

BOTCS102

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ABSTRACT

Chatterbot, a chatting robot, is a type of conversational agent which is a computer program designed to simulate an intelligent conversation with one or multiple human users via auditory or textual methods. Our main purpose was introducing Sabanci University and Computer Science by using chatbot. In order to build a chatbot, Pandora Chatbot language is the most suitable language for us. As a result, our chatbot can answer general questions about Sabanci University and detailed questions about CS.

PURPOSE

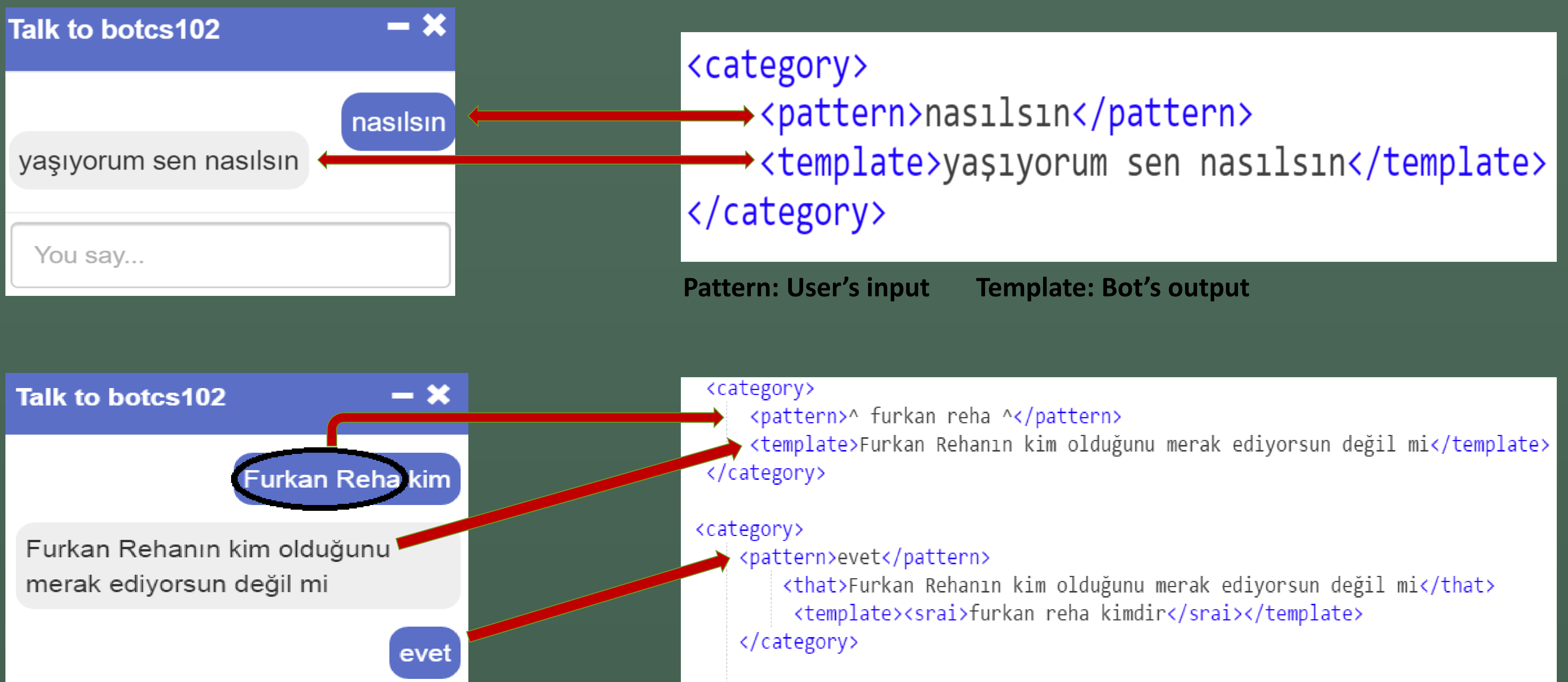
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INTRODUCTION

A chatterbot (also known as a talk bot, chatbot, Bot, chatterbox, Artificial Conversational Entity) is a computer program which conducts a conversation via auditory or textual methods. Such programs are often designed to convincingly simulate how a human would behave as a conversational partner, thereby passing the Turing test. Chatterbots are typically used in dialog systems for various practical purposes including customer service or information acquisition. Some chatterbots use sophisticated natural language processing systems, but many simpler systems scan for keywords within the input, then pull a reply with the most matching keywords, or the most similar wording pattern, from a database. There are two main types of chatterbots, one functions based on a set of rules, and the other, more advanced version, uses artificial intelligence. The chatterbots based on rules, tend to be limited in functionality, and are as smart as they are programmed to be. On the other end, chatterbots that use artificial intelligence, understand language, not just commands, and continuously gets smarter as it learns from conversations it has with people.

METHODS

At first, we started to search information about Facebook bot, Twitter bot, and other chatbot's languages (RiveScript and Pandora) to build a chatbot. We decided in using Pandora Chatbot as it is the most suitable bot language. After that, we built a bot included basic conversation and then tested it. We encountered errors with grammar rules of Turkish and we improved our bot. After that, we added some information about CS and its research interests. Then we added some general information about Sabancı University and its Faculties. Our bot was tested by our friends. We considered the feedbacks. Therefore, we improved the bot's basic communication skills.



There are a lot of ways to ask questions in Turkish language for the same meaning. If we coded every possible questions into the bot, it would have been wasting of time. Therefore, we used key words to avoid this problem. Additionally, we used yes or no question to test if the bot understand the correct question.

DISCUSSION AND CONCLUSION

Basically, our chatbot can answer questions about Computer Science so people who want know about Sabanci University or CS can easily reach the information by communicating with the bot. Therefore, our chatbot can be used on the website of SU for people who want to be informed. In this sense, more chatbots can be coded about other faculties or programs. Additionally, they can be used on the website of SU or they can be shared via Facebook, Twitter, Instagram and other social media accounts of SU

RESULTS

We coded botcs102 and it works. It can answer general questions about Sabanci University and detailed questions about CS. However, it only can answer certain type of questions so it cannot answer questions which are not coded.

SUPERVISED BY KAMER KAYA

REFERENCES:

- Chatterbot - Wikipedia. (n.d.). Retrieved November 13, 2016, from <https://en.wikipedia.org/wiki/Chatterbot>
- Twitterbot - Wikipedia. (n.d.). Retrieved November 13, 2016, from <https://en.wikipedia.org/wiki/Twitterbot>
- Artificial Intelligence Scripting Language - RiveScript.com. (n.d.). Retrieved from <https://www.rivescript.com/>
- How To Build Bots for Messenger - Facebook for Developers. (n.d.). Retrieved from <https://developers.facebook.com/blog/post/2016/04/12/bots-for-messenger/>
- Playground. (n.d.). Retrieved from <https://playground.pandorabots.com/en/>