ChatBots pt. 1

...

Assim que começa...

História dos Chatbots

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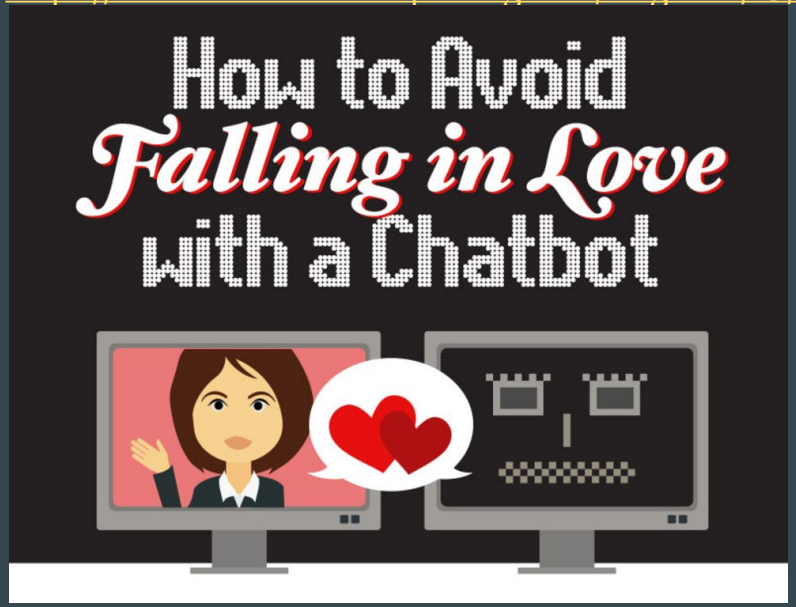


