

ЖАРАТЫЛЫСТАНУ ЖӘНЕ ТЕХНИКАЛЫҚ ҒЫЛЫМДАР

NATURAL AND TECHNICAL SCIENCES

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TELEGRAM BOT

Abstract. As we all know bots, robots simplify human life. Now, as the age of technology, heaped robots are being created every day to make life easier for mankind. The use of robots has spread so that now almost every school has robots. People began to arrange robots fights, once it was just a dream, and now every region of Kazakhstan can conduct their robot fights. Today it is modern to use bots in web pages. They replace operators who needed rest, sleep, food, and so on. Bots, on the contrary, they do not need worldly desires.

Messengers are messaging between users. One of the first online messengers was “ICQ”, where people could only exchange messages. Now in the market of online messengers is leading “WhatsApp”. With the help of “WhatsApp” we can not only exchange messages, but also make video calls.

Thanks to P. Durov and his team, we can now use both the bot and online messenger together.

Keywords: messenger, telegram, bot, information, internet.

Андатпа. Бәріміз білетініміздей боттар, роботтар адам өмірін жеңілдетеді. Қазіргі таң, технология ғасыры, күннен-күнге адамның өмірін жеңілдету үшін роботтардың түр-түрі шығып жатыр. Роботтардың қолдануы таралып кетті, қазіргі таңда мектептер роботтармен жабдықталған. Адамдар оңаймен роботтар соғысын өткізе бастады, кезінде роботтар соғысы жай ғана арман болған, ал қазір Қазақстанның әр облысы өздерінің робот соғысын өткізе алады. Бүгінде вэб парақшаларда боттарды қолдану сәнге айналды. Олар бізге тамаққа, демалысқа, ұйқыға және тағы басқаға мұқтаж адамдарды ауыстырады. Ал боттар болса ондай дүниелік заттарға қажет емес.

Хабарламалар пайдаланушылар арасында хабар алмасады. Алғаш онлайн хабаршылардың бірі «ICQ» болды, онда адамдар тек хабар алмасады. Қазір «WhatsApp» онлайн-хабар тарату нарығында көшбасшы.

«WhatsApp» көмегімен біз тек хабар алмасып қана қоймай, бейне қоңыраулар жасай аламыз.

П. Дуровтың және оның командасының арқасында біз енді ботты және онлайн хабаршыны бірлесіп пайдалана аламыз.

Түйінді сөздер: мессенджер, телеграм, бот, ақпарат, интернет.

Аннотация. Как нам всем известно боты, роботы упрощают жизнь человечеству. Сейчас так как век технологии, с каждым днем создаются навороченные роботы для облегчения жизни человечеству. Использование роботов распространилось так, что теперь почти в каждой школе есть роботы. Люди начали устраивать бои роботов, когда-то это было всего лишь мечта, а сейчас каждый регион Казахстана может проводить свои бои роботов. Нынче модно использовать ботов в вэб страницах. Они заменяют операторов, которым нуждался отдых, сон, еда и так далее. Боты же наоборот они не нуждаются в мирских желаниях.

Мессенджеры это обмен сообщениями между пользователями. Одним из первых онлайн-мессенджеров это «ICQ», где люди могли обмениваться только сообщениями. Сейчас на рынке онлайн-мессенджеров лидирует «WhatsApp». С помощью «WhatsApp» мы можем не только сообщениями обмениваться, но и ещё совершать видео звонки.

Благодаря П. Дурову и его команде теперь мы можем использовать и бота и онлайн-мессенджера вместе.

Ключевые слова: мессенджер, телеграм, бот, информация, интернет.

Introduction

The modern rhythm of life is extremely dynamic, not the last prerequisite for this was the rapid development of information technology. Currently, a variety of gadgets and applications are aimed at simplifying the lives of ordinary users as much as possible in solving everyday tasks, as well as providing fairly quick access to any information of interest to him.

According to statistics, the largest group of people who actively use both the Internet and the capabilities of electronic devices and various applications are schoolchildren and students. Any modern educational institution seeks to develop, improve the quality of the learning process, its accessibility and interactivity. At the moment, most universities and secondary specialized educational institutions have their own Internet presence in the vast world wide web, where the most relevant information about the school, its history, staff and teachers is posted, student life and various events are covered. As a rule, the main goal of such web services is to attract the attention of future students, their parents, potential employers, providing, first of all, information about current projects, research, and other scientific and extracurricular activities conducted in a particular educational institution. However, the students

themselves may not always receive quick and convenient access to information related to their academic activities, for example, current changes in the schedule of classes.

