A description of your chatbot's and its intended function.

I use Blenderbot to generate the conversations. Blenderbot is a chat language model released by Facebook in 2020 that focuses on conducting questions and answers. The goal of this model at the time of training is a chatbot about an open domain. The model can respond by answering to its input text. It is trained with a large amount of question and answer text, containing a large amount of real human chat messages. When the model was developed, the evaluators believed it would be able to express itself clearly and produce realistic text when chatting with humans.

The training data for this large-scale pre-trained language model is the text of real user conversations on Reddit collected by a third-party agency, pushshift.io. Some data cleaning was also done on the training data. For example, the data that are too long and too short are removed, URLs and non-ASCII characters are removed, etc. This allows to avoid the model to learn some networked terms.

BlenderBotl is also not trained from scratch. This dialogue model is fine-tuned for a specific task on a language model that has already been pre-trained. The pre-trained model on which this dialogue model is based is a task for multi-sentence ranking. A masked language model is also trained in a way that follows the fine-tuning strategy of the RoBERTa model. Also, in order to seriously improve the performance of the dialogue model with different parameter capacities, the inventors trained three models with different parametric quantities. Again considering the limited performance and arithmetic power of the end devices where our virtual assistant is deployed, I used the model with the minimum number of parameters.

A description of the user group you are targeting.

I think the target group of this chatbot is the elderly, widows, children and widowers who lack care around them. These people lack children, parents or partners, and often live alone, leaving them without a partner to share their lives with. I hope this chatbot will bring more communication opportunities and emotional support to these users, thus reducing loneliness and improving quality of life.

A description of the benefits you hope it will deliver to that user group.

Our chatbot is able to bring companionship to such lonely people as described above. It can bring solace to lonely people when they are living alone, talking to them when they are bored, comforting them when they are sad, and listening to them when they are crying. It is targeted at widows, orphans and children left behind. I want it to help these users eliminate loneliness and provide them with emotional support and entertainment. To do this, I want the chatbot to be able to perform natural language processing on the user and to be able to carry out shallow conversations.

A description of how you refined the questions received from your volunteers down into a smaller number of intents.

To refine the questions received from volunteers into fewer intents, I will use natural language processing techniques to analyze the user's input and use intent recognition models to determine the user's intent. I may also use labeling or classification models to help us better understand the user's questions.

A short summary of your chatbot's capabilities.

My chatbot is designed to help alleviate loneliness and provide emotional support and entertainment for widows, elderly people and children left behind. It learns how to respond to a specific question through real human chat material on the web.

My chatbot is capable of natural language processing and is able to carry out shallow conversations. This means that it can help users solve simple problems and provide entertainment and emotional support. It can help users solve problems by using natural language processing techniques to analyze their input and using an intent recognition model to determine their intent.

However, my chatbot has some limitations. It may not be able to recognize complex questions and may not be able to engage in deep conversations with the user. As a result, my chatbot may not provide full emotional support to the user, and the user may need to seek additional help to solve the problem.

My chatbot does not respond to questions through simple boilerplate text, but has some semantic understanding. It can understand the semantic information of the questioned statement and even analyze the emotion of the questioner, such as whether he or she is happy, angry, or puzzled.

A description of how you refined your chatboot based on user feedback.

I will improve my chatbot based on user feedback. This may include making changes to the bot's answers to make them more accurate and tailored to the user's needs, or adding new features to make it better able to help the user solve problems. I may also test the bot periodically to see how helpful it is to users and make adjustments to the bot based on the results of that testing.

How you might further develop your chatbot in future, capabilities you might add, as well as potential pitfalls.

In the future, I may try to use more advanced natural language processing techniques to improve the accuracy and capabilities of the bot. However, I should also be aware of possible limitations of the bot, such as the ability to recognize complex questions, and the depth of the conversation. For example, since this system is limited by the knowledge that has been imported in the past, their long-term memory is static. Although they are able to acquire new memories through multiple conversations with humans, such memories are usually short-term, i.e. new information acquired today is lost tomorrow or even the next time it is asked. Since we are using his first version and smaller (for improved client response) version, it is still possible to answer some questions very confidently with some wrong results.

What might you need to for the chatboot to meet local regulatory or compliance needs?

In order to meet local regulatory or compliance needs, I may need to make the following improvements to the chatbot.

To ensure that users' privacy is protected, I may need to implement data encryption and secure storage measures.
To ensure that the bot's speech does not violate legal or ethical guidelines, I may need to implement content censorship features.
To ensure that the bot's functionality complies with local regulatory requirements, I may need to conduct periodic testing.