Hist

https://s

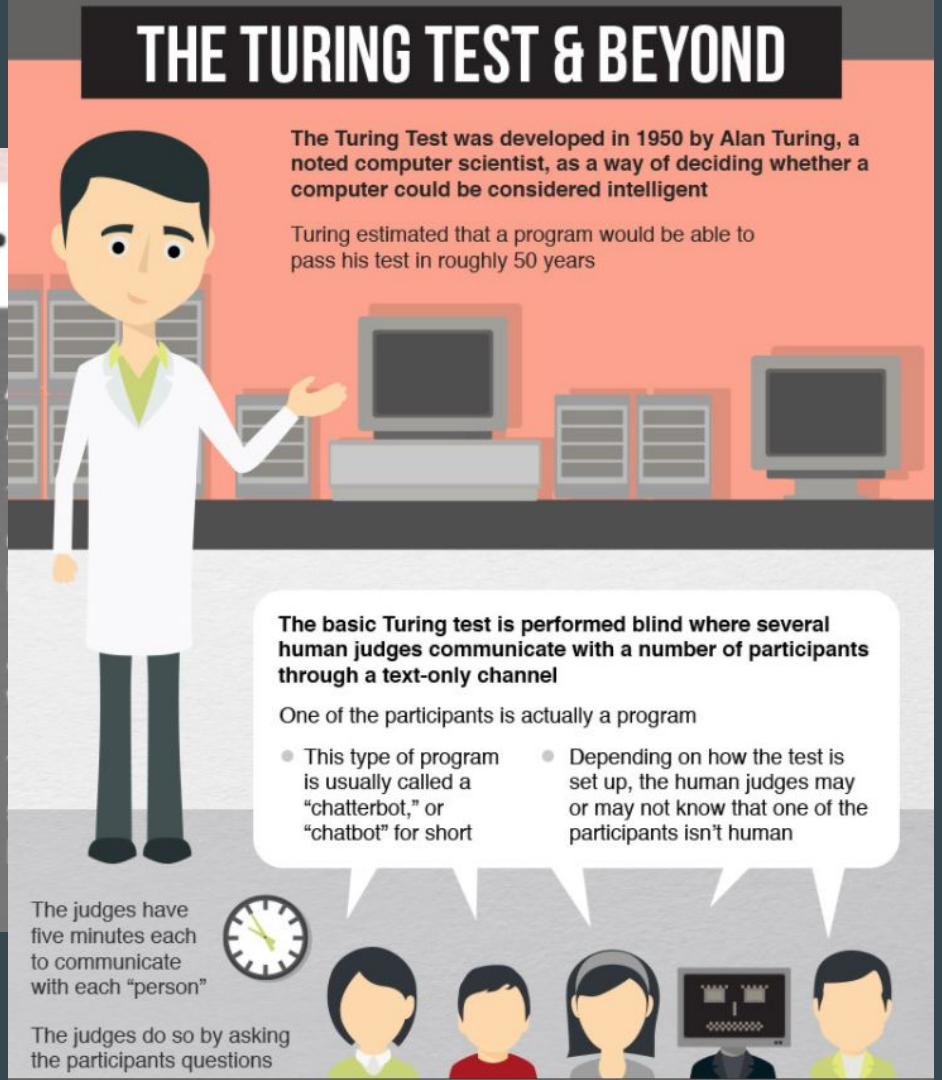
Tinder Meets Ava

- As part of a viral marketing campaign for the movie, *Ex Machina*, they created a fake Tinder account, Ava:
- They used a photo of the star of the movie to create a cross between ELIZA and the artificial intelligence (AI) character in the movie
- Ava sent her suitors to an Instagram page where they discovered she was a fake
- The profile has since been removed; however some people who matched with Ava won prizes like tickets to the premier of the movie

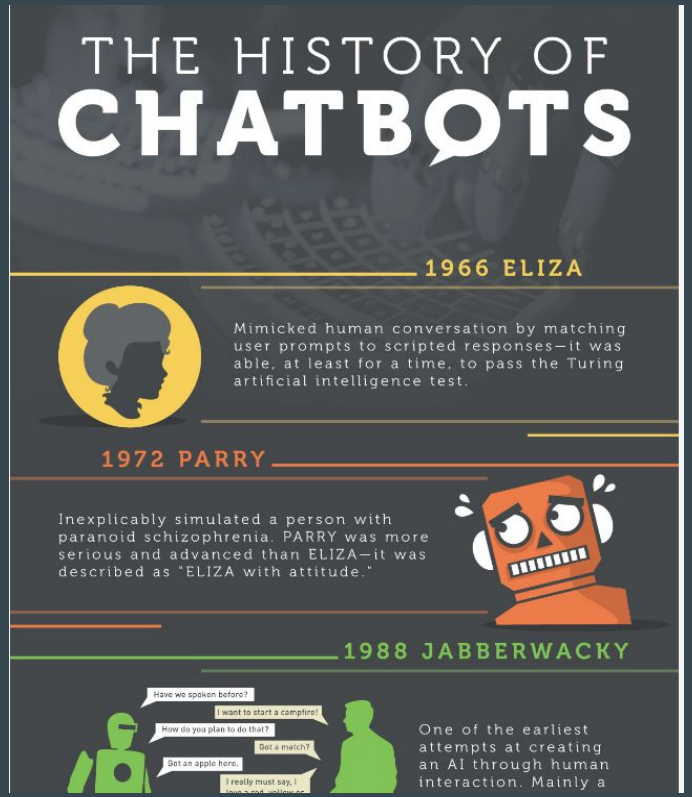
Hist

https://s


Tinder
TICKET


THE TURING TEST & BEYOND
The Turing Test was developed in 1950 by Alan Turing, a noted computer scientist, as a way of deciding whether a computer could be considered intelligent
Turing estimated that a program would be able to pass his test in roughly 50 years
The basic Turing test is performed blind where several human judges communicate with a number of participants through a text-only channel
One of the participants is actually a program
This type of program is usually called a "chatterbot," or "chatbot" for short
Depending on how the test is set up, the human judges may or may not know that one of the participants isn't human
The judges have five minutes each to communicate with each "person"
The judges do so by asking the participants questions

