

Taboo Game-like: Project

Intelligent Interfaces

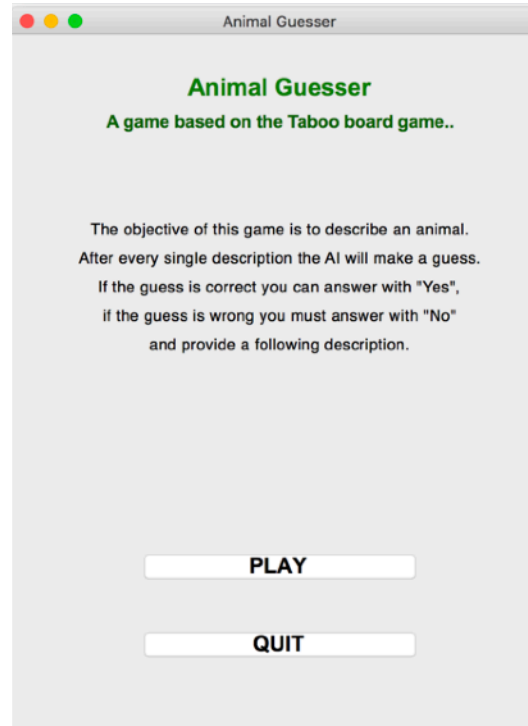
Wissam **Nasser**, Wouter **Parys**, Charlotte **Waltregny**

INTRODUCTION

Taboo Game-like

How to play?

1



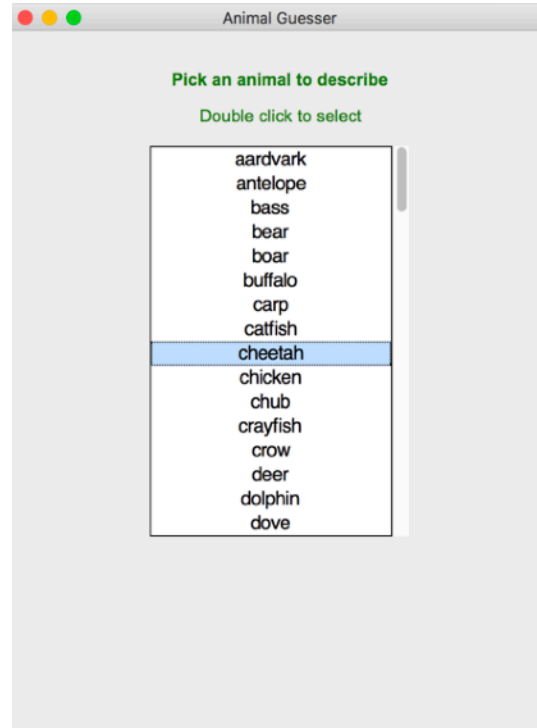
User presses **PLAY** button

INTRODUCTION

Taboo Game-like

How to play?

2



User selects animal
in the dropdown list
retrieved from **ElasticSearch**
database

DATABASE

ElasticSearch

DATABASE

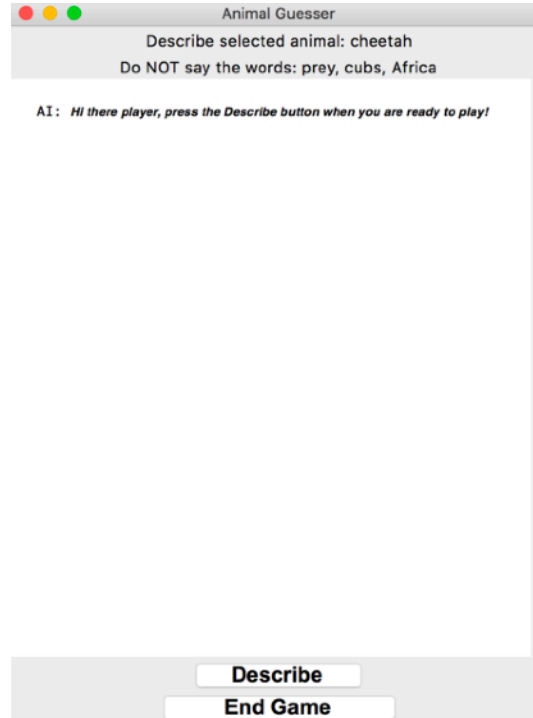
ElasticSearch

FRONT-END

Taboo Game-like

How to play?

