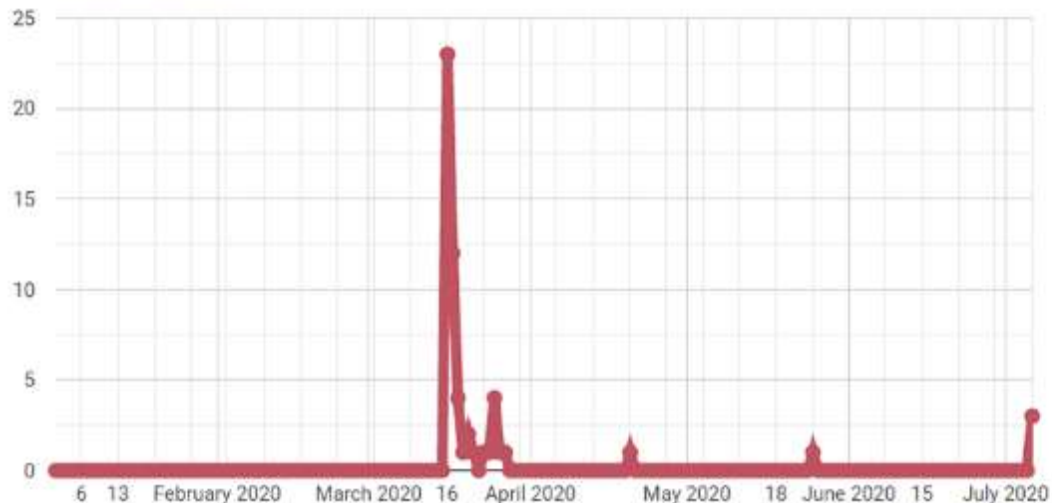
lv-lv 155

en-en 140



- Autoresponded
- Manual response

User activity



Most used intents

ID	Sample	Hits	en-en
price	How much is the price	32	32
yes	yes	21	21
start	begin	15	15
hello	good evening	13	13
no	no	12	12
weather	will it be snowing today	8	8
bye	bye	7	7
best_icecream	what is the best ice cream	3	3
did_not_like	I did not liked	1	1

Most used states

ID	Title	Hits	en-en
1	Have you tasted our new Ice cream?	30	30
10	The price of ice cream	21	21
6	See you later!	20	20
9	other topics	15	15
3	Was it tasty?	12	12
11	What city are you interested in?	8	8
5	What do you like?	8	8
2	Would you like to try it?	7	7
12	weather API	7	7

