

Microsoft Framework

Martin Šimeček

[@deedx](#)

martin.simecek@microsoft.com

Lidská řeč je nové uživatelské rozhraní
Boti jsou nové aplikace
Inteligentní if-else

Není bot jako bot

SELECT BOT



Anarki



Angel



Biker



Bitterman



Bones



Cadavre



Crash



Daemia



Doom



Gorre



Grunt



Hossman



Hunter



Keel



Klesh



Lucy



Konverzační boty

robot, m. živ. (stroj podobný člověku)

robot, m. živ. i neživ. (stroj nepodobající se člověku)

-ÚJČ

Konverzace s počítačem

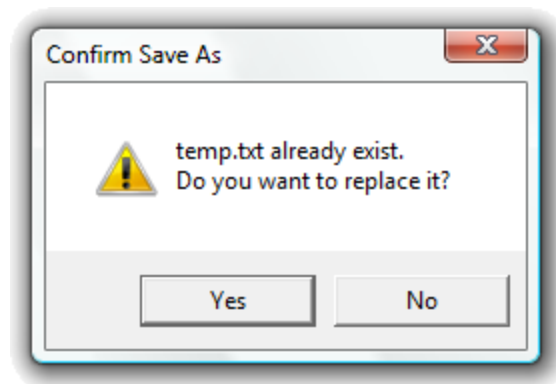
```
cmd
cmd.exe
c:\
λ ping bing.com

Pinging bing.com [204.79.197.200] with 32 bytes of data:
Reply from 204.79.197.200: bytes=32 time=10ms TTL=119
Reply from 204.79.197.200: bytes=32 time=8ms TTL=119
Reply from 204.79.197.200: bytes=32 time=8ms TTL=119
Reply from 204.79.197.200: bytes=32 time=10ms TTL=119

Ping statistics for 204.79.197.200:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 8ms, Maximum = 10ms, Average = 9ms

c:\
λ ls
'$Recycle.Bin'/'
BOOTNXT
Books/
Config.Msi/
DRIVERS/
Deploy/
'Documents and Settings'@
Downloads/
Fotky/
Intel/
MS-LENOVO-{51EC6744-CBDA-4BD2-B043-B05F2E051AAC}.txt
MSOTraceLite/
OneDriveTemp/
PerfLogs/
Prezentace/
'Program Files'/'
'Program Files (x86)'/
ProgramData/
Projekty/
Recovery/
Source/
'System Volume Information'/'
Users/
Videa/
Windows/
_SMSTaskSequence/
hiberfil.sys
pagefile.sys
swapfile.sys

c:\
λ |
```



XChat: PlayaTT @ rajaniemi.freenode.net / #dsotm (+cnt)

XChat View Server Settings Window Help

0 ops, 2 total

PlayaTT
xptb_lite

[12:24] PlayaTT !version
[12:24] xptb_lite XPTB Lite 0.2.4 by Craciun Dan - <http://www.tuxarena.com/intro/xptb.php>
[12:24] xptb_lite Time is up! The answer was: Nauru. Next question in 5 seconds.
[12:24] xptb_lite TLDs: .gt? [1 word]
[12:24] xptb_lite Hint 1: *****
[12:24] PlayaTT guatemala
[12:24] xptb_lite You got it, PlayaTT! [2.56 sec 3.51 cps]
[12:24] xptb_lite The answer was: Guatemala. Next question in 5 seconds.
[12:24] xptb_lite TLDs: .cg? [1 word]
[12:24] xptb_lite Hint 1: *****
[12:24] xptb_lite Hint 2: C***o
[12:24] PlayaTT congo
[12:24] xptb_lite You got it, PlayaTT! [10.18 sec 0.49 cps]
[12:24] xptb_lite The answer was: Congo. Next question in 5 seconds.
[12:25] xptb_lite TLDs: .nr? [1 word]
[12:25] xptb_lite Hint 1: *****
[12:25] PlayaTT nauru
[12:25] xptb_lite You got it, PlayaTT! [2.15 sec 2.31 cps]
[12:25] xptb_lite The answer was: Nauru. Next question in 5 seconds.
[12:25] xptb_lite TLDs: .gl? [1 word]
[12:25] xptb_lite Hint 1: *****
[12:25] xptb_lite Hint 2: G*****d
[12:25] xptb_lite Time is up! The answer was: Greenland. Next question in 5 seconds.
[12:25] xptb_lite TLDs: .sz? [1 word]
[12:25] xptb_lite Hint 1: *****

PlayaTT

freenode #dsotm

Encarta® Instant Answers - konverzace

Soubor Úpravy Akce Nástroje Nápověda Plus!

