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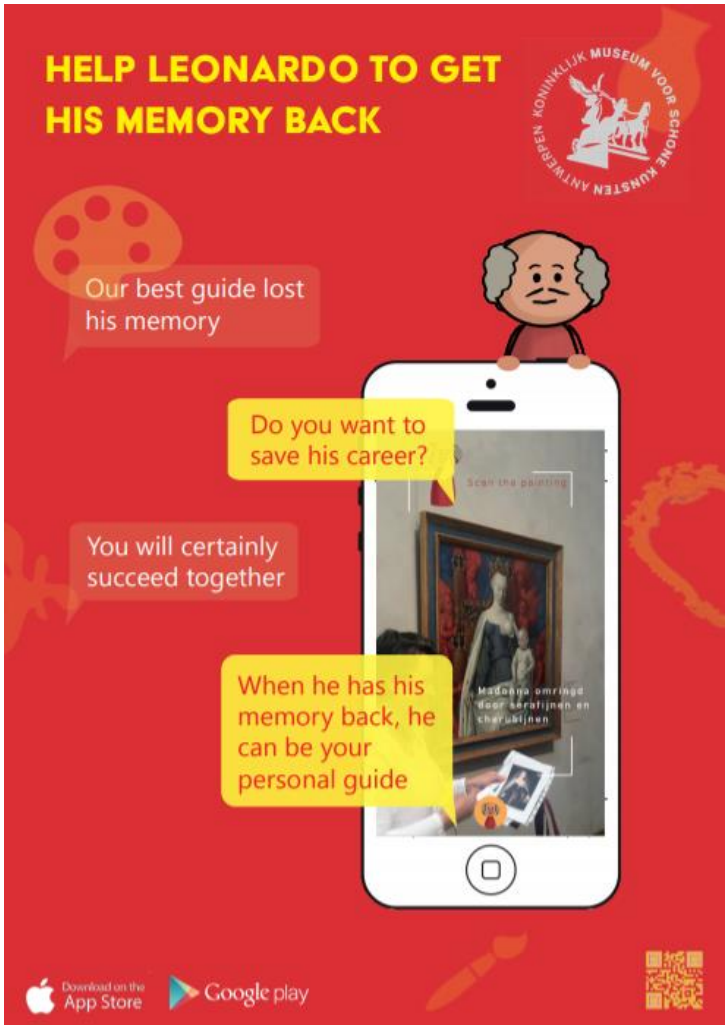
HOGESCHOOL BRUSSEL



Course: Full Project

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Summary

For our course “Full Project”, we were asked to have an idea for the customer journey of the KMSKA, The Royal Museum of Fine Arts Antwerp is a museum in Antwerp. We were asked to use Artificial Intelligence for the customer journey.

After a few brainstorms, few prototypes, we came with a brilliant idea. Our idea is an app with one character called Leonardo Da Vinci. But he would rather be called Leo. Leo is the best guide of the KSMKA. But unfortunately, he lost all his memory and now he needs your help. You can help Leo by scanning paintings which will make him remember everything about the painting.

With our app your able to scan paintings, interact with a chatbot and have fun while learning things about the museum and its beautiful paintings.

In this document, we documented how we created a chatbot using IBM Watson Assistant & Unity, how we created our animated story about our guide Leo, how to scan paintings and how we made museums more fun for kids.

In this repository you can find a few files:

- Chatbot in unity
- Json file is a list of all the possible answers and questions for the chatbot