História dos Chatbots



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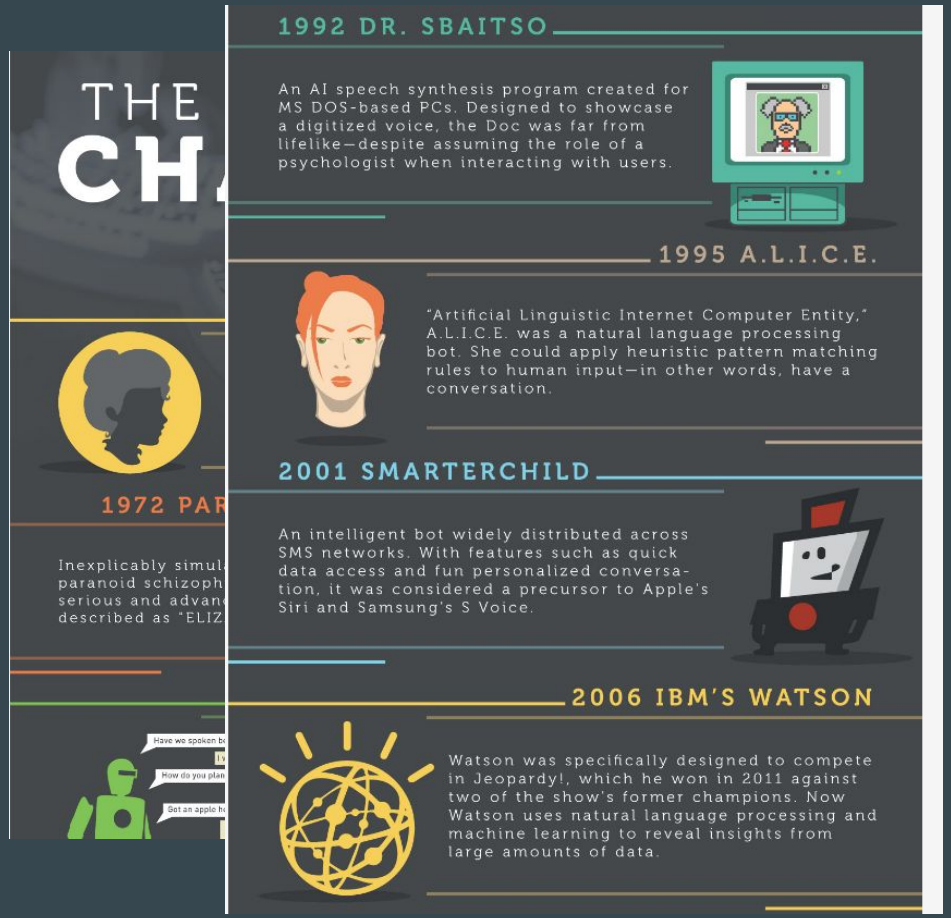
História dos Chatbots



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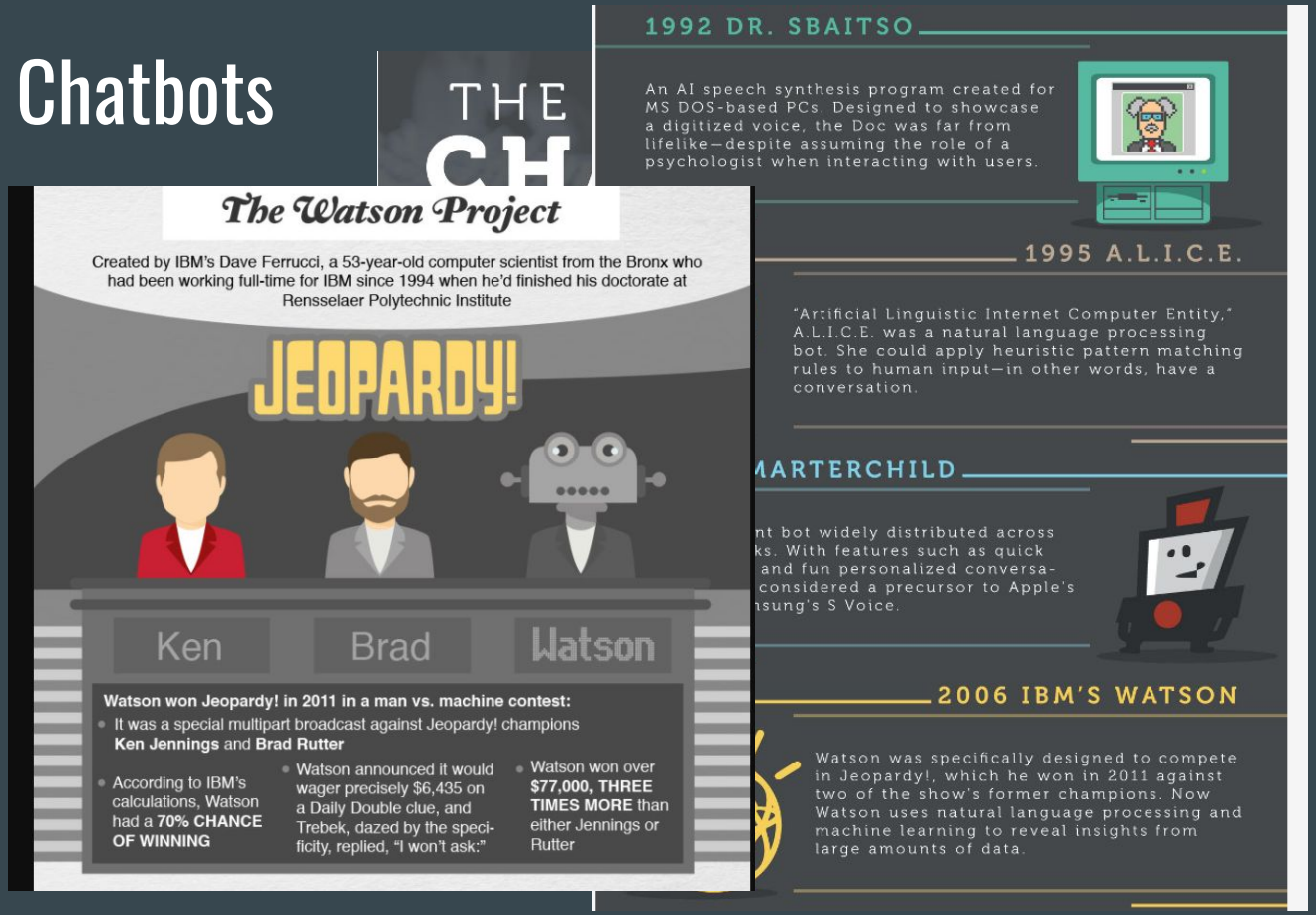