There are several options for solving such problems, for example, creating a mobile application, which displays the schedule for each group and teachers. The second option is the creation of a Telegram bot, through which access is made to information from the site. In this article, we will consider the second option.

The first Telegram client was introduced in 2013, and since then the messenger is gaining popularity, both in Russia and around the world due to its ease of use, security, high speed and availability. An interesting feature of Telegram is that anyone can use all the features of the service to create their own programs - bots. Such a program performs the functions of an indispensable assistant, which through the most convenient interface and set of commands allows you to solve an elementary operation without interrupting communication. Communication with the bot is carried out through a dialogue, as well as with a regular user.

In this regard, the goal of the work is to create a simple and convenient Telegram bot, which would provide quick and secure access to the necessary information, have a convenient and simple interface.

Research methods

The article discusses one of the most convenient ways to quickly and accurately obtain the necessary information through a dialogue between the user and the Telegram bot.

To make simple Telegram bot we need Computer, Telegram and Python programming language.

A computer is a device that can be instructed to carry out sequences of arithmetic or logical operations automatically via computer programming. Modern computers have the ability to follow generalized sets of operations, called programs. These programs enable computers to perform an extremely wide range of tasks. A "complete" computer including the hardware, the operating system (main software), and peripheral equipment required and used for "full" operation can be referred to as a computer system. This term may as well be used for a group of computers that are connected and work together.

Telegram is a cloud-based instant messaging and voice over IP service developed by Telegram Messenger LLP, a privately held company registered in London, United Kingdom, founded by the Russian entrepreneur Pavel Durov and his brother Nikolai. Telegram client apps are available for Android, iOS, Windows Phone, Windows NT, macOS and Linux. Users can send messages and exchange photos, videos, stickers, audio and files of any type.

Python is an interpreted, high-level, general-purpose programming language. Created by Guido van Rossum and first released in 1991, Python has a design philosophy that emphasizes code readability, notably using significant whitespace. It provides constructs that enable clear programming on both small and large scales. Van Rossum led the language community until stepping down as leader in July 2018.

Now we need to register our bot in Telegram. To do this, open the Telegram application (or the web version) and go to the @BotFather bot. Run the bot and send it the command /newbot.

The first thing we will be asked about the name of the bot, namely the name, what will be displayed in the list of conversations next to the avatar. Let's call our bot "JIC", send this message @BotFather. Now you need to come up with a unique bot login, which should end in bot. Let it be "jicedubot". Remember: the bot's login cannot be changed further.

First of all, fill in the About Info for this, enter the command /setabouttext. Following the instructions @BotFather we enter the following description of the bot. "Official bot of Jambyl Innovation College."

Next, fill in the Description Info for this in @BotFather enter the command /setdescription and write the following text. "This bot will ask your name, age and will say hello to you and tell you that your young"

And for dessert, use the /setuserpic command to set an avatar for our bot. It's time to install Python, and the PyCharm development environment. Edit text editors. Python practice is a very good solution using a development environment.

Install Python3

- I will write the code under MacOS, therefore:
- Go to the official Python website and select "Download Python 3.7.2"
- When we downloaded the correct version of Python, run the installer.



Then we need to open terminal and write:

- pip install pyTelegramBotAPI

What is going on here? We turn to pip and want to install the magic module pyTelegramBotAPI, which is responsible for the creation and operation of bots.

If the module is successfully installed, then we should see the inscription Successfully installed pyTelegramBotAPI-x.x.x. As a matter of fact, there are many other modules for Python (and not only) with which you can quickly launch a Telegram bot; in simple words, pyTelegramBotAPI is such a “constructor” that contains all the “cubes” components we need.

Then install PyCharm. I can recommend a great and free environment - PyCharm from JetBrains. This company specializes in creating professional programming environments. If Microsoft Office is almost always used to work with tables / presentations and text documents, then the programs from JetBrains occupy a leading position among programmers.

So, go to the download page of PyCharm. Two versions are available for download: professional and community version. The community version is free. I'll download the community version.