Encarta® Instant Answers
<encarta@botmetro.net>

✉ Přijali jste pozvání ke spuštění programu Encarta.

Encarta® Instant Answers:
Thanks for accepting this invitation! The application should load shortly. =>

deedx@tiscali.cz:
thank you very much

deedx@tiscali.cz:
😊

Encarta® Instant Answers:
Sure.

Encarta® Instant Answers:
😊

deedx@tiscali.cz:
😊

Encarta® Instant Answers:
😊

deedx@tiscali.cz:
😞

Encarta® Instant Answers:
Why are you mad?

deedx@tiscali.cz:
i'm not

Encarta® Instant Answers:
Maybe you are.

I do enjoy the conversation, but what I'm really here for is to help you learn new things. I'm sure you've heard about Uzbekistan... but do you know where it is? Just ask me and I'll show it to you on a map!

deedx@tiscali.cz:
where the fuck is uzbekistan?

Encarta® Instant Answers:
Uzbekistan, republic in Central Asia, bordered on the west and north by Kazakhstan, on the east by Kyrgyzstan, on the south-east by Tajikistan, and....

deedx@tiscali.cz:
czech republic

Encarta® Instant Answers:
I know many things about Czech Republic, its geography, its people and its government. Just ask me a specific question, for instance:

Where is Czech Republic located?
How many people live in Czech Republic?
Who is the head of state of Czech Republic?


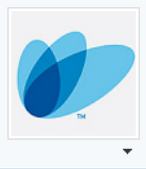
deedx@tiscali.cz:
where is czech republic?

Encarta® Instant Answers:
Czech Republic, republic comprising the historic regions of Bohemia, Moravia, and part of Silesia, in central Europe, bordered on the north by....

😊 😞 😊 🗺 🎨 📧

Odšlat

Poslední zpráva byla doručena 20:08 v 27.11.2006.



„Musím se naučit počítači rozumět.“

~~„Musím se naučit počítači rozumět.“~~

„Počítač se musí naučit rozumět mně.“

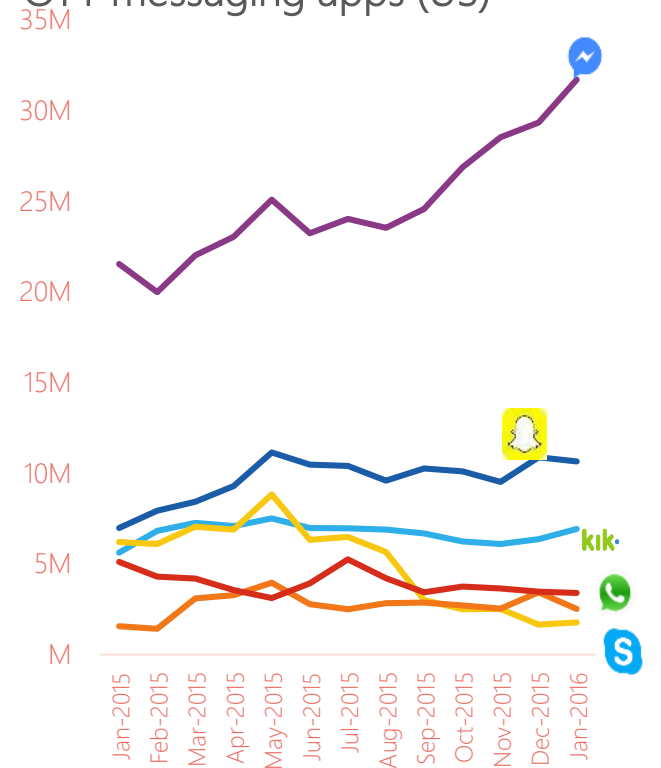
Proč boty?

