How to create a Telegram Bot

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Agenda

1. What is a bot?
2. The Botfather
3. API
4. Python Telegram Bot Project
5. Write your own bot

What is a bot?

> Bots are simply Telegram accounts operated by software – not people – and they'll often have AI features.
>
> They can do anything – teach, play, search, broadcast, remind, connect, integrate with other services, or even pass commands to the Internet of Things.
>
> -- *Telegram blog*

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5. When added to a group, bots do not receive all messages by default.
6. Bots never eat, sleep or complain (unless expressly programmed otherwise).

The Botfather

One Bot to rule them all, One Bot to find them

One Bot to bring them all and in the darkness bind them

-- *The Lord of the Bots, J.R.R.Tolkien*

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4. Write down the token.

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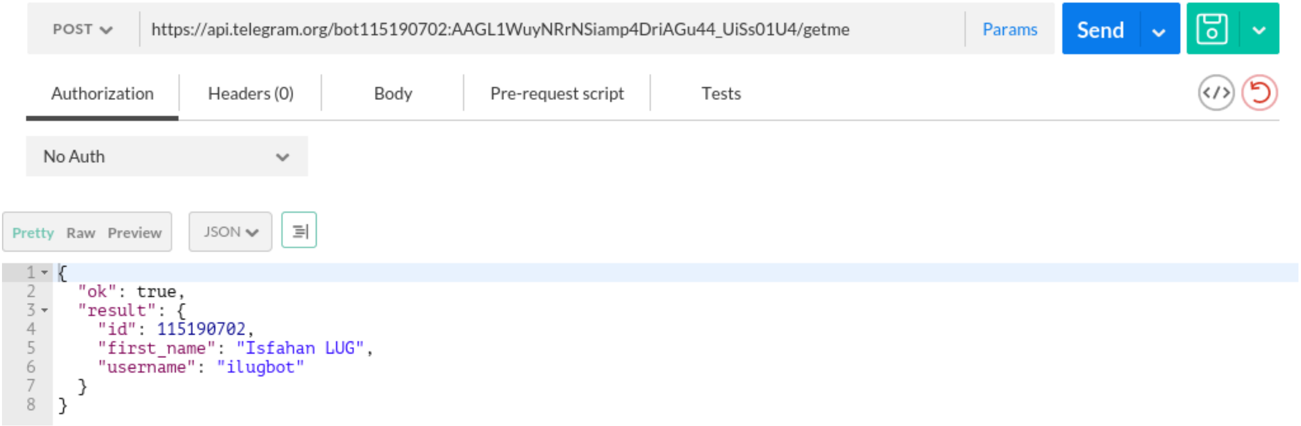
  - may have an optional 'description' field which contains some info about the occurred error.
  - also has a 'error_code' in the case of errors.

Some Examples

- Use Postman in order to test the API.



POST https://api.telegram.org/bot115190702:AAGL1WuyNRrNSiamp4DriAGu44_UiSs01U4/getme

Authorization: No Auth

```
{
  "ok": true,
  "result": {
    "id": 115190702,
    "first_name": "Isfahan LUG",
    "username": "ilugbot"
  }
}
```