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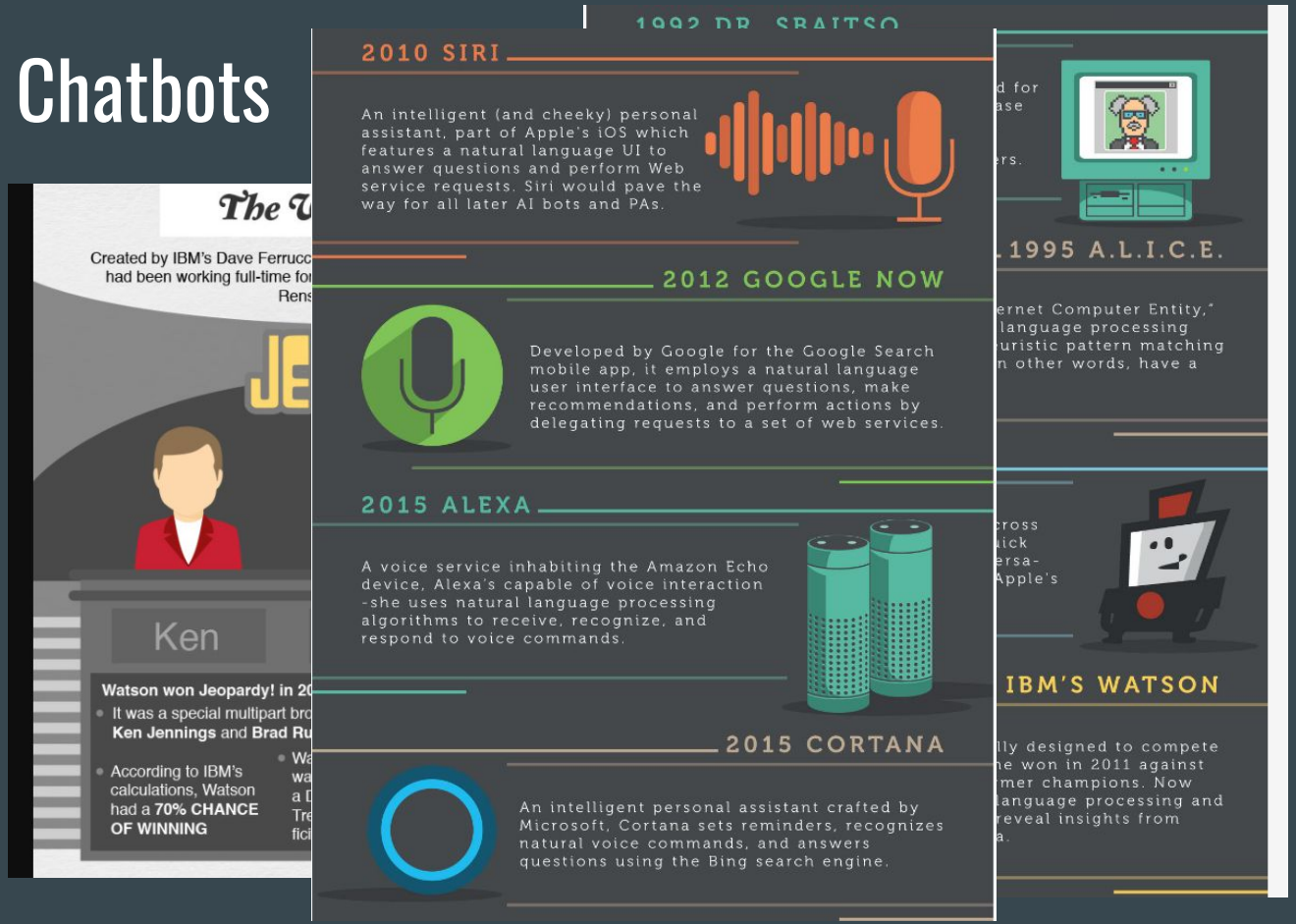