Uživatelé používají hlavně chatovací aplikace
„Millenials“ už radši napíšíou než zavolají

Technologicky:

- Automaticky multiplatformní
- Push notifikace „zadarmo“
- Jednodušší deployment
- Unifikované UI

Mobile Minutes Spent in for leading OTT messaging apps (US)



#39999   



 26 příspěvků v diskuzi

<a> Vis jak jsem zkousel napsat toho bota?

 jj, co to umi?

<a> No zatim nic moc. Jenom nahodne odpovida ano nebo ne.

 hm

<a> Zkousel jsem ho v praci na support kanalu a nechal ho tam bezet pres obed. Kdyz jsem prisel bylo tam tohle:

<a> <Adam> Dobry den

<a> <zzzBOT> Ano

<a> <Adam> Mam problem s pripojenim, jede to hrozne pomalu, pomuzete mi prosim?

<a> <zzzBOT> Ano

<a> <Adam> Asi budete potrebovat nejake udaje, ne?

<a> <zzzBOT> Ano

<a> <Adam> Tak jmenuji se Adam XXX, bydlim v YYY, mam smlouvu cislo ZZZ. Potrebujete jeste neco?

<a> <zzzBOT> Ne

<a> <Adam> Muzete mi prosim poslat email nebo zavolat az to bude opraveno?

<a> <zzzBOT> Ano

<a> <Adam> Dekuji, zatim nashledanou

<a> <zzzBOT> Ano

 LOL, to je dokonaly! :-))

Komentář: Prvni umela inteligence :-)

Bot NEmusí

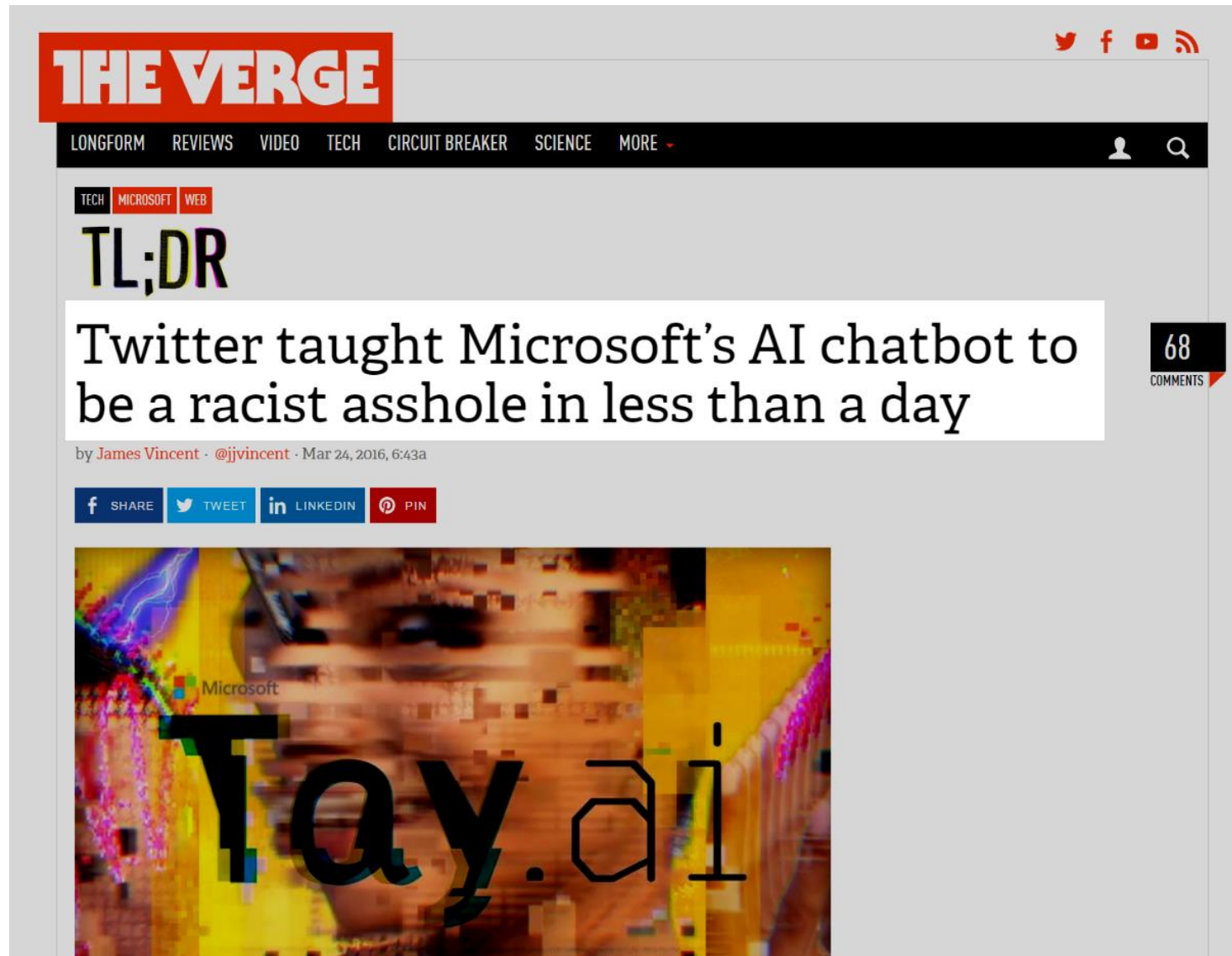
Mít umělou inteligenci (za každou cenu)

