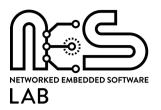Fundamentals of IoT Software © 2022 by Luca Mottola
is licensed under CC BY-NC 4.0

To view a copy of this license, visit
creativecommons.org/licenses/by-nc/4.0/

Node-RED Lab 2/2

Luca Mottola
`luca.mottola@polimi.it`
(version 0.1)

Building Bots (1/4)

- The exercises coming next use the `node-red-contrib-chatbot` extension, which provides a rich set of nodes to build **bots** for Telegram, Facebook Messenger, …

- We use Telegram
  - For configuration, you need to ask `t.me/BotFather` to create an API key for your new bot
  - You use the username and API key to configure the nodes

Building Bots (2/4)

Luca Mottola
/start

BotFather
I can help you create and manage Telegram bots. If you're new to the Bot API, please see the manual.

You can control me by sending these commands:

/newbot - create a new bot
/mybots - edit your bots **[beta]**

Edit Bots
/setname - change a bot's name
/setdescription - change bot description
/setabouttext - change bot about info
/setuserpic - change bot profile photo
/setcommands - change the list of commands
/deletebot - delete a bot

Bot Settings
/token - generate authorization token
/revoke - revoke bot access token
/setinline - toggle inline mode
/setinlinegeo - toggle inline location requests
/setinlinefeedback - change inline feedback settings
/setjoingroups - can your bot be added to groups?
/setprivacy - toggle privacy mode in groups

Games
/mygames - edit your games **[beta]**
/newgame - create a new game
/listgames - get a list of your games
/editgame - edit a game
/deletegame - delete an existing game

POLITECNICO MILANO 1863

Building Bots (3/4)

Luca Mottola
/newbot

BotFather
Alright, a new bot. How are we going to call it? Please choose a name for your bot.

Luca Mottola
Node-RED Lab

BotFather
Good. Now let's choose a username for your bot. It must end in `bot`. Like this, for example: TetrisBot or tetris_bot.

Luca Mottola
nodered_lab_bot

BotFather
Done! Congratulations on your new bot. You will find it at t.me/nodered_lab_bot. You can now add a description, about section and profile picture for your bot, see /help for a list of commands. By the way, when you've finished creating your cool bot, ping our Bot Support if you want a better username for it. Just make sure the bot is fully operational before you do this.

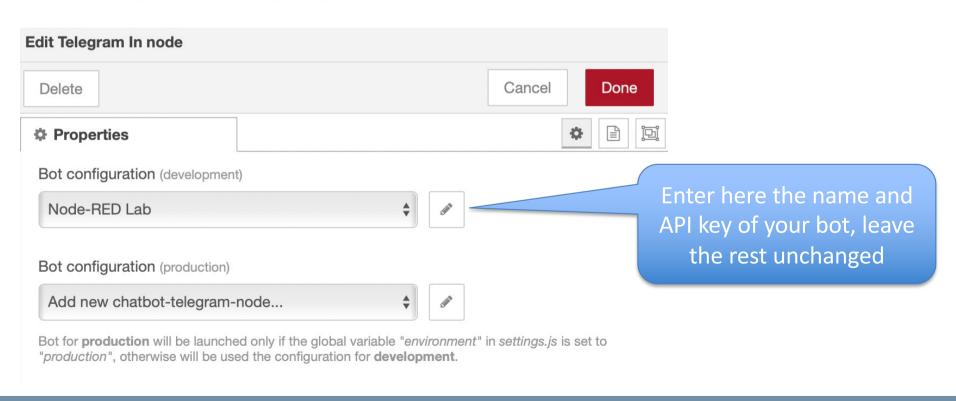Use this token to access the HTTP API:
5686644067:AAHgqS-PiJY-0t0bhAaNwuqPv-8c-jOpiiQ
Keep your token **secure** and **store it safely**, it can be used by anyone to control your bot.

For a description of the Bot API, see this page: https://core.telegram.org/bots/api

Building Bots (4/4)

- Dowload the example at `bit.ly/3ViBg6p`
- Check the configuration of the Telegram Receiver node

Enter here the name and API key of your bot, leave the rest unchanged

Exercise 8-1

- Modify the example bot with two more commands that people can use to ask what is the current temperature in Milan or Rome

- Example:

  – User: "What is the temperature in Milan?"

  – Bot: "The current temperature in Milan is 7C"

- Hint: check the documentation of the **Text** node in the extension

Exercise 8-2

- Now extend the previous solution to
  - Add the ability for the bot to greet back the user
  - Keep a persistent log of all the usernames seen so far

- Example:
  - User: "My name is Luca!"
  - Bot: "Hello Luca!"
  - (while "Luca" is made persistent)