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Missão: Construir um classificador de texto - que vamos chamar de chatbot - em uma sessão de Hangout

Mas, Primeiro....

Vamos definir algumas coisas...

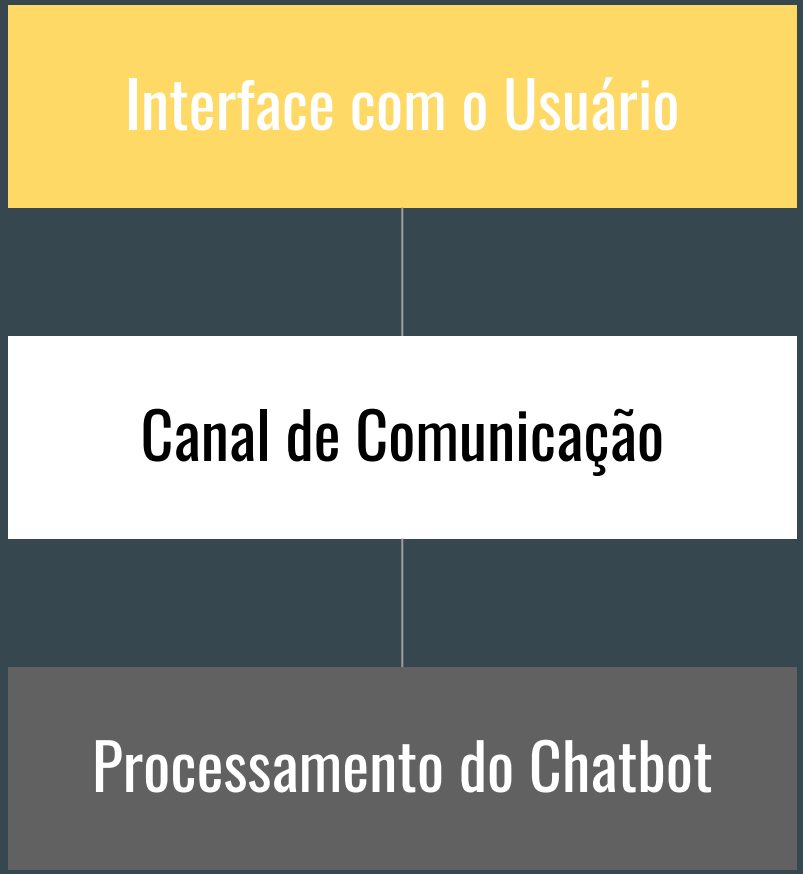
O objetivo é mostrar que o maior trabalho pode não estar no “Cérebro” do ChatBot...