Zpracovávat lidskou řeč (za každou cenu)

Vystačit si pouze s textem

Reální boti

Když se to nepovede...



The screenshot shows a news article on The Verge website. The page layout includes a top navigation bar with the site logo, a secondary navigation bar with categories, and a main content area. The article title is prominently displayed in a white box, and the author information is below it. Social sharing buttons are visible, and a comment count is shown on the right side of the article header. The main image is a stylized, glitched portrait of a woman's face with the text 'Tay.ai' overlaid.

THE VERGE

LONGFORM REVIEWS VIDEO TECH CIRCUIT BREAKER SCIENCE MORE

TECH MICROSOFT WEB


TL;DR

Twitter taught Microsoft's AI chatbot to be a racist asshole in less than a day

by James Vincent · @jjvincent · Mar 24, 2016, 6:43a

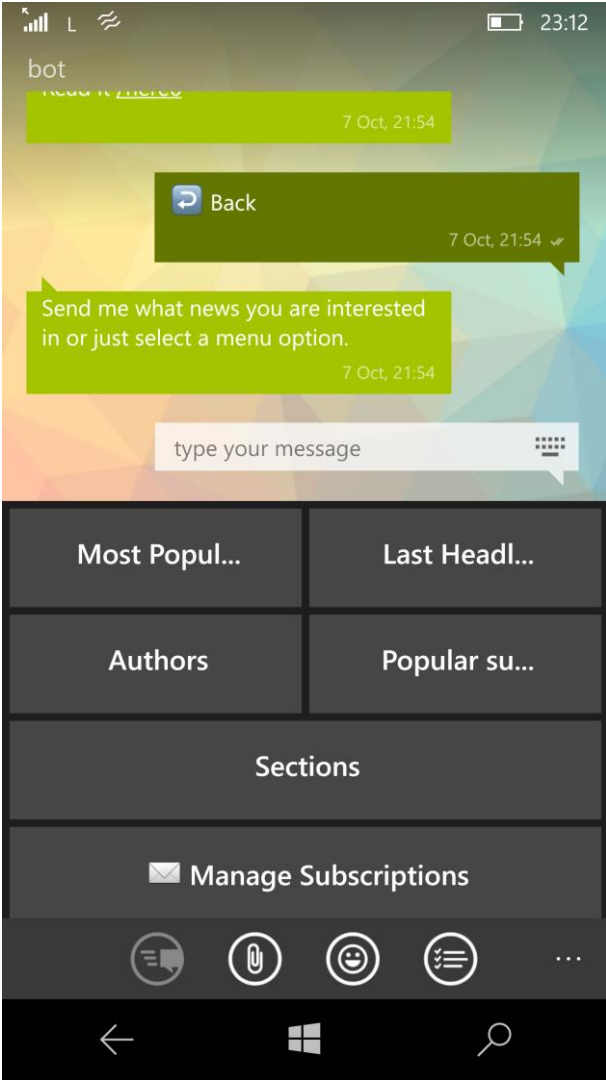
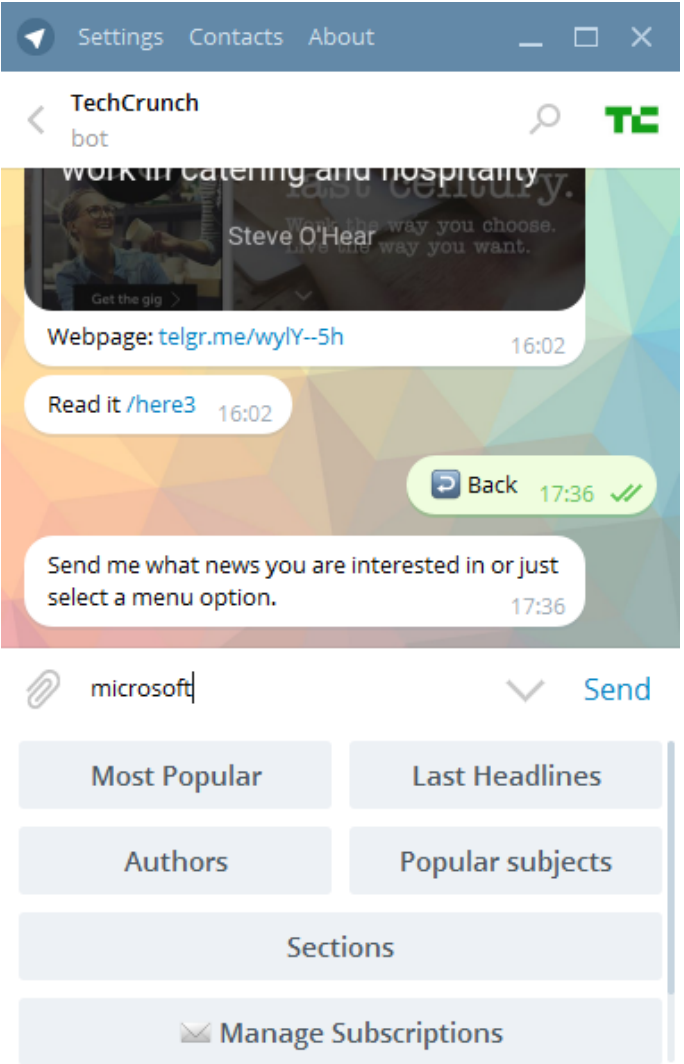
68 COMMENTS