Training

Add Import Export Delete Other

Search

Unpublished changes

Publish

Scenario

Outputs

Intents

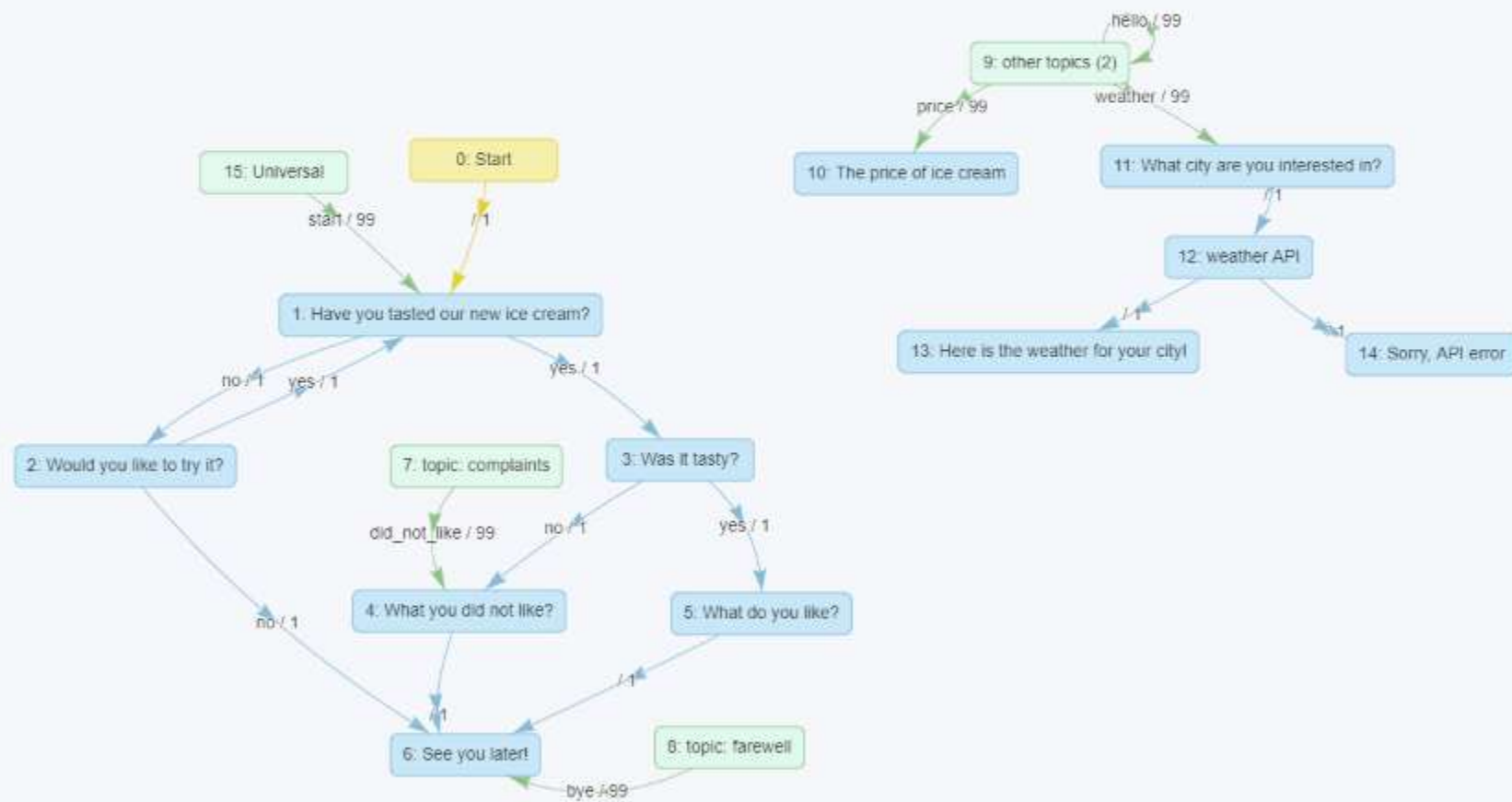
Entities

Actions

Resources

Data tables

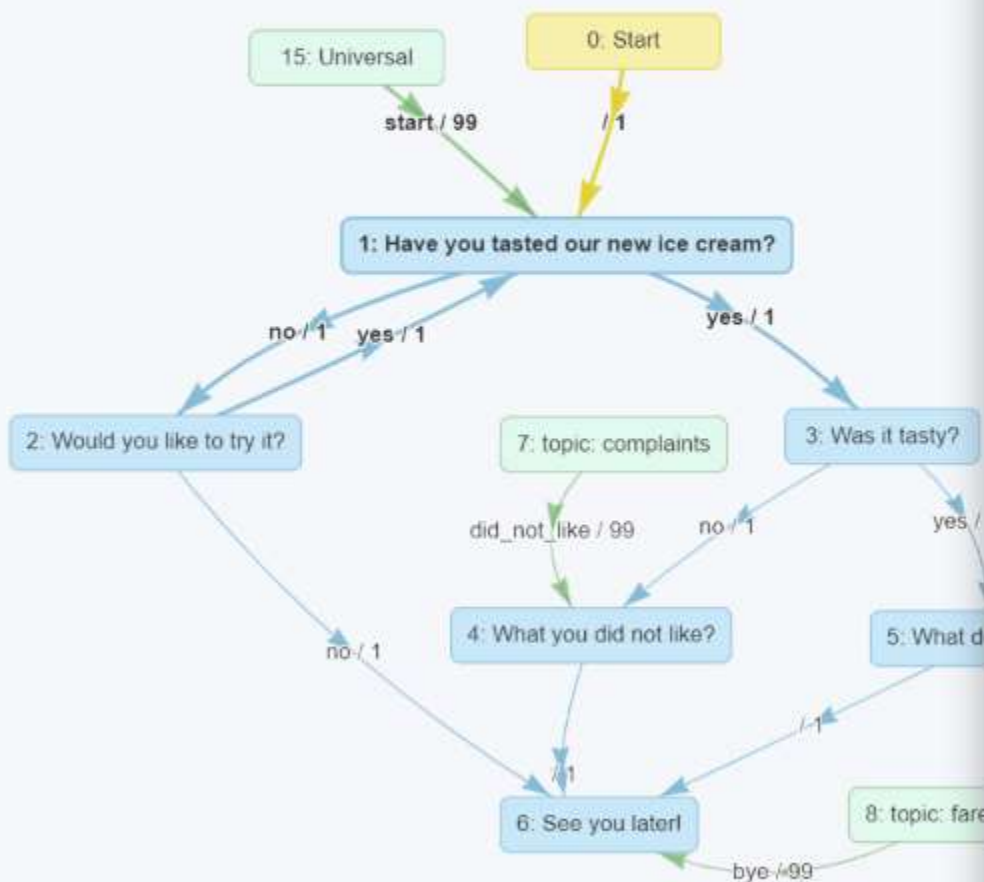
Chat



Training

- Scenario
- Outputs
- Intents
- Entities
- Actions
- Resources
- Data tables
- Chat

⊕ Add
Import
Export
🗑 Delete
Other
Search



State ⓘ

Cancel
Save and close

Have you tasted our new ice cream?