Um modelo de Chatbot

Interface com o Usuário

Um modelo de Chatbot

Um modelo de Chatbot

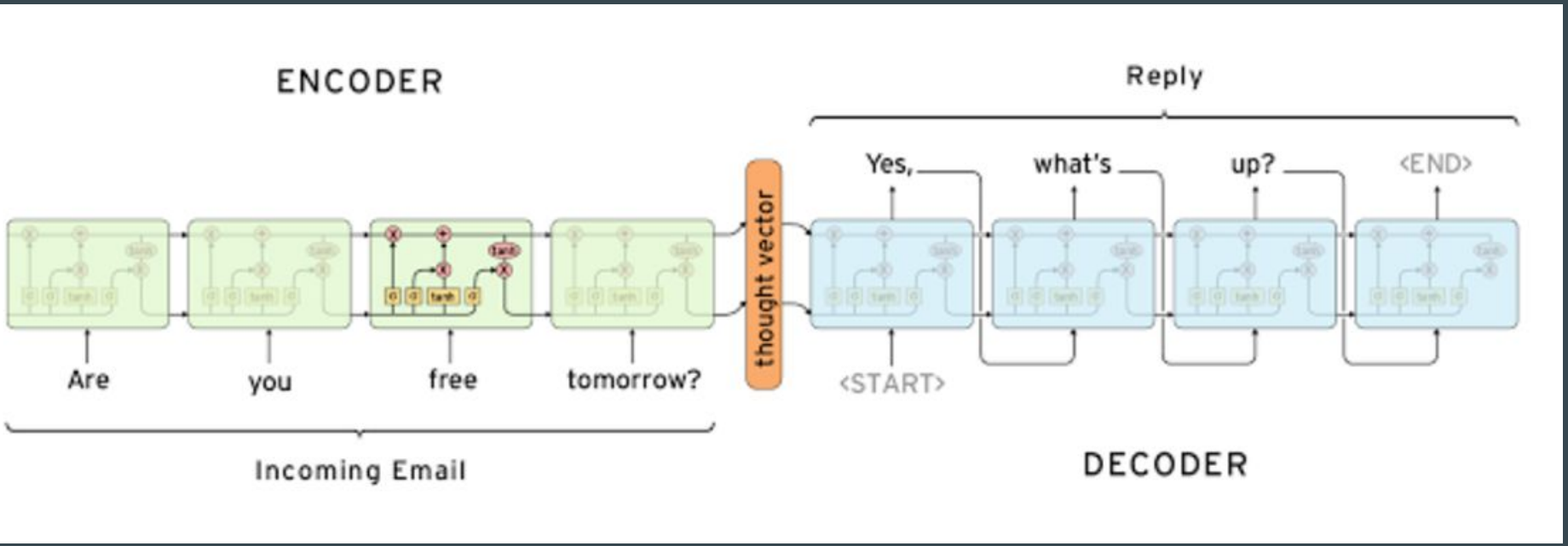


Processamento do Chatbot

- Generative
- Retrieval-Based

http://www.wildml.com/2016/04/deep-learning-for-chatbots-part-1-introduction/

Generative



http://www.wildml.com/2016/04/deep-learning-for-chatbots-part-1-introduction/

Retrieval-Based

Usam um conjunto pré-definido de respostas e uma heurística para escolher a resposta apropriada baseado na entrada do usuário e no contexto.

http://www.wildml.com/2016/04/deep-learning-for-chatbots-part-1-introduction/

Retrieval-Based

Baseado em Regras

```
If (...) {
      if (...) {
            If (...) {
            }
      } else {
      }
} else {
}
```