3



User presses the **DESCRIBE** button and starts describing the animal without saying the **Taboo words**

BRAIN ASPECT 1

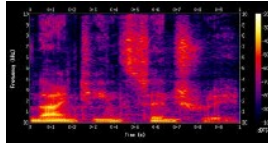
Speech Recognition

How does it work?

BRAIN ASPECT 1

Speech Recognition

How does it work?

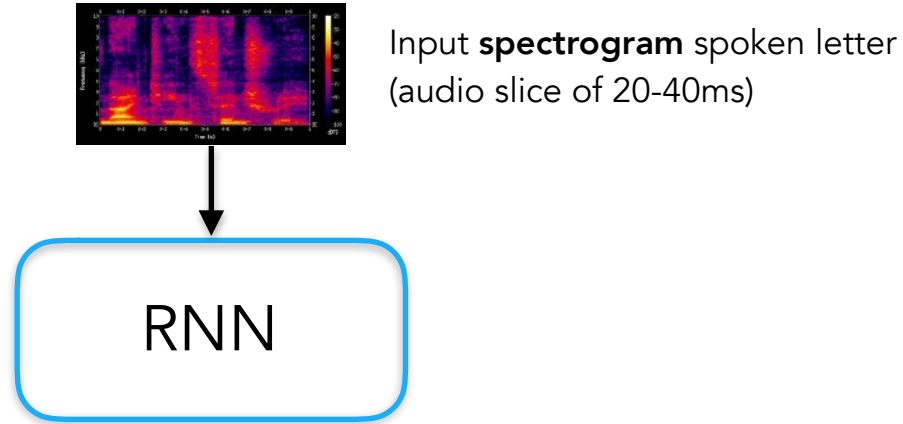


Input **spectrogram** spoken letter
(audio slice of 20-40ms)

BRAIN ASPECT 1

Speech Recognition

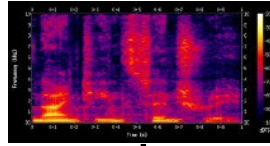
How does it work?



BRAIN ASPECT 1

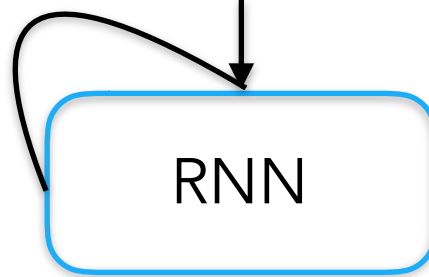
Speech Recognition

How does it work?