f SHARE t TWEET in LINKEDIN p PIN

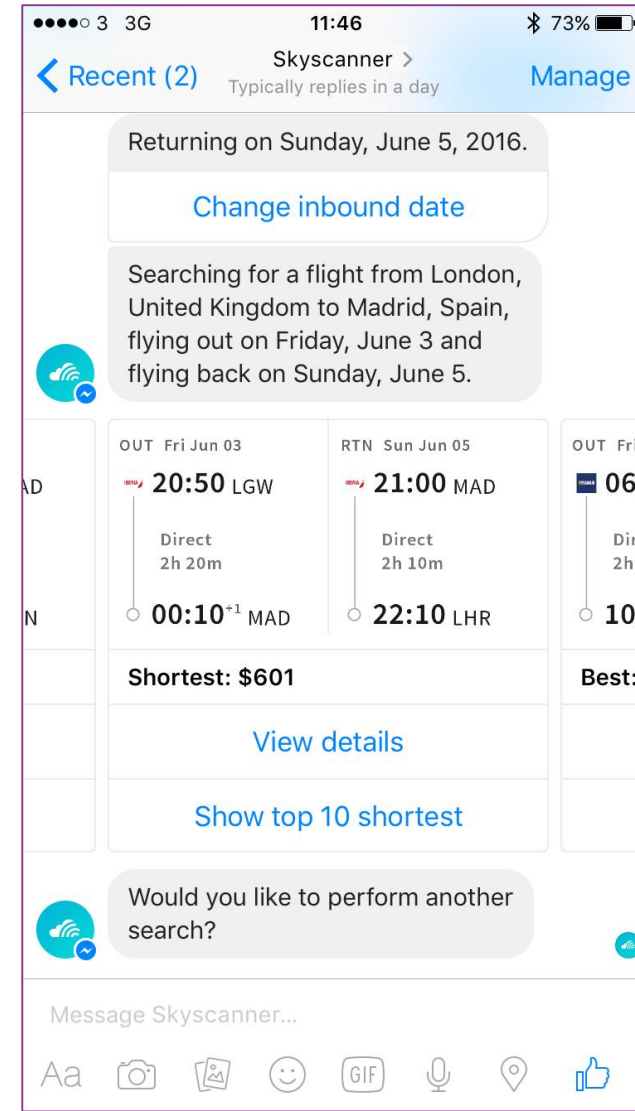
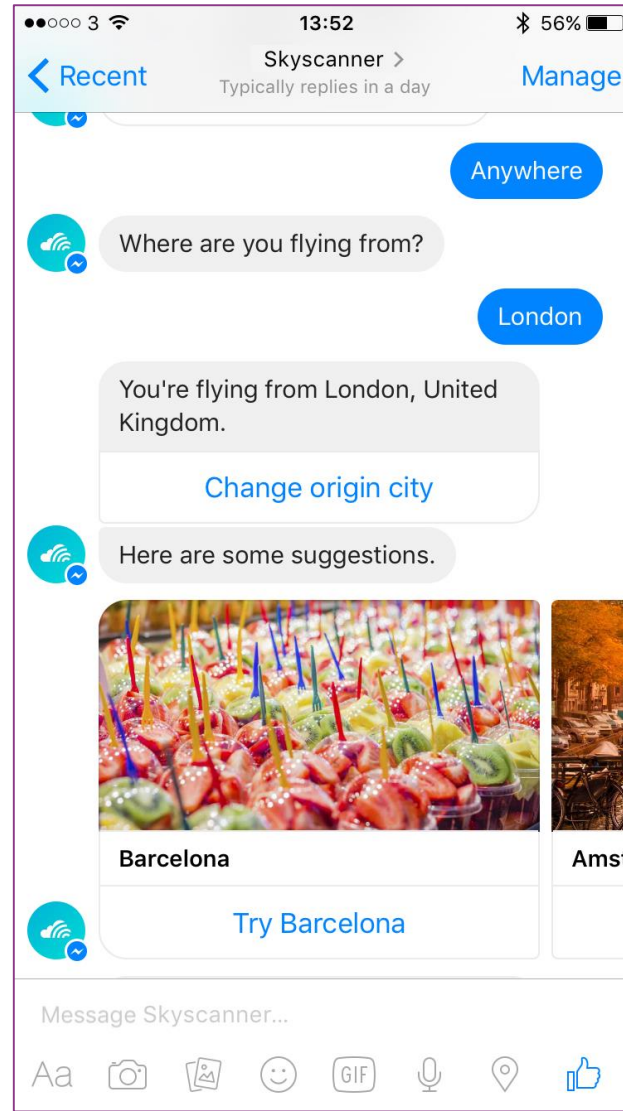


