Telegram Bot API

Presented by :

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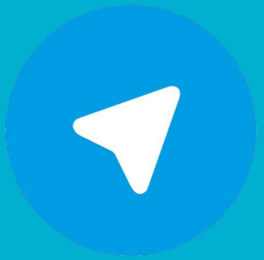
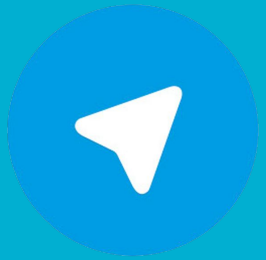


Introduction to bots

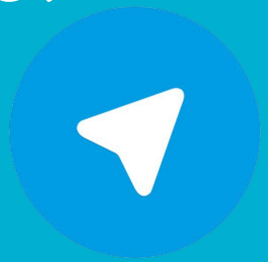
A **bot** is a software application that runs automated tasks (scripts) over the Internet. Typically, bots perform tasks that are both simple and structurally repetitive, at a much higher rate than would be possible for a human alone.



How can I create my own Bot?

To begin with, there is this big question: *Are you able to code*? For creating a "real" Telegram bot you would need to code a little program to interact with the Telegram servers.

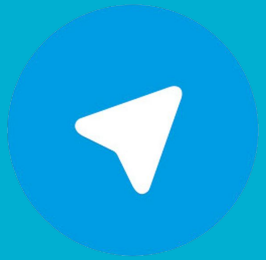
- Manybot -Offers to create bot on their own servers. (Limited)
- Coding it yourself - No limitations, can create anything you want!



Hosting a bot

A bot interacts with the Telegram servers via an API. In order to have a 24/7 online bot, it needs to run on any type of computer for 24/7 . This can be done by:

- **Micro-Controller/Raspberry Pi** - consumes only a tiny amount of energy compared to a PC and costs less
- **Having your PC running 24/7** - consumes a lot of energy
- **Pay for a VPS from a hosting provider -** more computing power, but it costs on a monthly basis

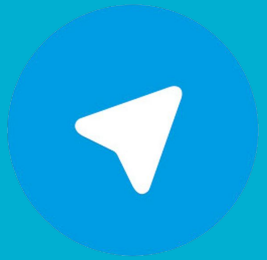


Programming language and IDE

The most suggested programming languages for coding a Telegram bot are:

- Python
- PHP or Node.js
- C#
- Java

Any IDE can be used to program your bot, depending on the language. A simple text editor like **Atom** or **gedit** can be used as well.

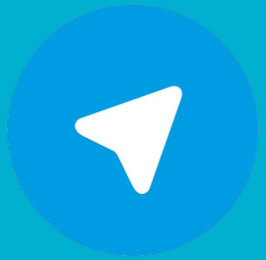


Libraries and frameworks

Telegram uses an HTTP based API. You call the url and pass it parameters. It then sends back a JSON decoded answer. This can be done easily with the help of libraries and frameworks:

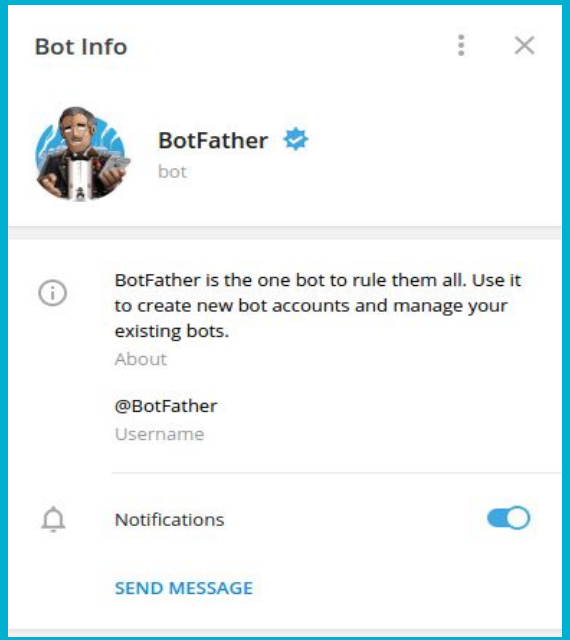
- A **library** is a package of code used for one task or a group of tasks. There is still a need to periodically check for updates and handle the conversations yourself when using libraries.
- A **framework** is a piece of software which is kind of a skeleton. It runs autonomously and does stuff when it needs to be done. You only provide the code for some special stuff.

Note: Using Frameworks are highly recommended!