Topic description



#@@media#logo fb.png
 ...resources/prodboticecrea637655650/staging/logo fb.png
 Choose image or provide an image link

Title

Have you tasted our new ice cream?

Yes No

⊕ Add

⊕ Add

Apmācība

Scenario

Outputs

Intents

Entities

Actions

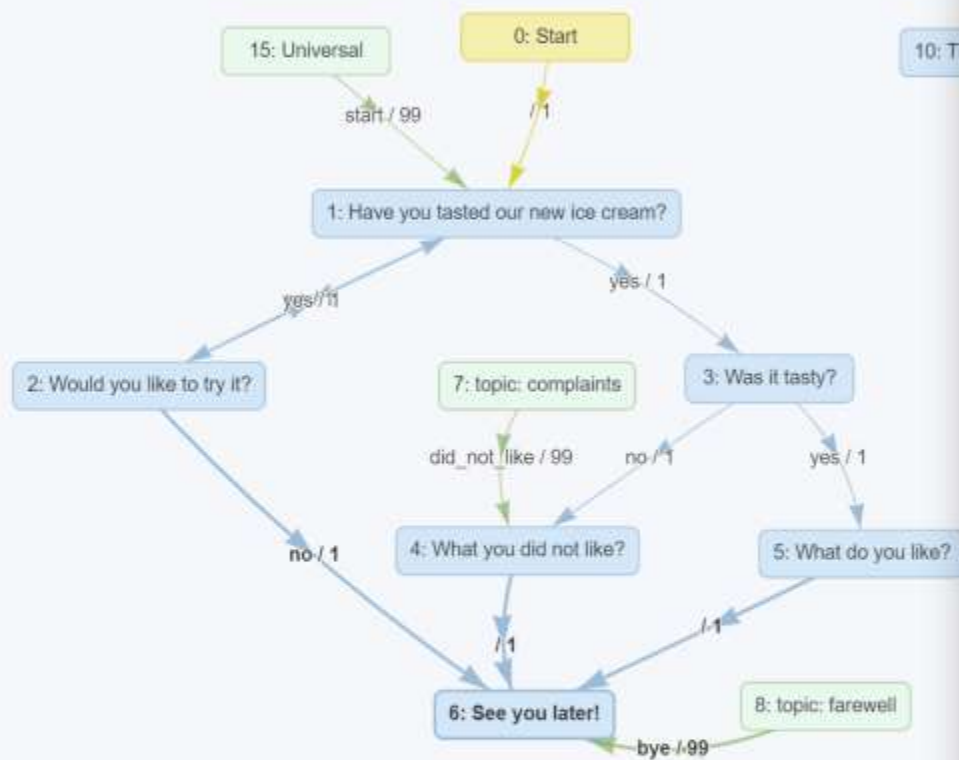
Resources

Data tables

Chat

Add Import Export Delete Other

Search



State ⓘ

Cancel

Save and close

See you later!