Retrieval-Based

Baseado em Intenções

Detecta a Intenção -> Gera uma Ação

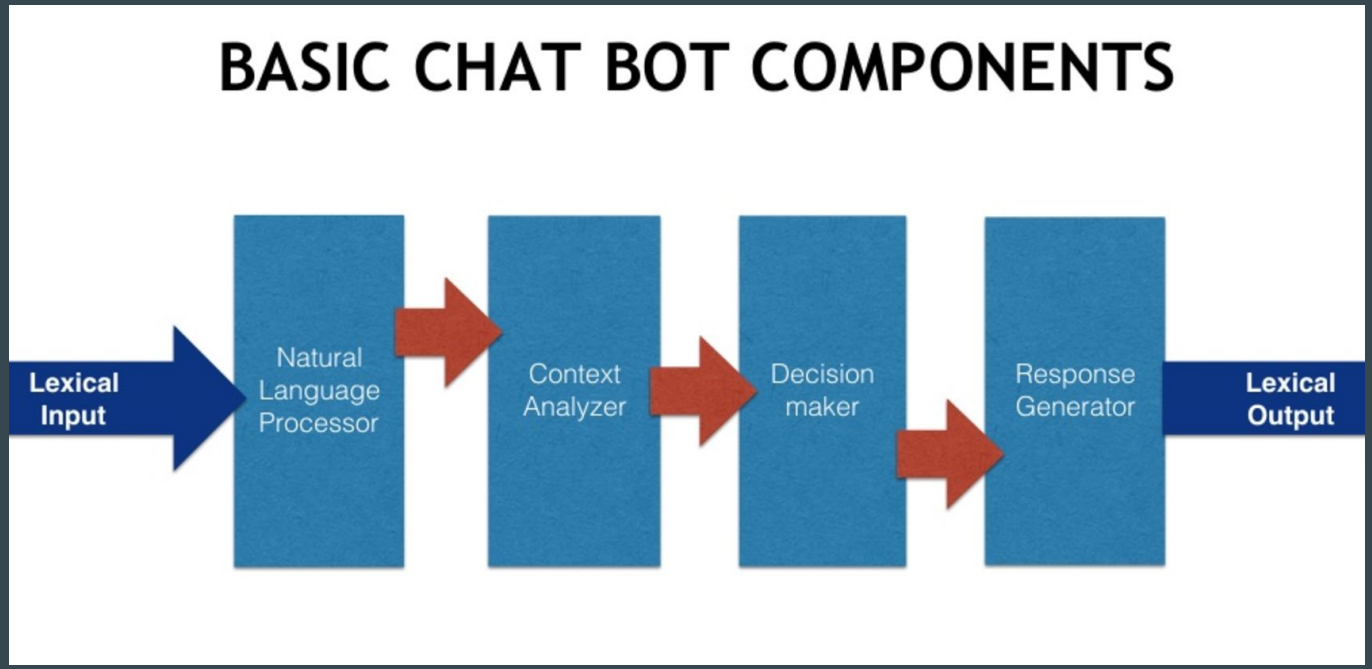
Retrieval-Based

“De-para” com Machine Learning

Detecta o Contexto -> Gera uma Resposta Baseada num CMS

Retrieval-Based

Mais complicado que isso!



Retrieval-Based

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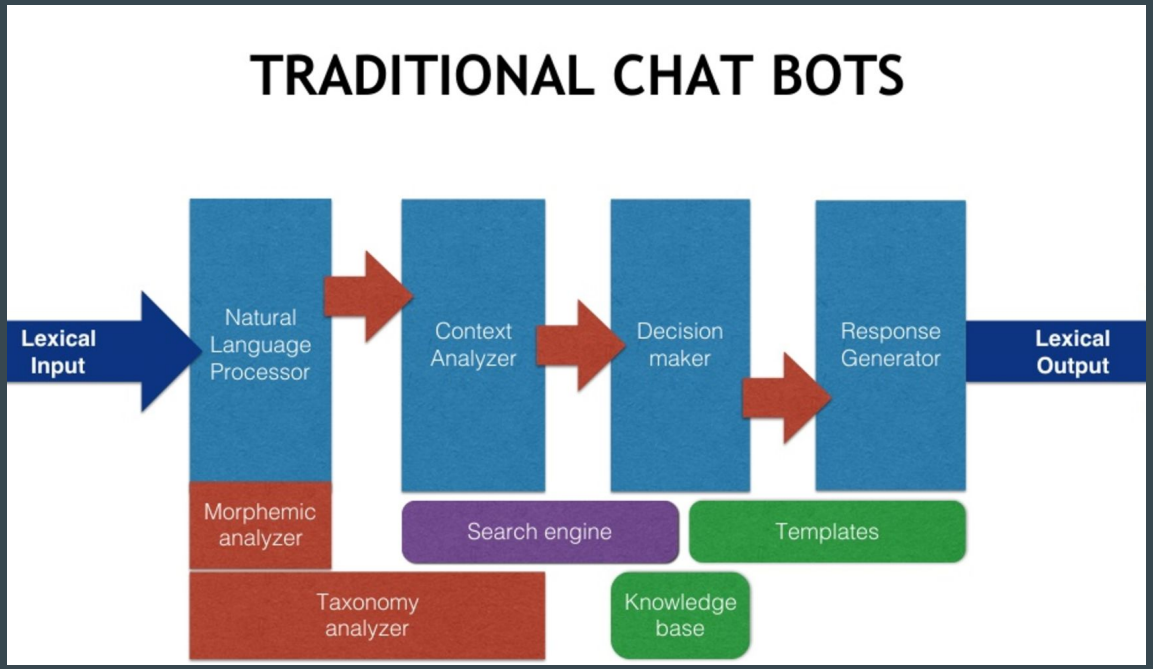