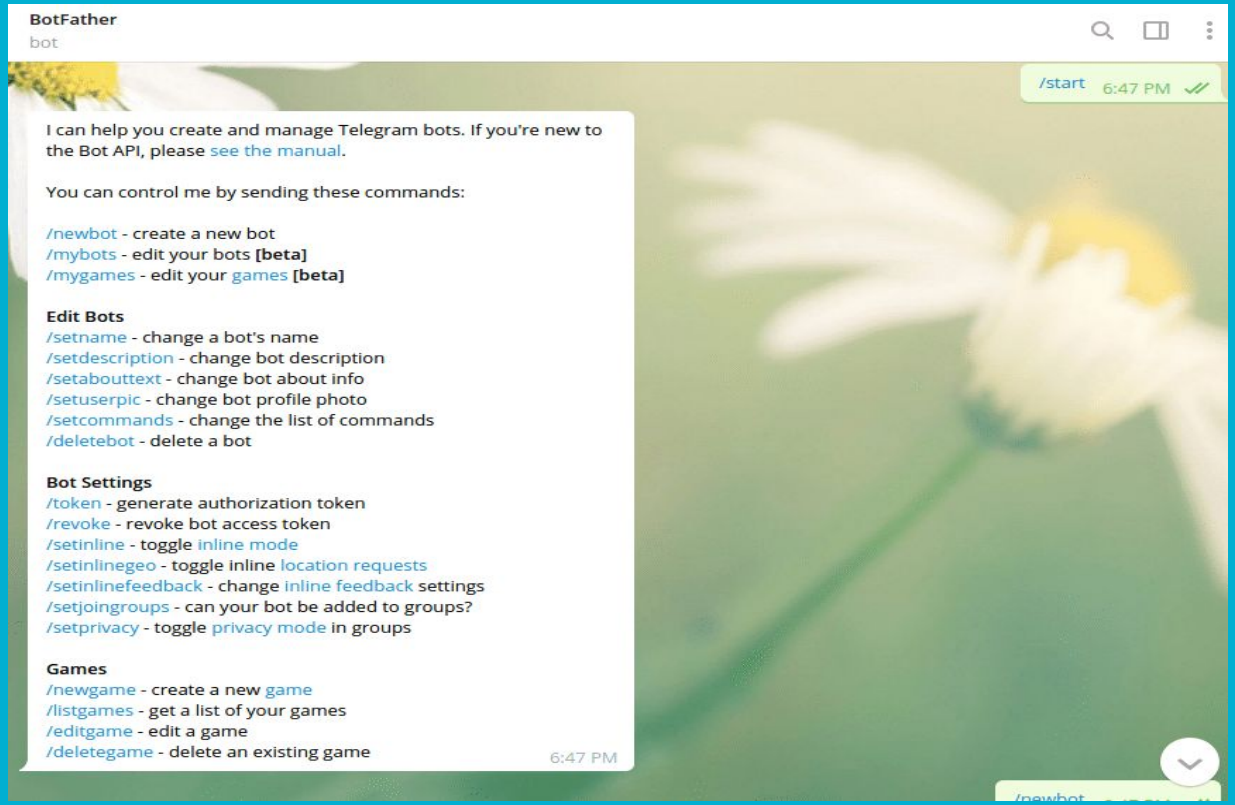


Starting your first bot

To start your bot, you need to get a **BotToken** from the BotFather bot on Telegram. With it you can interact with the Telegram Servers. Just Talk to @BotFather and create a new bot.