Topic description

Thank you. See you later!

- or Thank you! See you later.

- or Thank you! Bye!

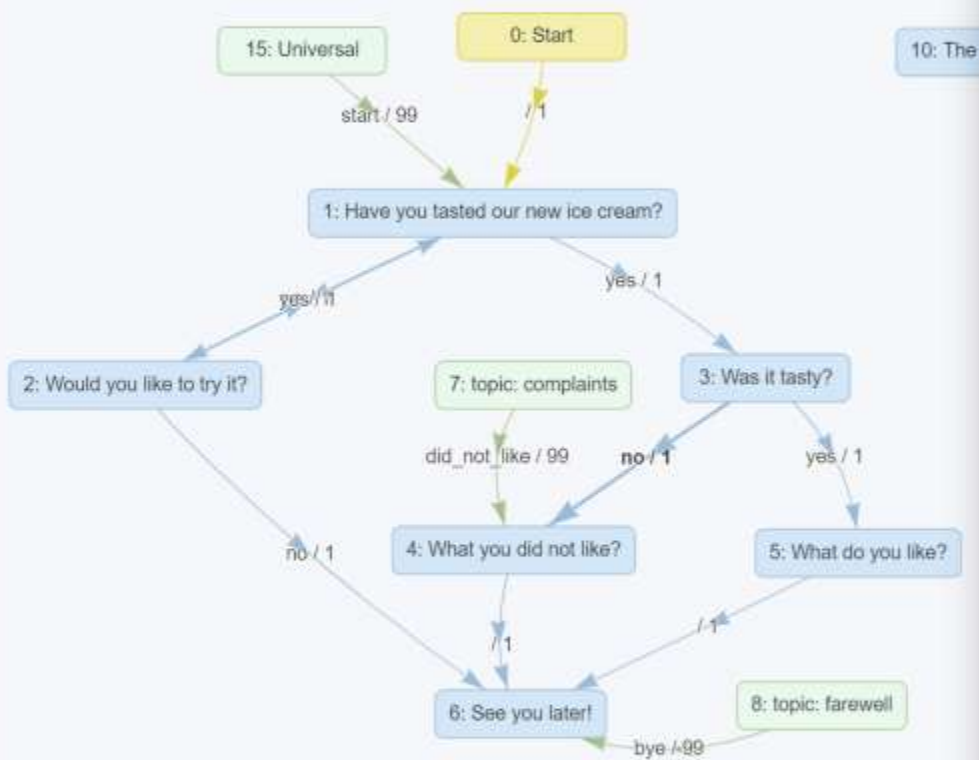
Add an option

Add

Apmācība

- Scenario
- Outputs
- Intents
- Entities
- Actions
- Resources
- Data tables
- Chat

⊕ Add
Import
Export
🗑 Delete
Other
Search



Transition

Close

User types (22) ✎
 Virtual assistant replies (0) ✎
 ...