Input **spectrogram** spoken letter
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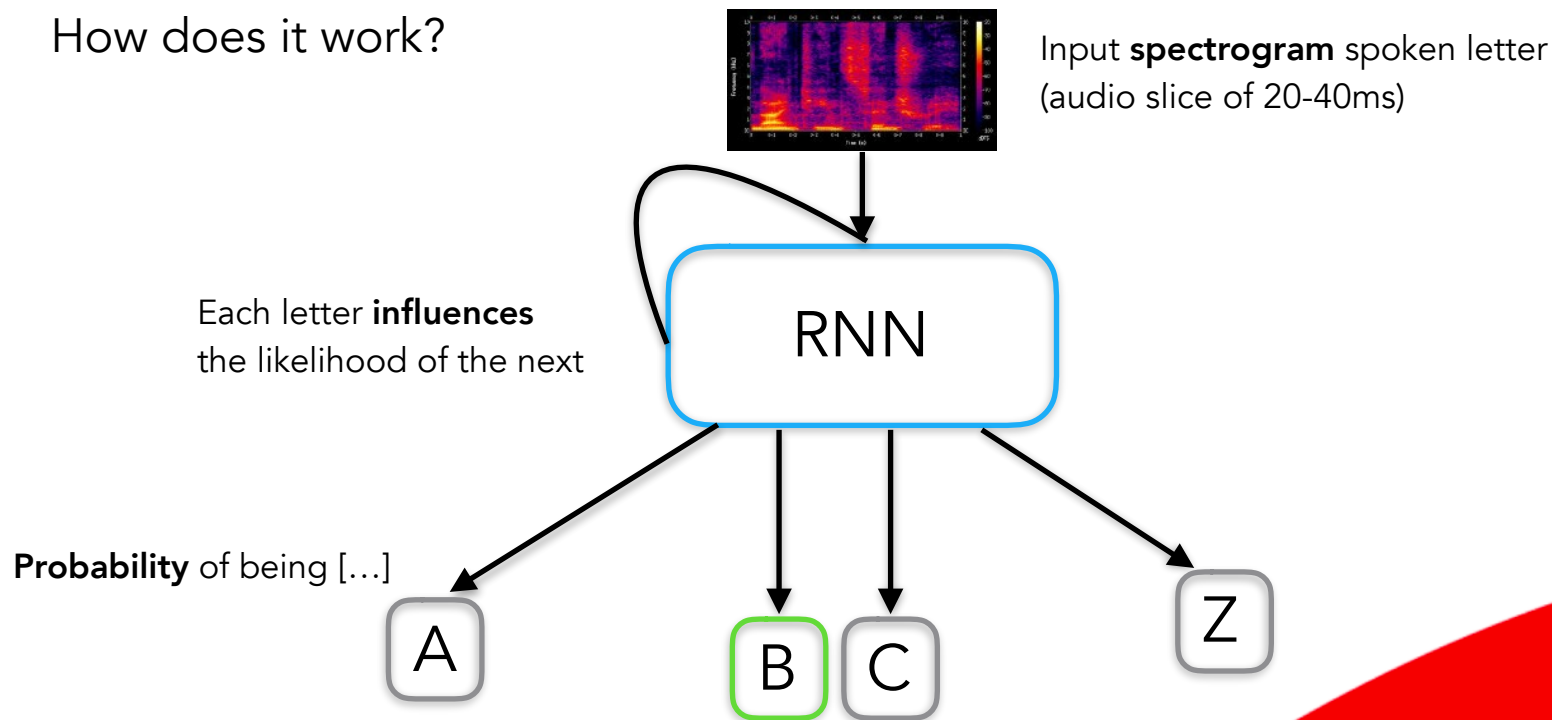
Each letter **influences**
the likelihood of the next



BRAIN ASPECT 1

Speech Recognition

How does it work?



BRAIN ASPECT 1

Speech Recognition

Speech Recognition as a Service

BRAIN ASPECT 1

Speech Recognition

Speech Recognition as a Service



BRAIN ASPECT 1

Speech Recognition

Speech Recognition as a Service

No account
needed

Free

Audio
streaming





Unlimited
API call



BRAIN ASPECT 1

Speech Recognition






Speech Recognition as a Service

	No account needed	Free	Audio streaming	Unlimited API call
				
				
				

BRAIN ASPECT 1

Speech Recognition







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BRAIN ASPECT 1

Speech Recognition








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BRAIN ASPECT 1

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BRAIN ASPECT 1

Speech Recognition










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BRAIN ASPECT 1

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BRAIN ASPECT 1

Speech Recognition












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BRAIN ASPECT 1

Speech Recognition













Speech Recognition as a Service

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BRAIN ASPECT 1

Speech Recognition














Speech Recognition as a Service

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BRAIN ASPECT 1

Speech Recognition















Speech Recognition as a Service

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BRAIN ASPECT 1

Speech Recognition
















Speech Recognition as a Service

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BRAIN ASPECT 1

Speech Recognition
















Speech Recognition as a Service

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BRAIN ASPECT 1

Speech Recognition

Speech Recognition as a Service

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BRAIN ASPECT 1

Speech Recognition

Using SpeechRecognition and PyAudio python libraries

BRAIN ASPECT 1

Speech Recognition

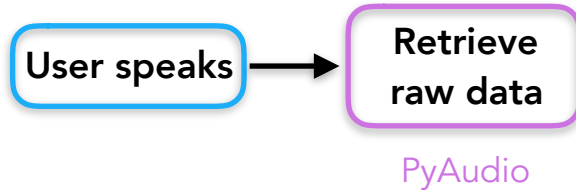
Using SpeechRecognition and PyAudio python libraries