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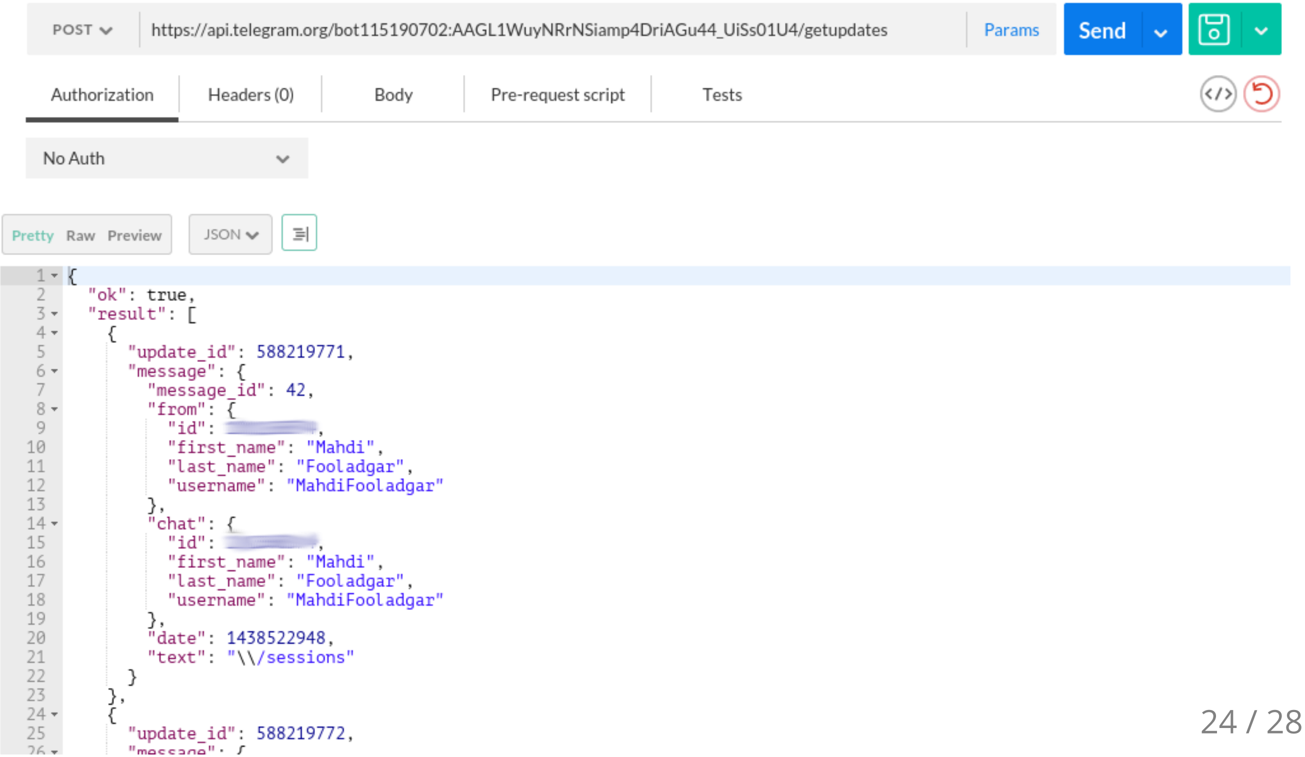

POST https://api.telegram.org/bot115190702:AAGL1WuyNRrNSiamp4DriAGu44_UiSs01U4/getupdates

No Auth

```
{
  "ok": true,
  "result": [
    {
      "update_id": 588219771,
      "message": {
        "message_id": 42,
        "from": {
          "id": [redacted],
          "first_name": "Mahdi",
          "last_name": "Fooladgar",
          "username": "MahdiFooladgar"
        },
        "chat": {
          "id": [redacted],
          "first_name": "Mahdi",
          "last_name": "Fooladgar",
          "username": "MahdiFooladgar"
        },
        "date": 1438522948,
        "text": "\\/sessions"
      }
    },
    {
      "update_id": 588219772,
      "message": {
```

Python Telegram Bot

Sweet Python!

In order to make requests, we need an interface. Here we use Python-Telegram-Bot which is written in Python.

It is under development and is well written. check out the project site.

- Installing

  ```
  pip install --upgrade python-telegram-bot
  ```

- Using

  ```
  >>> import telegram
  >>> bot = telegram.Bot(token='your_bot_token')
  ```

Some Examples

- To get Bot's info:

```
>>> print bot.getMe()
```

- To get updates:

```
>>> updates = bot.getUpdates()
>>> print [u.message.text for u in updates]
```

- To send a text message:

```
>>> chat_id = bot.getUpdates()[-1].message.chat_id
>>> bot.sendMessage(chat_id=chat_id, text="Can I help you?")
```

- To send an Emoji:

```
>>> bot.sendMessage(chat_id=chat_id, text=telegram.Emoji.SEE_NO_EVIL_MONKEY)
```

Time to write your own bot

Thank you

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