no

No answers added

⊕ Add transition

Training

Scenario

Outputs

Intents

Entities

Actions

Resources

Data tables

Chat

Add

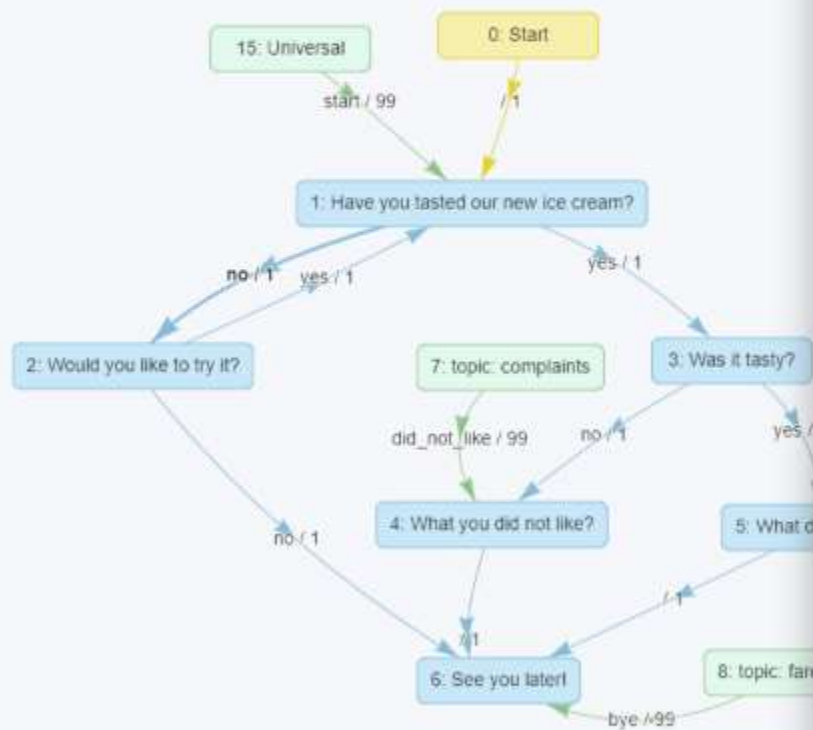
Import

Export

Delete

Other

Search



Transition ⓘ

Cancel

Save and close

Actions

Advanced

Intent

Intent ID

no

- 1 no
- 2 not sure
- 3 not
- 4 nope
- 5 that is no
- 6 do not think so
- 7 don't think so
- 8 dont think so
- 9 disagree

You choose to answer "No".

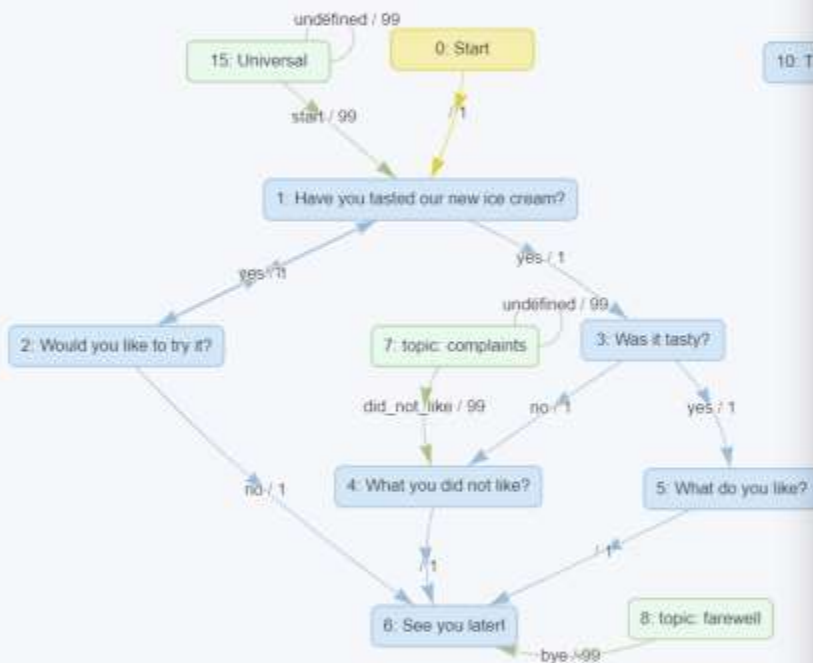
Add an option

Add

Apmācība

- Scenario
- Outputs
- Intents
- Entities
- Actions
- Resources
- Data tables
- Chat