User speaks

BRAIN ASPECT 1

Speech Recognition

Using SpeechRecognition and PyAudio python libraries



BRAIN ASPECT 1

Speech Recognition

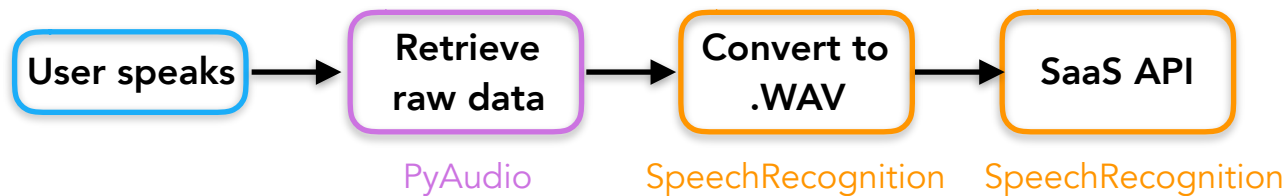
Using SpeechRecognition and PyAudio python libraries



BRAIN ASPECT 1

Speech Recognition

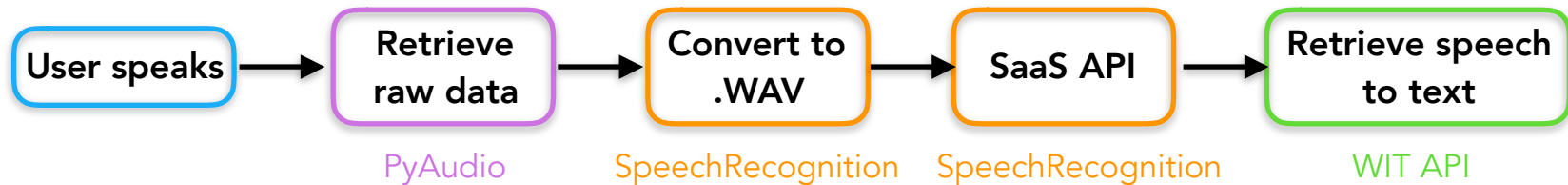
Using SpeechRecognition and PyAudio python libraries



BRAIN ASPECT 1

Speech Recognition

Using SpeechRecognition and PyAudio python libraries

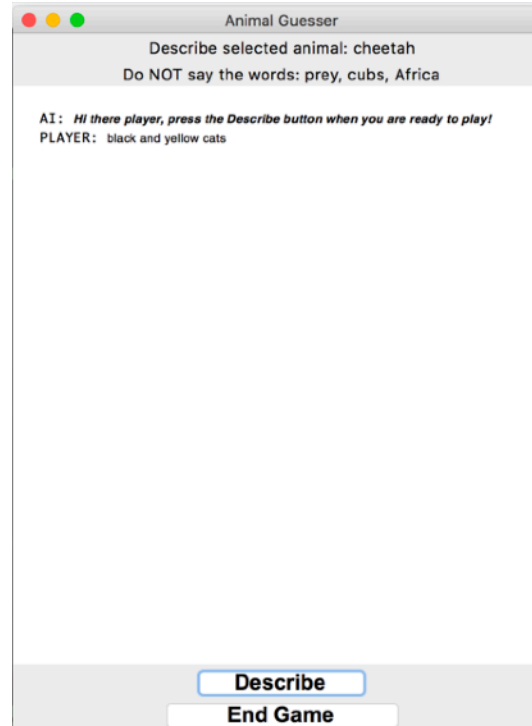


FRONT-END

Taboo Game-like

How to play?

