

Activity Sheet 9

Training the chatbot

Why does a chatbot need to be trained?

A chatbot needs to recognize many different sentences. In the Tutorbot project, the partners decided to use the Natural Language Engine to train the chatbots. You can learn more about the functions of the Natural Language Engine in Activity Sheet 8.

To access the learning function of the chatbot, click on "Natural Language" in the menu on the left and select the language of your chatbot.

Access WIT Natural Language Engine for chatbots in English
Access WIT Natural Language Engine for chatbots in French
Access WIT Natural Language Engine for chatbots in Catalan
Access WIT Natural Language Engine for chatbots in Italian
Access WIT Natural Language Engine for chatbots in Greek
Access WIT Natural Language Engine for chatbots in Greek

-Q-Each language needs to be trained separately. If you have one chatbot in English and another one in Italian, you should focus on training the chatbot in both languages.

In the box "If a user says...", you can type or select a sentence to check how the chatbot understands it by clicking on "analyze".

	CHATBOT FOR LEARNERS				
If a user says					
Write a sentence about anything in English					
or choose a sentence that has not been underst	or choose a sentence that has not been understood previously				
	ANALYZE				

The box entitled "... the natural language engine understands: " details the information that the chatbot extracts from the sentence. It also allows you to correct them if they are wrong.

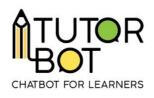
Text :		Confidence :	Intent	
I want to learn about specific lea	arning disorders	100 % Good	ASK_FOR_INFOS	Ŧ
Sample :	Туре :			
specific	subject		8	
Sample :	Туре :			
disorders	subject		× ×	

We are mostly interested in this information:

the natural language engine understands -

- **Confidence** tells you how well a chatbot understands a specific sentence. It can be "good", "average" or "poor". In order to provide relevant information, the chatbot needs to understand the subject of the sentence properly. If the confidence is anything else than "good", you need to train the chatbot.
- The intent tells you what the chatbot understood. In the example above, the chatbot thinks that the student asked for information about something, therefore it will use the "ASK_FOR_INFOS" intent to answer. More "intents" were developed to help the chatbot to understand the user. Here are a few of them:







- **ASK_FOR_INFOS:** the user wants to receive resources about this subject.
 - (I want to learn {dyslexia \rightarrow subject})
- **ASK_FOR_DEFINITION:** the user asks about the definition of a specific word or a phrase.
 - (What is $\{ dyslexia \rightarrow subject \}$?)
- A full list of intents can be found at the end of this Activity Sheet.
- "Sample" is a specific part of a sentence the chatbot recognizes. It is one of the following "types":
 - o a "subject" (e.g. specific learning disorders, dyslexia, etc.)
 - a "level" (e.g. beginner, advanced, etc.)

... the natural language engine understands :

o a "resource type" (e.g. exercise, infographics, etc.)

• A chatbot is always learning and can make a mistake in identifying the samples (as in the example above). In this case, the correct sample is "specific learning disorders". The "subject" is the "type". If a mistake like this occurs, delete the

sample by clicking on this button ⁽²⁾. Afterwards, the sample can be chosen manually by highlighting the part of the text in the text tab with your mouse. Don't forget to choose the correct "type" and click on the "send update" button.

Text :		Confidence :	Intent			
I want to learn about specific learning disorders		100 % Good	ASK_FOR_INFOS	Ŧ		
Sample : specific learning disorders	Type : subject	×	0			
SEND UPDATE						







-Q-It is normal if your changes do not appear immediately. It takes a few minutes for the system to integrate them. The more sentences you add and analyze, the more the **"confidence" score improves**. Don't give up!

Frequent mistakes

Similar messages might appear when the chatbot does not understand something:

You are the first one asking about it! Can you ask me differently? 4:28 PM

- I can't help you with this one, your teacher must have left it out. But definitely tell him about it and next time I will find it for you. 4:31 PM
- Make sure the subject of the sentence was added to its sequence in the subject interface.
- Check how the chatbot understands the sentence in the Natural Language Engine. Maybe the chatbot has not been trained to understand this or a similar sentence. If the confidence is poor or average the chatbot needs to be trained.

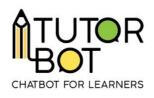
Tips

Think of different ways a student could ask for information or what synonyms they can use. When chatting with somebody on the Internet, we often leave out words, punctuation or make the sentences shorter. Train your chatbot for as many different phrases and sentences as possible.

Here is the list of the existing intents:

- ASK_FOR_DEFINITION: the user asks about the definition of a specific word or a phrase.
 - (What is the definition of {dyslexia \rightarrow subject} ?)

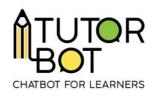






- ASK_FOR_PROGRESS: the user asks for information on their level in all the sequences
 - (What is my progress?)
- **ASK_FOR_RECAP:** the user asks for a recap of what they last studied and the last resource they have seen.
 - (What is my history?)
- **ASK_FOR_LEVEL:** the user asks for their level in the sequence they are studying.
 - (What is my level?)
- **ASK_FOR_LATEST_RESOURCE:** the user asks for the latest resources they have seen.
 - (Show me my latest consulted resources.)
- **ASK_FOR_ALL_SEQUENCES:** The user asks for a list of all the sequences in the chatbot.
 - (Show me all the sequences.)
- **ASK_FOR_HELP:** the user is lost.
 - (What can I do?)
- **ASK_FOR_MORE:** the user asks for more information about the last consulted sequence.
 - (I want information about it.)
- ASK_FOR_DOWN_LEVEL: the user wants to lower their level.
 - (It's too difficult!)
- **ASK_FOR_UP_LEVEL:** the user wants to boost their level.
 - (It's too easy!)
- **ASK_FOR_STOP:** the user wants to stop receiving resources in a step by step sequence.
 - (I don't want any more resources.)
- **ASK_FOR_CHANGE_LEVEL**: the user asks to change their level, whether the level is specified or not.
 - (I want to change for {beginner \rightarrow level} level.)
- **ASK_FOR_INFOS:** The user wants resources about this subject.







• (I want to learn {dyslexia \rightarrow subject}.)