Repository: https://github.com/KevinJi98/FullProject3-Chatbot

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- Foreknowledge of coding
- Foreknowledge designing
- Unity 2020.1.0 Alpha 19
- IBM CLOUD V2
- Adobe XD 2019
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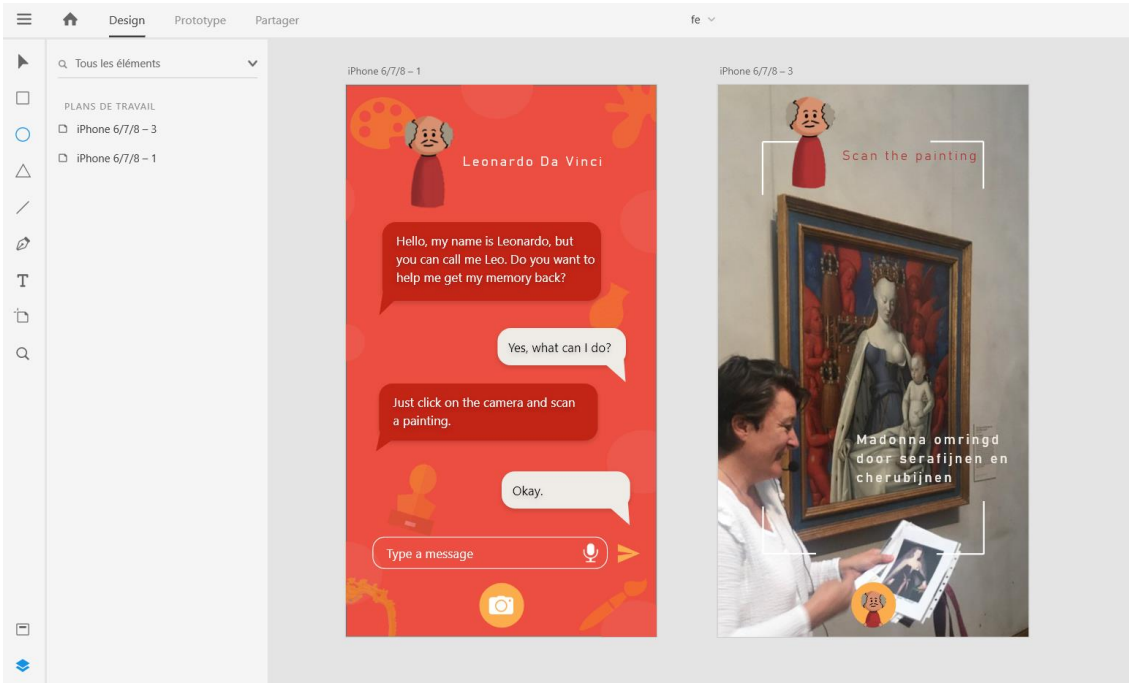
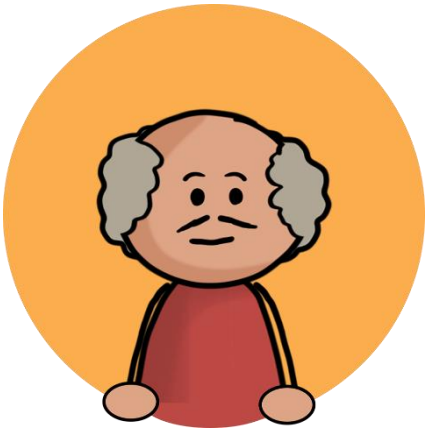
2. Design

We created an app so of course you need a design. We used Adobe XD to create our own design. You have to think about all the User Interface to make it more useful for the client. To make it easier for him to use it.

Version: Adobe XD 2019



3. Animated story



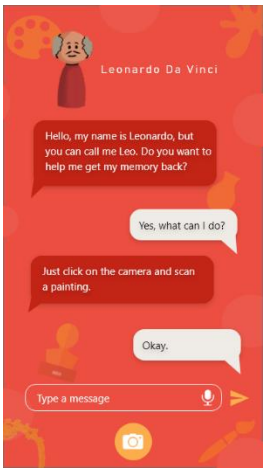
When starting our app we wanted the customer to understand our story directly. So we decided to do a little animated story of our tour guide Leo. He explains what happened to him and that he needs the help of the customer.

We created this animated story using Adobe Character Animator. We used one of the template character already existing in the app.