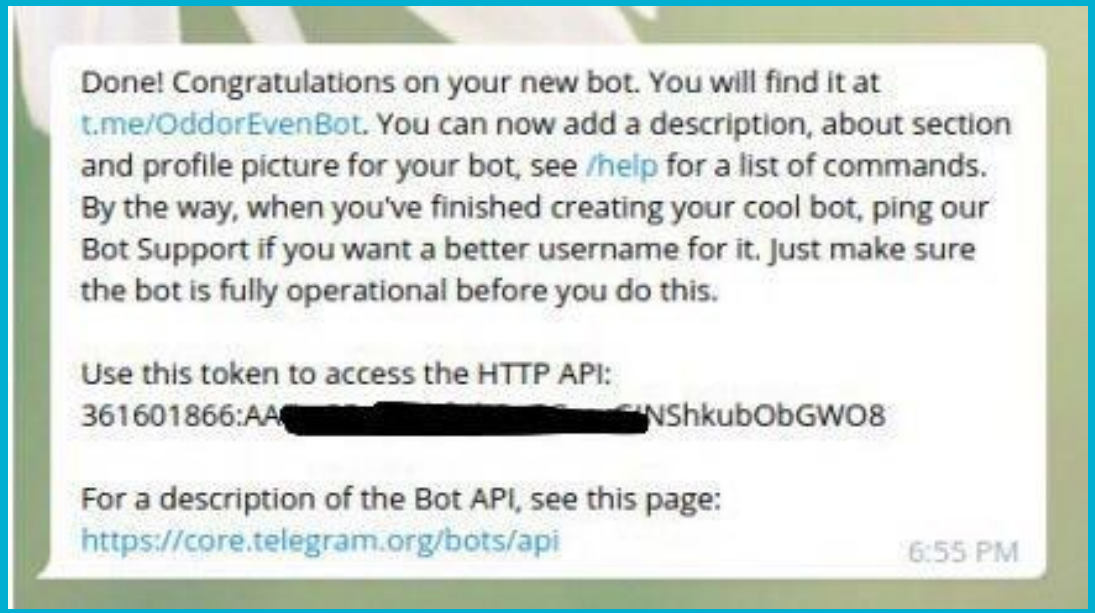


Starting your first bot(contd.)



Starting your first bot(contd.)

After bot creation:



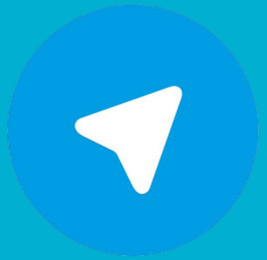
Programming your bot

The link to the Telegram bot API can be found at : https://core.telegram.org/bots/api
Various methods and objects are present in this documentation which helps us program our bot.
Here is an example of the **User** object and its attributes:

User

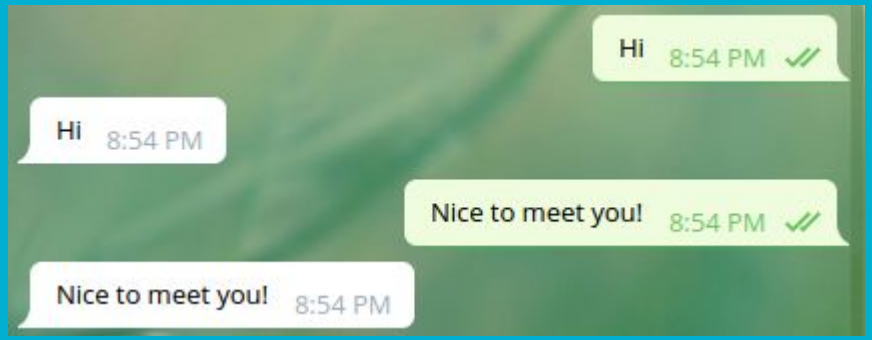
This object represents a Telegram user or bot.

Field	Type	Description
id	Integer	Unique identifier for this user or bot
is_bot	Boolean	True, if this user is a bot
first_name	String	User's or bot's first name
last_name	String	*Optional*. User's or bot's last name
username	String	*Optional*. User's or bot's username
language_code	String	*Optional*. IETF language tag of the user's language



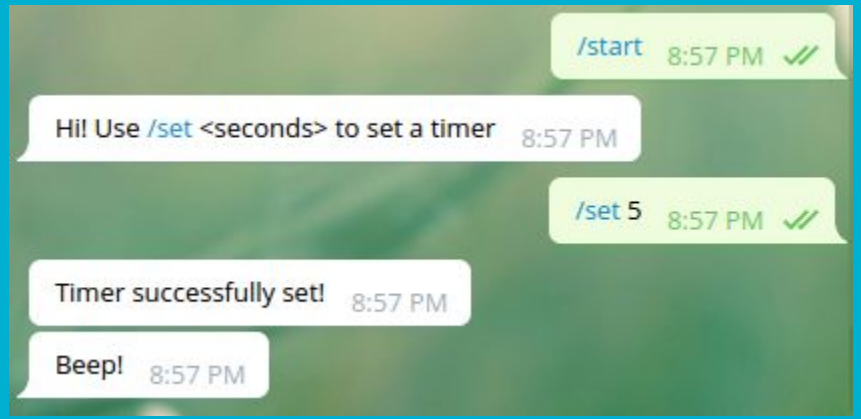
Bot examples

- A simple echo bot:



Bot examples

- **Timer bot:**



THANK YOU!