+ Add ▾
 Import
Export
🗑️ Delete
Other ▾
Search



Topic ⓘ

Cancel Save and close

other topics

Topic description

2 Questions and answers ⓘ

User types (27) ✎

Virtual assistant replies (1) ✎

good evening

Hi

User types (11) ✎

Virtual assistant replies (1) ✎

what is the best ice cream

I love vanilla ice cream a lot! 🔄

+ Add questions and answers group

Apmācība

Scenario

Outputs

Intents

Entities

Actions

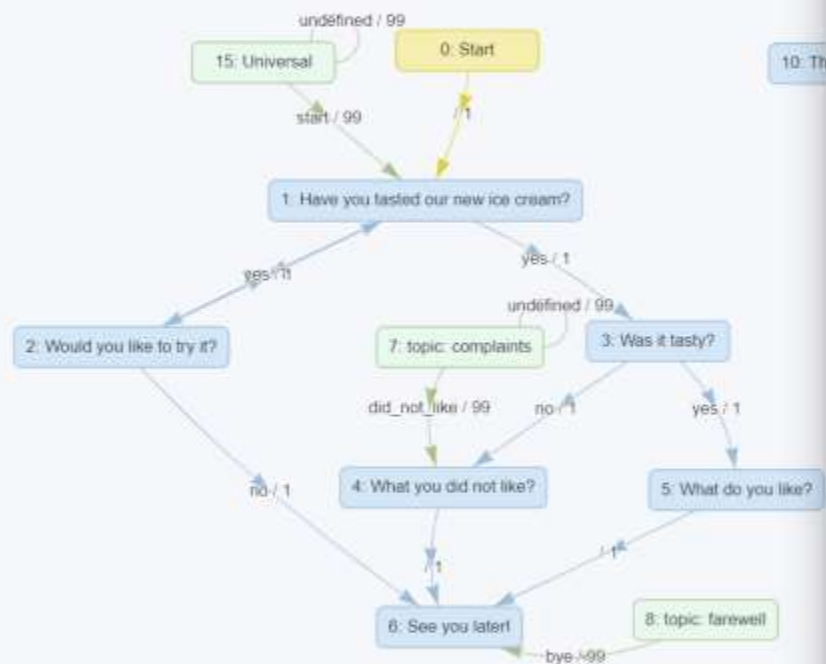
Resources

Data tables

Chat

Add Import Export Delete Other

Search



Questions and answers group

Cancel

Save and close

User types

Virtual assistant replies

Advanced

what is the best ice cream

- 1 what is the best ice cream
- 2 can you recommend ice cream
- 3 recommend me
- 4 best icecream for today
- 5 what ice cream do you like?
- 6 what ice-cream do you like?
- 7 what ice cream do you like
- 8 do you like ice cream
- 9 what do you like
- 10 do you have favorites
- 11 favorite icecream