Start writing code

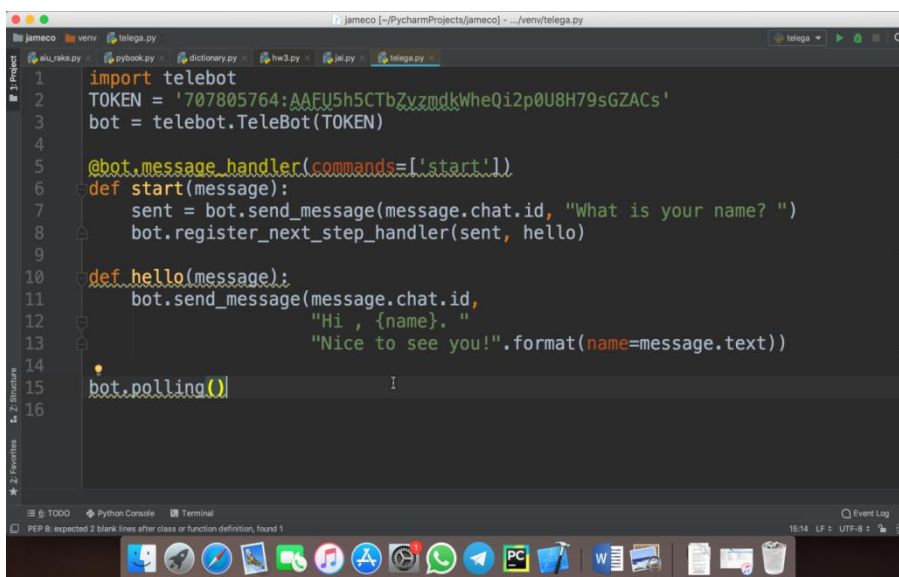
You can go to the most interesting part - writing the code of our bot. Open up

First of all, we connect the telebot module, which we installed using pip. We do it like this:

- import telebot







At the beginning of the creation of the bot, we got TOKEN bot. This is the key with which we can control our robot through Python.

How look simple code for Telegram bot:



```
1 import telebot
2 TOKEN = '707805764:AAFU5h5CTbZyzwdkWhQI2p0U8H79sGZACs'
3 bot = telebot.TeleBot(TOKEN)
4
5 @bot.message_handler(commands=['start'])
6 def start(message):
7     sent = bot.send_message(message.chat.id, "What is your name? ")
8     bot.register_next_step_handler(sent, hello)
9
10 def hello(message):
11     bot.send_message(message.chat.id,
12                      "Hi, {name}. "
13                      "Nice to see you!".format(name=message.text))
14
15 bot.polling()
```

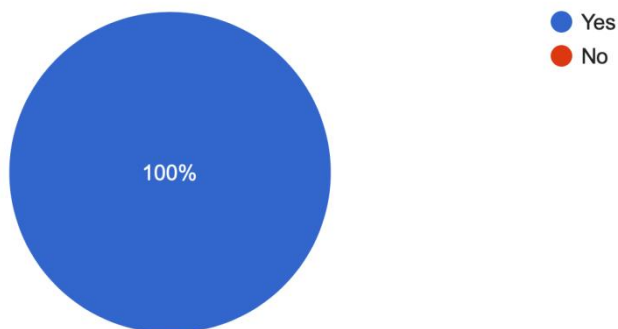
Today

-  **mrQabdushev** ✓✓
/start
-  **JIC**
What is your name?
-  **mrQabdushev** ✓✓
Yerdaulet
-  **JIC**
Hi , Yerdaulet. Nice to see you!
How old are you?
-  **mrQabdushev** ✓✓
25
-  **JIC**
Wow , 25. You're too young.

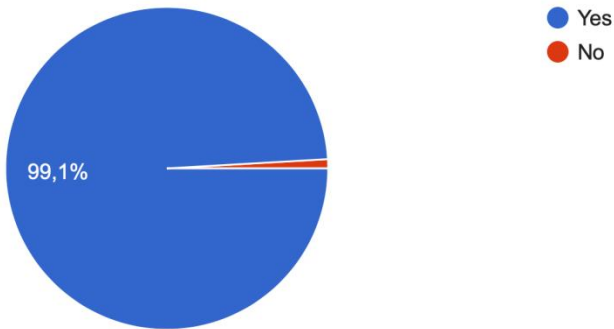
Research results

I've asked more than 100 persons about Telegram and here is statistics:

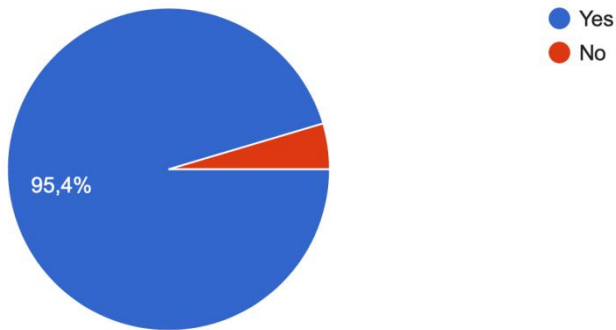
- Have you heard about Telegram messenger?