Retrieval-Based

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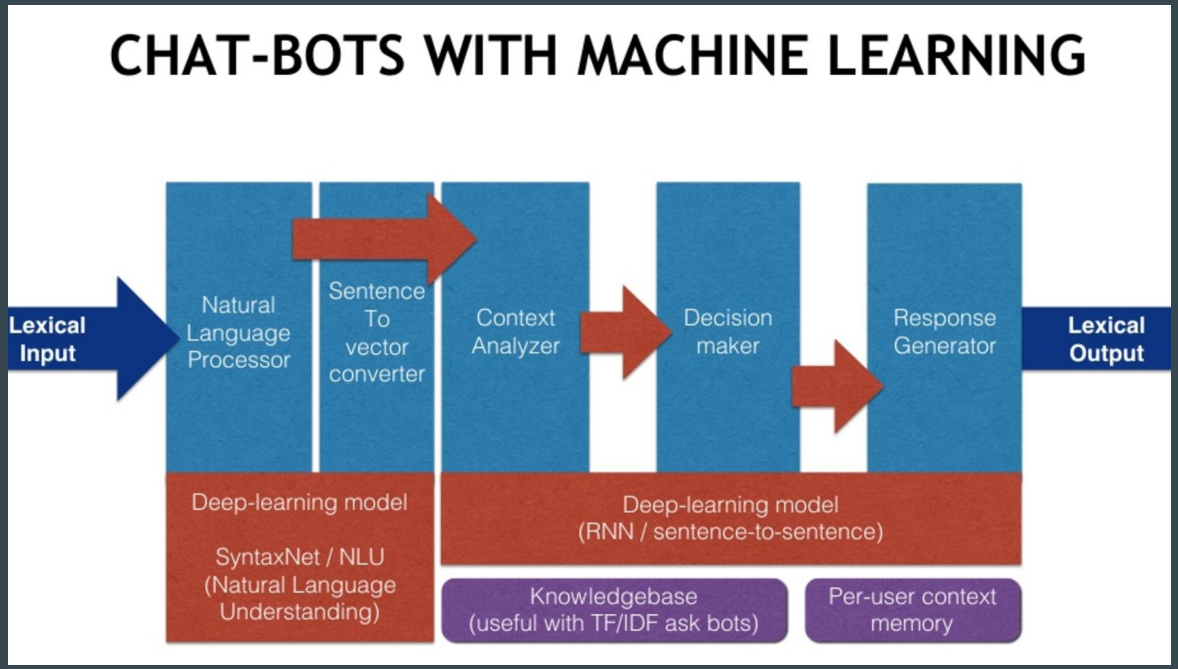


O que vamos fazer:

Detecta a Intenção

- >

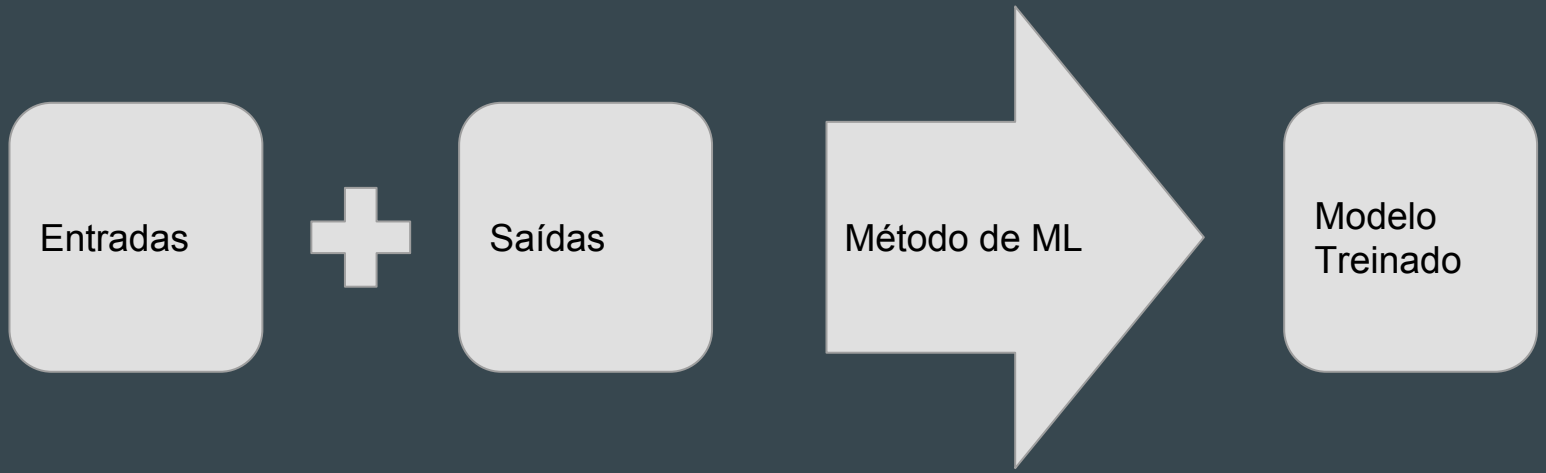
Classifica numa Ação

Retrieval-Based

Baseado em Intenções

Detecta a Intenção -> Gera uma Ação

Treinamento



Treinamento

Teste

Rodando o classificador

$ python train.py

$ python eval.py --eval_train --checkpoint_dir="./runs/1234567890/checkpoints"