Add

Apmācība

Scenario

Outputs

Intents

Entities

Actions

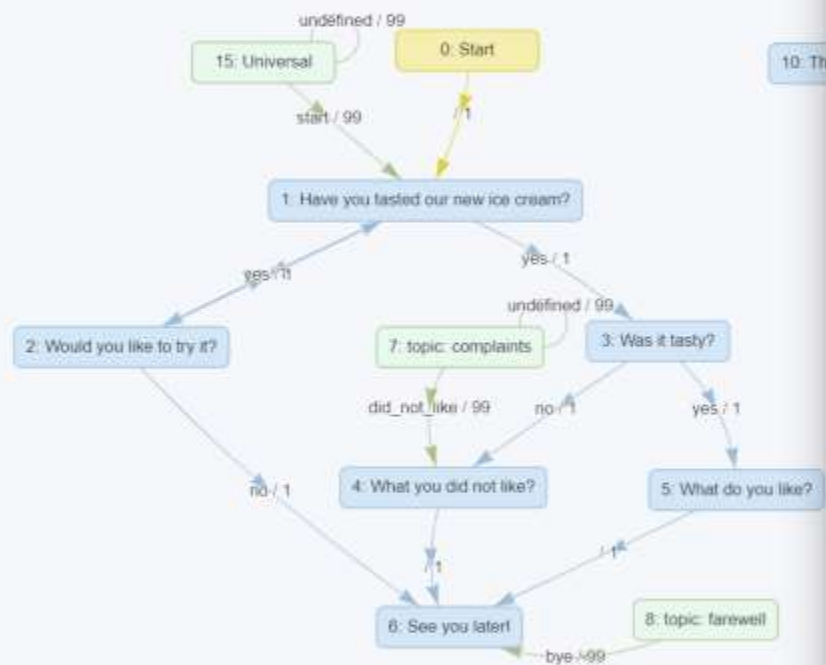
Resources

Data tables

Chat

Add Import Export Delete Other

Search



Questions and answers group

Cancel

Save and close

User types

Virtual assistant replies

Advanced

I love vanilla ice cream a lot! 🍦

– or Oh, I like vanilla ice cream! 🍦

– or I often choose vanilla ice cream. 🍦

Add an option

Add

Training

Scenario

Outputs

Intents

Entities

Actions

Resources

Data tables

Chat

Outputs

Virtual assistant response messages to a user displayed as text messages, buttons, pictures, or links.

English

+ Add

Import ▾

Export ▾

Search



ID	Value		
best_icecream	I love vanilla ice cream a lot! 🍦		
	Oh, I like vanilla ice cream! 🍦		
	I often choose vanilla ice cream. 🍦		
bye	Thank you. See you later!		
	Thank you! See you later.		
	Thank you! Bye!		
did_not_like	What did not like?		
error_api	Well... I am not in a mood to talk about that.		
	I am not in a mood to talk about that!		
have_you_tasted	Have you tasted our new ice cream?		
hello	Hi!		
	Hello!		
	Hi there!		
liked	What did you like about it?		

Entries per page 500 ▾

1 - 17 from 17



Training

Scenario

Outputs

Intents

Entities

Actions

Resources

Data tables

Chat

Intents

User questions and other utterances.

English



Add

Import

Export

Search




ID	Value	Used	Sample count		
best_icecream	what is the best ice cream can you recommend ice cream recommend me More (11)	1 reizi	11 piemēri		
bye	bye see you later goodbye More (17)	1 reizi	17 piemēri		
did_not_like	i did not liked do not like nope i do not liked it More (5)	1 reizi	5 piemēri		
hello	good evening good morning hi More (27)	1 reizi	27 piemēri		

Entries per page: 500

1 - 4 from 9

Training

 Scenario Outputs Intents Entities Actions Resources Data tables Chat

Entities

All types of objects determined as text units that must be recognized from user input.

English



Add

Import

Export

Search



ID

Value

products

vanilla (1)

chocolate (4)

Landleibe (0)

Pols (0)

Häagen-Dazs (3)

Less (2)



Entries per page 500

1 - 1 from 1



Training

Scenario

Outputs

Intents

Entities

Actions

Resources

Data tables

Chat

Actions

Definitions of connecting external resources

 Add function

Import

Export

Search



ID	Value
get_weather_city	http://api.openweathermap.org/data/2.5/weather

Entries per page: 500

Edit function 

Cancel

Save and close

Function ID

get_weather_city

Connection of external services.

Function type

GET

URL

http://api.openweathermap.org/data/2.5/weather

ID	Value	Description		
q	Riga	pilsēta		
appid	f045da90e98220a569b46f554f8	appid		
units	metric	units		
lang	en	language		

 Add new entry

JSON

ID	Value	Description	
status	StatusCode	status code	
weather_descr	\$.weather[0].description	Description	
weather_temp	\$.main.temp	Description	
weather_humidity	\$.main.humidity	Description	
weather_windspeed	\$.wind.speed	Description	

Training

Scenario

Outputs

Intents

Entities

Actions

Resources

Data tables

Chat

Resources

Images, audio files, and video files used in virtual assistant actions.

Upload

Download

Delete



Ice cream_512.png
3/16/2020
165.09 KB



logo fb.png
3/18/2020
78.42 KB

Training

Scenario

Outputs

Intents

Entities

Actions

Resources

Data tables

Chat

Data tables

Uniform data lists.