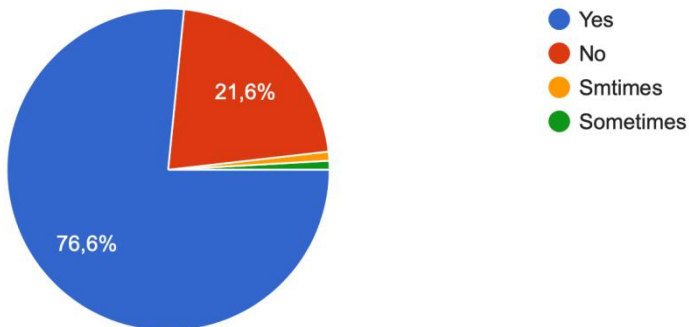
- Are you using Telegram messenger?



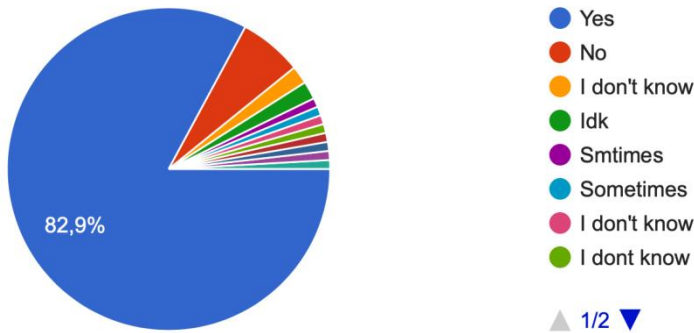
- Did you hear about Telegram bots?



- Do you use Telegram bots? Or have you ever use it?



- Is Telegram bots useful?



- Which Telegram bots do you know?

Here is a lot of bots, but let me write top 5 bots they are:

1. @KazPostBot
2. @EgovKzBot
3. @vkmusic_bot
4. @flibustafreebookbot
5. @Instasave_Bot

Conclusion

Telegram bots have become a breakthrough in their field as a convenient platform for implementing various software tools for the user's goals. The user's goals can be quite diverse and the only expense of the user will be hosting with an SSL certificate.

Telegram bots can be a good help as a platform for monitoring the development of a project as a whole or any part of it. Such a part can be a project risk control process.

From the monitoring side, bots are convenient because Telegram can be installed on almost any common platform. It should be noted that the control can be carried out in real time by making a request to the bot or by setting program rules for monitoring and reporting. As part of risk control using Telegram-bot, you can view, add and change project risks, and, as a result, instantly react to any changes in the course of development.

In conclusion, I want to write that using bots will make life easier for us, but I also think that people will become even lazier. But at the same time, bots will do the job better than people, they can't be bribed or something like that.

References:

- 1 <https://chto-eto-takoe.ru/messenger>
- 2 <http://www.businessofapps.com/data/telegram-statistics/>
- 3 The Python 3 tutorial (<http://pythonworld.ru>) is an excellent Russian-language website from which to start learning Python;

4 The lessons on creating Telegram bots from @Groosha (<https://www.gitbook.com/book/kondra007/telegram-bot-lessons/details>) - everything you need to know about Telegram robots in Python is very detailed and understandable about many aspects of bot development;

5 The py Telegram Bot API repository on Git Hub (<https://github.com/eternnoir/pyTelegramBotAPI>) is a detailed English-language documentation for the telebot module, all functions are described, and there are several examples in the examples directory;

6 Telegram Bot API (<https://core.telegram.org/bots/api>) - complete official English-language documentation describing all the features and functions of the Telegram API for bots.

7

https://docs.google.com/forms/d/1wZSCpePos2Gi0GRLy_snjTWC0Yq_HXo_ussUnQLrFXi4/edit

8

https://docs.google.com/spreadsheets/d/1aHDDM-bjqWdfjLAHiZL_2d_M27iwHnos-kOLh-8XFiY/edit#gid=2123043159&fvid=505899628