

VEEMbot : The Intelligent Chatbot



TUTORED PROJECT USER GUIDE Master 2 Internet of Things

Enguerrand BOITEL
Elio ELHOYECK
Mohamad MAKHLOUF
Vincent RAMOUSSET

Tutor : Raphaël COUTURIER

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What is *VEEMbot* ?

VEEMbot is a vocal assistant that will answer all of your questions about everything. Of course, you can also type your questions using your keyboard to communicate with your new friend !

VEEMbot can answer your questions, find anything interesting on the net, give you the current time, do a quick calculation and even answer a Yes or No question ! All of this implemented in a simple and natural app !

These are the few things you need to know about *VEEMbot* before starting...

1 Control *VEEMbot*

1.1 Orally

VEEMbot has a single objective : satisfy yourself !

Indeed, developers created an assistant that you can control orally by just clicking a simple button. During your usage, *VEEMbot* will understand what you're saying, and answer your request as fast as possible.

Let's see how to use *VEEMbot* (Figure 1) :

```
Good morning, I'm VEEMbot, your virtual assistant !
How can I help you ?
Do you want to talk or write to me ? (talk / write) :
talk
```

Figure 1: **Step 1 : Talking mode**

Nice ! It was your first interact with *VEEMbot* ! Now let's choose the language you want to speak with (Figure 2) !

```
Good morning, I'm VEEMbot, your virtual assistant !
How can I help you ?
Do you want to talk or write to me ? (talk / write) :
talk
In which language ? English
```

Figure 2: **Step 2 : In which language ?**

Pay attention ! Once you entered the language, *VEEMbot* is listening to you ! To stop recording : just click on the button "Recording... press to stop" (Figure 3).

```
Good morning, I'm VEEMbot, your virtual assistant !
How can I help you ?
Do you want to talk or write to me ? (talk / write) :
talk
In which language ? English
Recording... press to stop
```

Figure 3: **Step 3 : Let's talk now !**

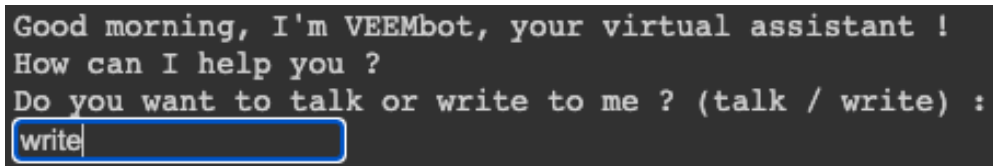
Now, you just need to listen to the answer given by *VEEMbot* and **ENJOY** !

1.2 Using keyboard

What would a chatbot be without a written part ?

Don't forget, *VEEMbot* has been created to be as logical as possible. You can just start typing your questions and feelings, and *VEEMbot* will detect your language and answer as precisely as possible.

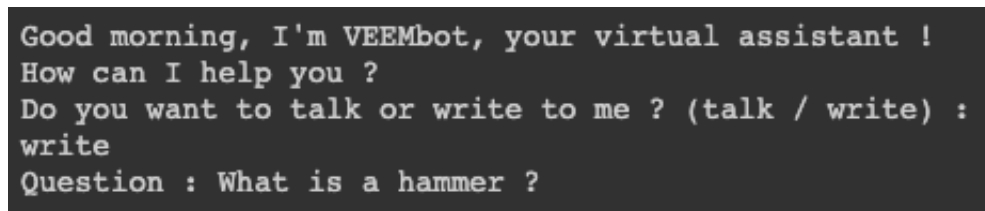
Let's see how it goes (Figure 4) :



```
Good morning, I'm VEEMbot, your virtual assistant !  
How can I help you ?  
Do you want to talk or write to me ? (talk / write) :  
write
```

Figure 4: **Step 1 : Writing mode**

As simply as that ! You can now ask your request (Figure 5) !



```
Good morning, I'm VEEMbot, your virtual assistant !  
How can I help you ?  
Do you want to talk or write to me ? (talk / write) :  
write  
Question : What is a hammer ?
```

Figure 5: **Step 2 : Write your request**

Now, you just need to read the answer given by *VEEMbot* !