English

+ Add table

Import

Export

Search



^ price 5 entries



Parameter

Value

Häagen-Dazs

3.70 Euro



Pols

1.70 Euro



Landliebe

2.35 Euro



chocolate

1.50 Euro



vanilla

1.10 Euro



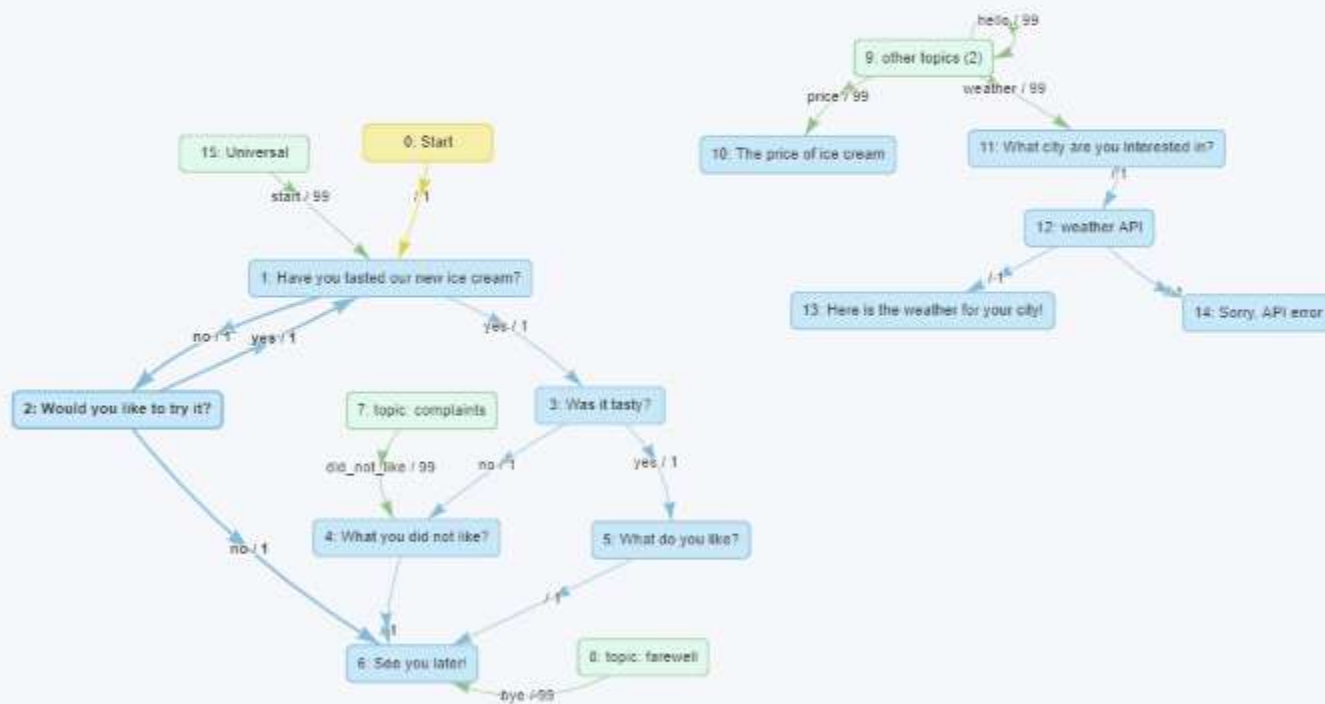
+ Add parameter

Training

[Add](#) [Import](#) [Export](#) [Delete](#) [Other](#)

Search

- Scenario
- Outputs
- Intents
- Entities
- Actions
- Resources
- Data tables
- Chat



Chat

Clear



Have you tasted our new ice cream?

Yes

No

Just now

Type your message





How to use it

Build and test your bot

- Log-in to Tilde.AI
- Play with the demo bot '**ESA Ice-cream**'
- Create your own bot (ask me to create it)
- Implement your scenario
- Test and elaborate





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