4



The **text** is displayed
on the Chatbox and **NLP**
can be used to guess
the animal

BRAIN ASPECT 2

Natural Language Processing

BRAIN ASPECT 2

Natural Language Processing

BRAIN ASPECT 2

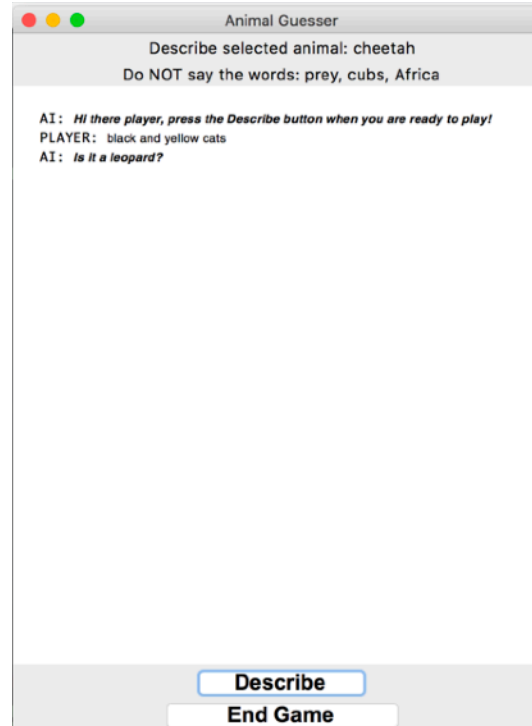
Natural Language Processing

FRONT-END

Taboo Game-like

How to play?

5



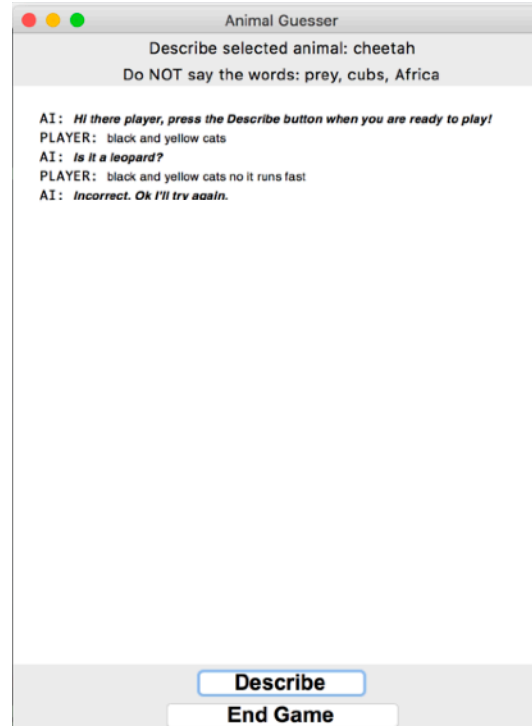
Agent makes its first **guess**

FRONT-END

Taboo Game-like

How to play?

6



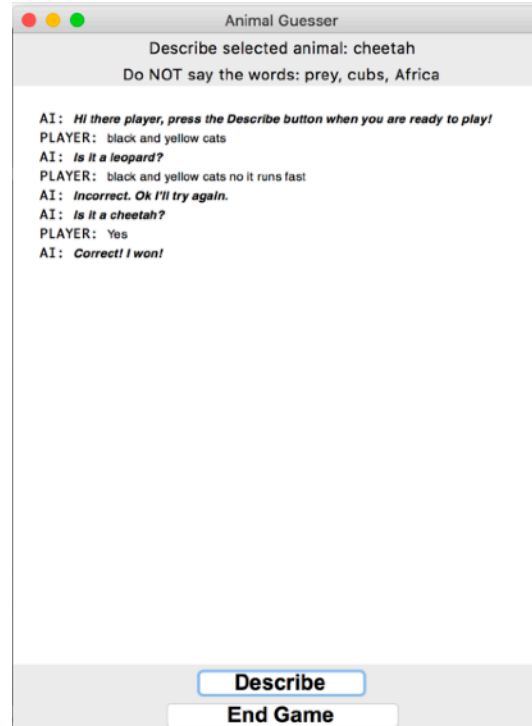
If agent is wrong, player provides more info and we go back to step 3

FRONT-END

Taboo Game-like

How to play?

7



The **game goes on** until the agent makes the **correct guess** (the player says yes), if **30s** has passed or if player says a taboo word

CHALLENGES

Issues faced

POSSIBLE IMPROVEMENTS

CONCLUSION