To animate our character we followed this tutorial: https://www.youtube.com/watch?v=Nl1xot_1hJo

Version: Adobe Character Animator 2019

4. Chatbot

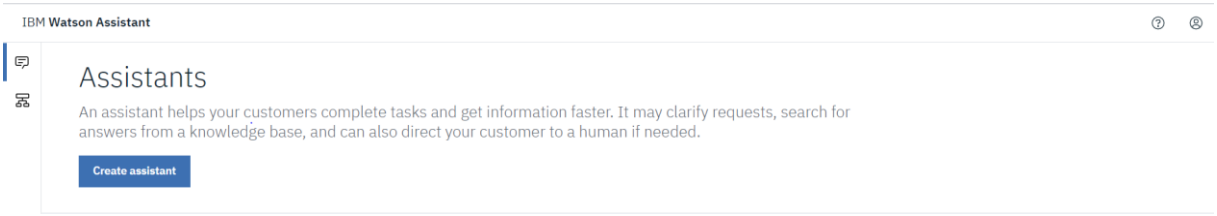


To create a chatbot you can use IBM Watson
IBM WATSON ASSISTANT: https://assistant-eu-gb.watsonplatform.net/eu-gb/crn:v1:bluemix:public:conversation:eu-gb:a~2Ff2152eb2f99940578b9184ae78405af0:5008e9b3-b1ef-4ad2-9c41-45f3c67b971b::/skills/9684bd3a-817e-4e98-9956-e2aefe9541b4/build/intentsx.