1.3 Your choices

Sometimes, you could have to select the best topic (Figure 6) about your question (*VEEMbot* is not perfect, like a human !).

```
Good morning, I'm VEEMbot, your virtual assistant !
How can I help you ?
Do you want to talk or write to me ? (talk / write) :
write
Question : Qu'est ce qu'un marteau ?

1. Language : fr

Translation : What is a hammer?
This is an opened question

3. Keyword : marteau

4. Keyword without verb : marteau
marteau may refer to :
0 Marteau (outil)
1 Lancer du marteau
2 Grand requin-marteau
3 Faucille et marteau
4 Marteau d'armes
5 Marteau-piqueur
6 Marteau-pilon
Enter a choice : 0
```

Figure 6: Select the topic of your question

Once chosen the topic that suits you, *VEEMbot* will answer your question !

2 Answers of *VEEMbot*

2.1 Type of answers

2.1.1 Open-ended question

These are all the questions when the answer can't be "Yes" or "No".

For example : "Where is London ?". *VEEMbot* will retrieve several information (Figure 7):

- The **language** used : "en" for "English",
- The **keyword** found : "London",
- The **keyword where verbs are removed** to avoid data problems : "London",
- The **summary** found on Wikipedia : "London is the capital ...",
- The **score** of the answer : "29.7 %". It is the reliability of the response,
- The **final answer** : "London is the capital and largest city ...".

```
Question : Where is London ?  
1. Language : en  
This is an opened question  
3. Keyword : london  
4. Keyword without verb : london  
5. Summary : London is the capital and largest city of England and the United Kingdom  
{ 'score': 0.29702286145266044, 'start': 0, 'end': 73, 'answer': 'London is the capita  
6. Answer : London is the capital and largest city of england and the united kingdom.
```

Figure 7: Result of an open-ended question

2.1.2 Closed-ended question

These are all the questions when the answer can only be "Yes" or "No".

For example : "Is London in the UK ?". *VEEMbot* will retrieve several information (Figure 8):

- The **language** used : "en" for "English",
- The **keyword found where verbs are removed** : "London",
- The **summary** found on Wikipedia : "London is the capital ...",
- The **final answer** : "Yes",
- The **score** of the answer : "100 %". It is the reliability of the response.

```
Question : Is London in the UK ?  
1. Language : en  
This is a closed question  
4. Keyword without verb : london  
Summary : London is the capital and largest city of England and the United Kingdom.  
Answer : YES, at 100 % !
```

Figure 8: Result of a closed-ended question

2.1.3 Calculation

There is no question that *VEEMbot* will not answer. With *VEEMbot*, you can also make simple calculations (Figure 9).

For example : "2 times 3 - 4". *VEEMbot* can also understand the following maths symbols : * or x, +, /, - and *times*, *plus*, *divided by*, *minus*.

```
Question : 2 times 3 - 4  
1. Language : en  
It is 2
```

Figure 9: Result of a simple calculation

2.1.4 Time-dependent question

As *VEEMbot* finds his data on Wikipedia, he can't answer a simple question such as "What time is it ?".

Of course, we implemented a way to answer this kind of questions (Figure 10) :

```
Question : What time is it ?  
  
1. Language : en  
  
This is an opened question  
We are on Thursday 1/21/2021 and it's 10h20m and 31 seconds !
```

Figure 10: Result of a time-dependent question

2.2 Type of controls

VEEMbot can answer your questions in two different ways : orally and using the screen !

2.2.1 Orally

This way is the easiest way to get your answer quickly ! After selecting "Talk" during the first step, *VEEMbot* will answer automatically using its friendly voice (Figure 11).



Figure 11: *VEEMbot* answers orally !

2.2.2 Using keyboard

You can also find the answer of *VEEMbot* directly after your request on your screen in both choices (Figure 12).

```
We are on Thursday 1/21/2021 and it's 10h20m and 31 seconds !
```

Figure 12: *VEEMbot* answers with text !

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