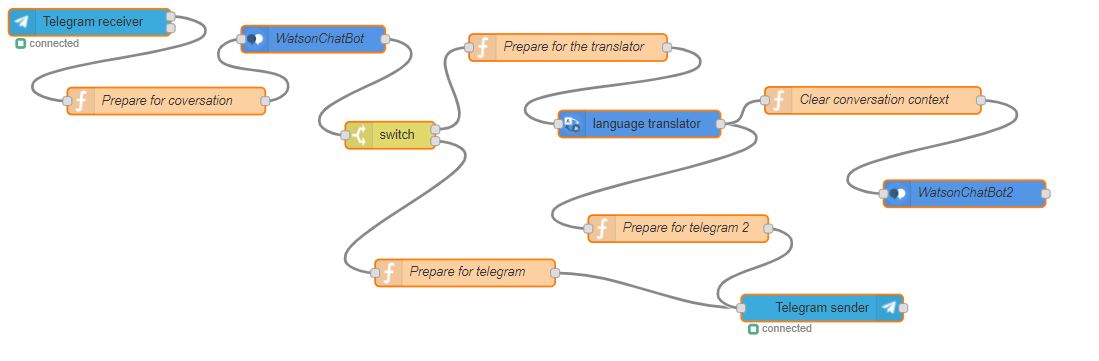
Product Design

# Prototype 1

For the first prototype of the project, I decided to create a simple chatbot that didn’t require much coding to work properly. I settled to do it this way, so I could gain a general idea of how a chatbot is built, and what requirements does it need to be able to function and think like a human.

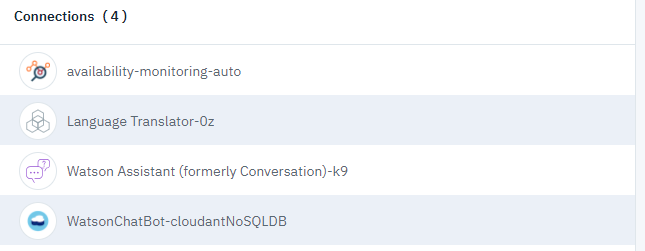
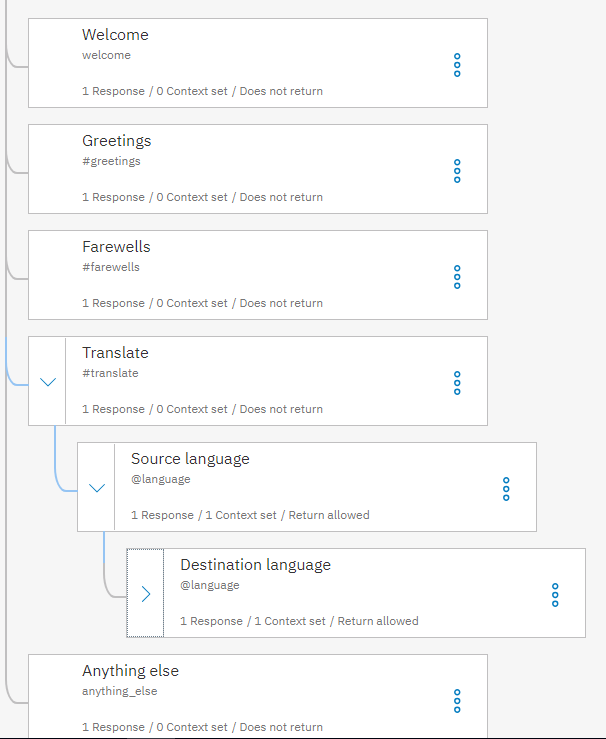
## Prototype 1 steps:

* First, the user will have to add the chatbot in the Telegram app, which is under the name ‘WatsonELchatbot’. After that, he will send a message to the bot via Telegram, where the chatbot is set-up. This message may contain a question or just a simple conversation starter.
* When the message is sent, it will go through my personal IBM cloud. This will then start the chatbot and the conversation.
* After the message is received in the cloud, Watson Conversation Assistant will read and understand the sentence by using IBM’s language AI.
* The switch statement in the flowchart divides the conversation in two, depending on what the user asks for in the message:
* If the user asked for the translator, then the program will choose the translator route. This way the IBM Language Translator will ask for an input (sentence) to be translated and will also ask for the language to be translated to. The AI will then translate the message to the required format and display it to the user. After this process is finished the user will get two choices:

1. Stay in the translator mode and keep translating messages.
2. Clear the conversation and start from the beginning.

* The other option is to keep talking to the chatbot in a normal conversation.

## Prototype 1 evidence:

This screenshot shows the connections that the chatbot cloud is using in order to make the AI work correctly. The first connection monitors the data going through the cloud and check for the availability of the cloud. The second connection manages the translator module that the chatbot uses within its conversation with the user. The third one connects the chatbot with Watson’s language AI. This AI is used so the program can understand basic English and formulate an answer to respond the user. The last connection directs the cloud to the conversation flow that was set by me (explained in the next paragraph).

Conversation flow:

This flowchart represents how the conversation will be managed by the AI while in conversation with the user.

Welcome: at the beginning of every new conversation the bot will welcome the user.

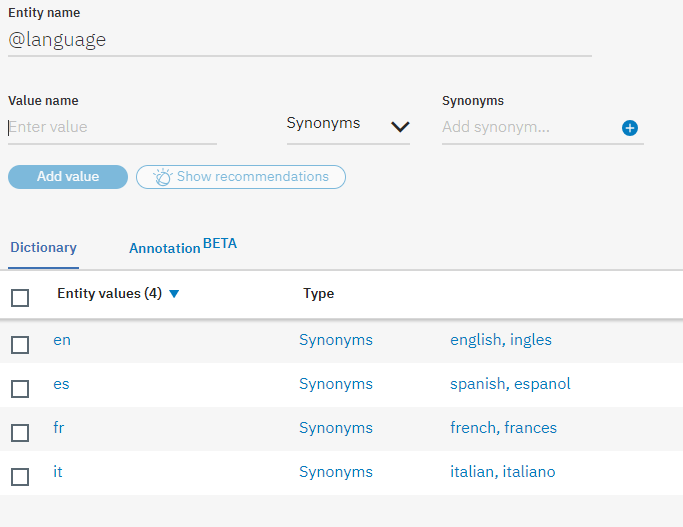
Greeting: if the user types a sentence containing words like ‘hi’ or ‘hello’ then the A will choose the welcome flow.

Farewells: if the user types a sentence containing words like ‘bye’ or ‘see you’ then the A will choose the welcome flow.

Translate: If the user chooses to translate something, the bot will take the sentence, and then the chatbot will first ask about source language of the sentence and then it will ask about the destination language.

Anything Else: if the user talks about a subject that the AI cannot understand, then the AI will tell the user that the conversation has been unsuccessful with a message like ‘sorry I didn’t understand what you said’.



Translate function:

The translate function is activated, as we can see from the screenshot, by different trigger sentences such as ‘Can you translate?’. The Watson’s Ai will also understand one of these sentences even If one of these sentences is miswritten by the user. Then, if the user chooses to translate some text, it will ask the user for the native and the foreign language so that the AI knows what is working with.