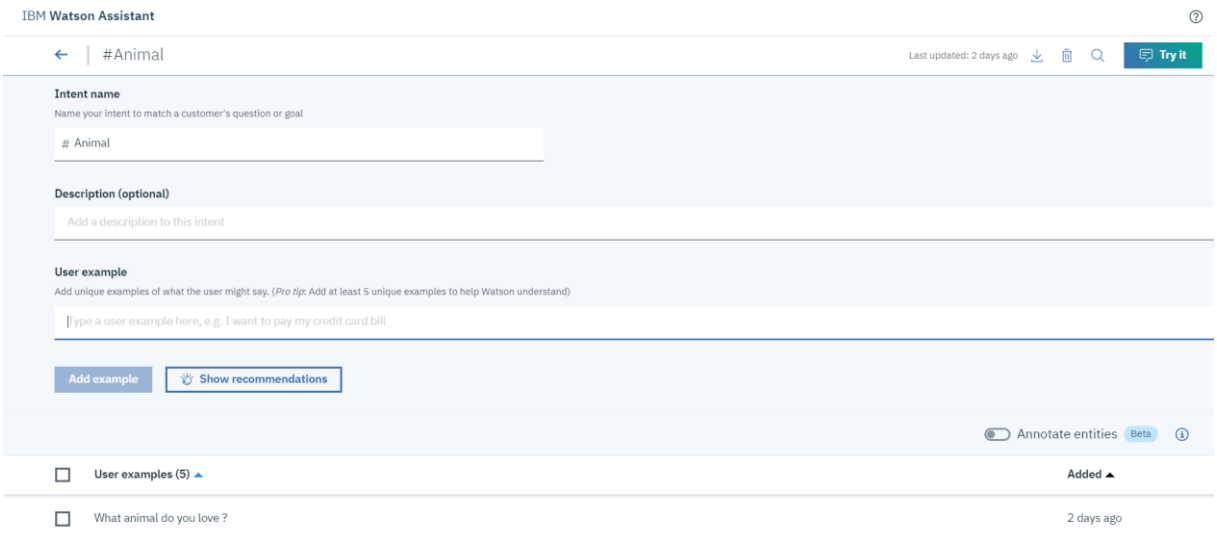
Version: IBM Watson V2

3.1. Create your own chatbot

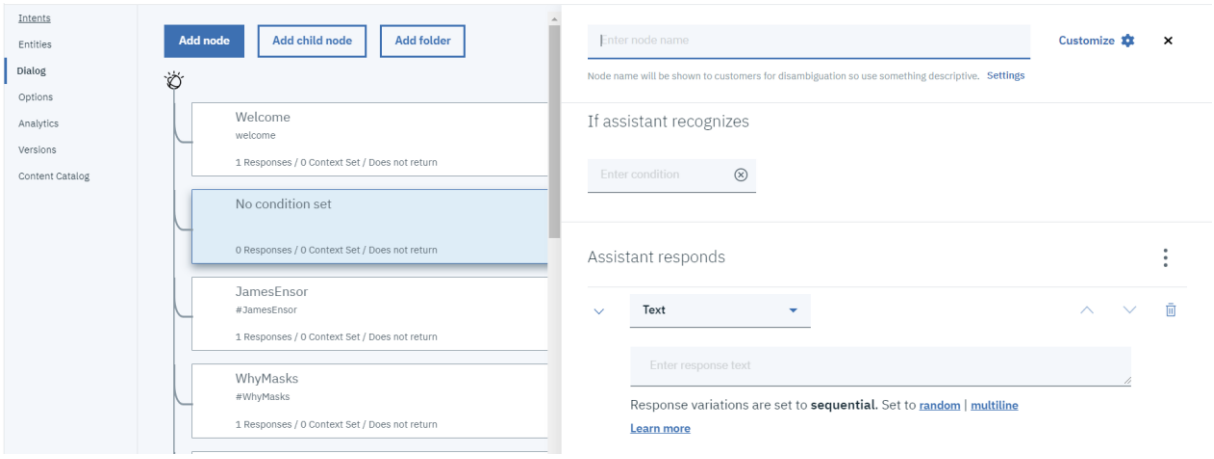
After creating an account you get to choose between different services. To create a chatbot you can use IBM Watson Assistant, you can find this in the catalogue after you logged into IBM Cloud. Once you are on IBM Watson Assistant you can click on "Create assistant"



By doing this you give a name to the project/chatbot. Once you have your assistant you can give that assistant skills. Of course since it is a chatbot you give it a dialog skill. Once the assistant has a dialog skill you can create intents. Intents are the questions that the user can ask to the chatbot. Here you write all the questions that are possible that the user might ask.



If the chatbot recognizes the question of the user, he has to find a suited answer. To get these answers you need to add them into the database of the chatbot. You can do this by pressing on the "Dialog" button and you have to press "add node".



Here you give a name to that particular answer. With the text/answer that the chatbot is going to answer if he recognizes the question.

Once you have all your answers and questions you can download an api key and URL which you can use on unity. You link unity with that url to get the data of your list.

To use that chatbot you can use the documentation of:

https://github.com/ZeeNastalski/unity-watson-chat?fbclid=IwAR0QOlu0xGdKlCl5nM2Ii0aYOk7n4pR39lrKDrdkfnPJ8-DBqf7MF1NhSOw

Here it is explained how to make your chatbot in unity. There our three services explained: Speech to Text, conversation and Text to speech. Don't forget to get the right api key and URL since they are different in the documentation.

Once you have done that, your chatbot can now talk, answer and understand what the user said.

3.2. Use our chatbot

We attached our json file in the zip where you found the pdf/documentation. Feel free to use it in unity.

To use that chatbot you can use the documentation of:

https://github.com/ZeeNastalski/unity-watson-chat?fbclid=IwAR0QOlu0xGdKlCl5nM2Ii0aYOk7n4pR39lrKDrdkfnPJ8-DBqf7MF1NhSOw

Here it is explained how to make your chatbot in unity. There our three services explained: Speech to Text, conversation and Text to speech. Don't forget to get the right api key and URL since they are different in the documentation.

Once you have done that, your chatbot can now talk, answer and understand what the user said.

Version: Unity 2020.1.0 Alpha 19

5. Recognition of painting

To recognize a painting we used unity and followed a tutorial.

https://www.youtube.com/watch?v=MtiUx_szKbI&t=0s&fbclid=IwAR3BKLFL7KLBcbhr3UD2XSz1qg8CJ9WB1KADCu4XpN6mi-YWsTBhGKl2RMs

In the video he uses cards but instead of cards we want paintings. And you also have to change what has to appear once the painting has been recognized. In our case, once it recognized the painting we want to have a button which you can click on to get started interacting with a chatbot.

Version: Unity 2020.1.0 Alpha 19

6. Get straight started !

If you want to download our code and get straight started. You can download the code in our repository. You just need to add to add the whole project in Unity and you can get started and test our app, enjoy !

Repository: https://github.com/KevinJi98/FullProject3-Chatbot