UnibaguePocketBot

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***Abstract*—This project was developed in order to fulfill the need to provide information to any user so that they can find locations or information relevant to the University of ibagúe.**

***Index Terms*—Bot, Information, Programming, Telegram, python**

I. Introduction

In this paper we explain how and why we created a telegram bot for the university of ibague.

II. Objectives

-Guide a person who is at the University of Ibagué and provide pertinent information about it. -Implement a bot that works for the University of Ibague. -Send locations to the user so that they can be easily mobilized through the university campus. -Provide basic information about the electronic engineering program to the end user. -Create a connection through the teacher-student bot allowing a faster and more efficient way of contact than an email.

III. Body

The University of Ibagué does not have an integrated information system that allows any user to be located on the university campus, first semester students and visitors of the university constantly have to ask for laboratory locations, classrooms or university offices. We decided to address these problems and solve it by using an information bot through the use of Telegram, a messaging application very similar to WhatsApp but more open to development by users. Taking advantage of the fact that a bot can be programmed with automatic responses UnibaguePocketBot can give users information about teachers such as their student seen timetable and institutional mail, currently the bot has electronic engineering information only, location of classrooms and location of laboratories, Among these are the following sections:

Information about teachers of the faculty of electronic engineering: The bot sends a list of professors and a collage with their photos, additionally displays a selection menu for each teacher who sends their advisory hours and institutional mail.

Information about classrooms: It is possible to ask the bot for specific classrooms so the user receives the location of the classroom with satellite view and a photo of such classroom.

Information about laboratories: It is possible to ask the bot for specific laboratories so the user can receive the location of the laboratory, a description of how to get there, the name on the sign and a photo of the laboratory entrance.

Information about professional electives for electronic engineering: The bot sends the list of professional electives that electronic engineering students can register

Information about electives of humanities: The bot sends the list of electives of humanities that the students of the University of Ibagué can register throughout their career.

Information about degree project options: The bot sends the possible degree options offered by the university and its requirements.

University contact information: The bot sends contact information of the electronic engineering faculty such as program email, program Facebook, phone number and extension to the program.

Subjects for each semester of electronic engineering: The bot sends the list of subjects for each semester for the electronic engineering program.

Special dates: The bot sends the list of special dates of the semester calendar.

Information about hotbeds of research: the bot sends the list of hotbeds of the E + TEC group of the University of Ibague describing the topic of study of the hotbed and it's respective director.

UnibaguePocketBot has the ability to contact some teachers through chat during their student time timetable without the student having access to the teacher's phone number to communicate with him. Currently UnibaguePocketBot has a good amount of information that we could access but it is planned for the future to add even more, so that you can access information for all the undergraduate programs offered by the university.

IV. Conclusion

When a new user starts a chat with UnibaguePocketBot, an options menu is displayed to the user that sends specific messages to the bot so that it returns the information requested by the user or a new options menu. The UnibaguePocketBot code can run on any device with internet access and the ability to execute a Python code, currently running on arubaCLOUD, a virtual machine server so you can have high response time due to the low latency of your internet connection. UnibaguePocketBot is designed to respond to different specific requests to which responses were programmed so that it is able to provide a large amount of information to the end user to get them located in the university. The token generated by @botfather in Telegram makes possible the direct contact with the messages that the UnibaguePocketBot receives by

using the API with our Python code. By having contact with Telegram or more specifically the bot we can have as an input the messages written by the user and have an output of messages previously written in the code. For example: If the user writes the word “Profesores” or selects it on the keyboard provided, the code recognizes that it has a programmed response and will return the information through a message and / or location and image. And finally the bot will send you a new information keyboard either to continue the information search or the main menu. UnibaguePocketBot is able to send predefined messages, locations, images and specific information. Locations are sent in response to classrooms and / or laboratories. The images are also sent in response to requests for location and in case of searching for teacher information to give a guide to the user of who is the teacher they are looking for. The information that UnibaguePocketBot provides to the user can be about: teachers, classrooms, laboratories, degree project options, hotbeads of reaserch, etc. The contact function is part of our branch of profesores and what it allows is a direct contact between student teacher using the bot as a virtual tunnel style communication layer making possible the communication of two users without the need for them to have a direct communication where they would have to exchange personal data.

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