

AI Powered Chatbot with NLU & NLP

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Abstract— It is a AI powered Chatbot which answers the questions asked about the College. It is a python based chatbot that can be implemented on the website. So, any user who visits the website can interact with this chatbot.

Key words: NLU & NLP, AI powered Chatbot

I. INTRODUCTION

Over the last few years, Chatbots have played a prominent role as human-computer interfaces. Chatbots are generally composed of three modules: the user interface, an interpreter, and a knowledge base. Chatbot is a program that attempts to simulate typed conversation, with the aim of at least temporarily fooling the human into thinking they were talking to another person. Basically, the chatbot is a conversational agent that can interact with user in a given subject using the natural language. Many chatbots have been deployed on the internet for the purpose of education, customer service site, guidance, entertainment.

II. LITERATURE REVIEW

Emanuela Haller and Traian Rebedea, “Designing a Chat-bot that Simulates an Historical Figure”, IEEE Conference Publications, July 2013. There are many applications that are incorporating a human appearance and intending to simulate human dialog, but in most of the cases the knowledge of the conversational bot is stored in a database created by a human expert. However, very few researches have investigated the idea of creating a chat-bot with an artificial character and personality starting from web pages or plain text about a certain person. This paper describes an approach to the idea of identifying the most important facts in texts describing the life (including the personality) of an historical figure for building a conversational agent that could be used in middle-school CSCL scenarios.

III. METHODOLOGY

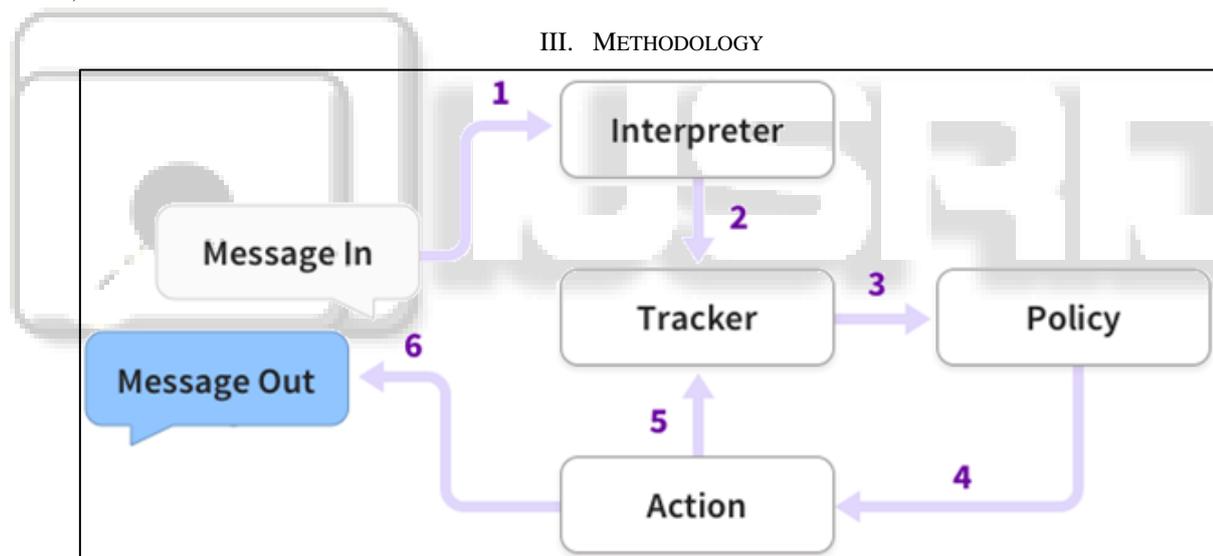


Fig. 1: Methodology

The steps are:

- 1) The message is received and passed to an Interpreter, which converts it into a dictionary including the original text, the intent, and any entities that were found.
- 2) The Tracker is the object which keeps track of conversation state. It receives the info that a new message has come in.
- 3) The policy receives the current state of the tracker.
- 4) The policy chooses which action to take next.
- 5) The chosen action is logged by the tracker.
- 6) A response is sent to the user.

IV. CONCLUSION

The main objectives of the project were to develop an algorithm that will be used to identify answers related to user submitted questions. To develop a database were all the

related data will be stored and to develop a web interface. The web interface developed had two parts, one for simple users and one for the administrator. A background research took place, which included an overview of the conversation procedure and any relevant chatbots available. A database was developed, which stores information about questions, answers, keywords, logs and feedback messages.

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