Microsoft
Tay.ai

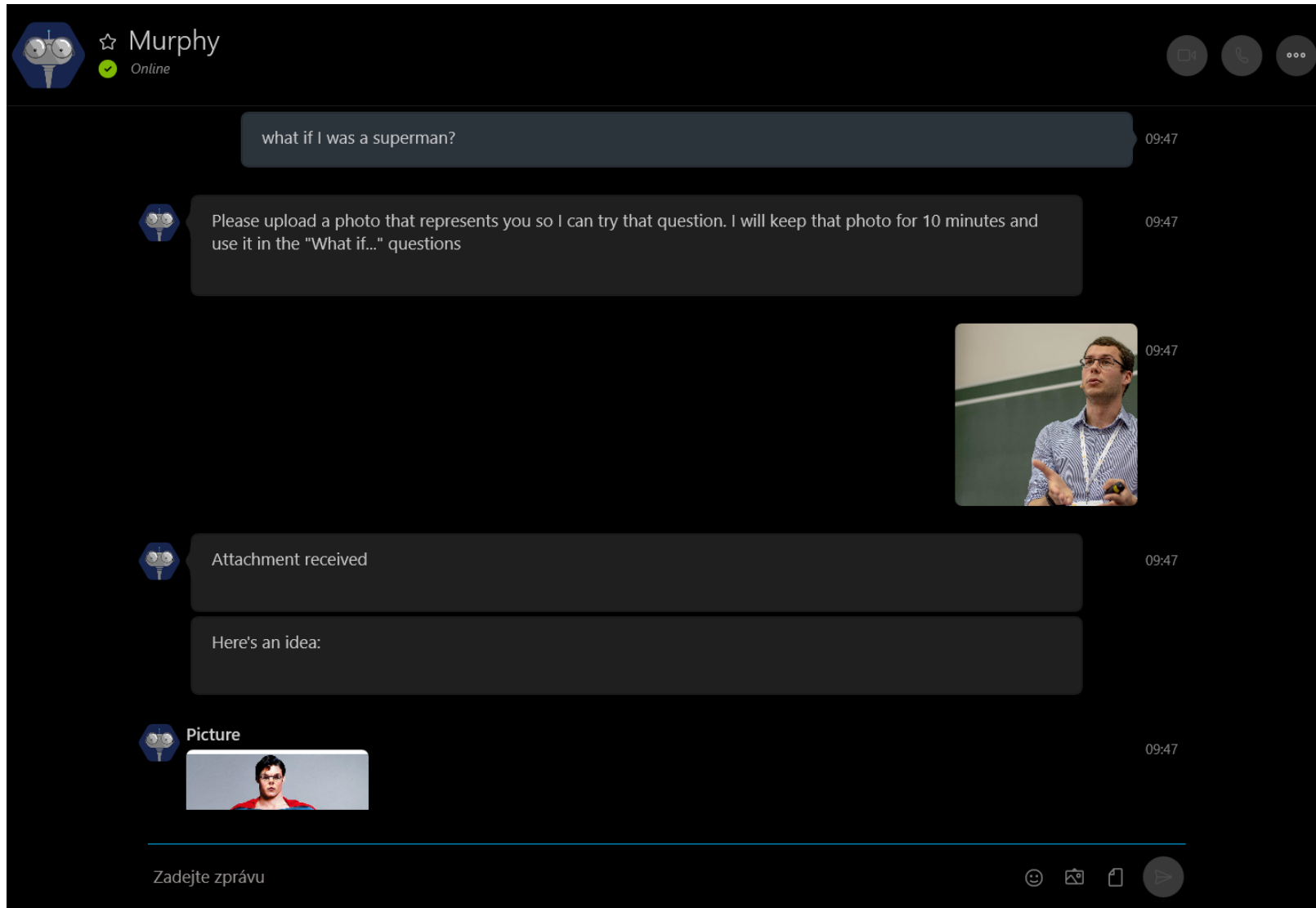
TechCrunch @ Telegram



SkyScanner



CaptionBot & Murphy



The screenshot shows a chat interface with a contact named 'Murphy' who is online. The chat history includes:

- A user message: "what if I was a superman?" (09:47)
- A bot response: "Please upload a photo that represents you so I can try that question. I will keep that photo for 10 minutes and use it in the 'What if...' questions" (09:47)
- A user image attachment: A photo of a man in a blue patterned shirt and glasses, gesturing with his hands. (09:47)
- A bot response: "Attachment received" (09:47)
- A bot response: "Here's an idea:" (09:47)
- A bot image attachment: A small picture of a man in a red Superman costume. (09:47)

The bottom of the chat shows a text input field with the placeholder "Zadejte zprávu" and icons for emojis, gallery, attachments, and send.

AzureBot

Slack - CZSK DX

File Edit View History Window Help

CZSK DX martin

CHANNELS (10)

DIRECT MESSAGES (16)

- slackbot
- martin (you)
- azurebot**

+ Invite people

@azurebot active | AzureBot

Search

AzureBot BOT 4:28 PM
You have canceled the operation. What would you like to do next?

martin 4:29 PM
stop vm devbox

AzureBot BOT 4:29 PM
Would you like to stop virtual machine 'devbox (Status: Running, ResourceGroup: DEVBOX, Size: Standard_DS2)'? Your VM won't incur charges and all IP addresses will be released.

martin 4:29 PM
Y

AzureBot BOT 4:29 PM
Stopping the 'devbox' virtual machine...
The 'devbox' virtual machine was stopped successfully.

September 6th

martin 10:02 PM
List vm

AzureBot BOT 10:02 PM
Available VMs are:

- devbox (Status: Deallocated, ResourceGroup: DEVBOX, Size: Standard_DS2)

Yesterday

martin 8:27 PM
list vm

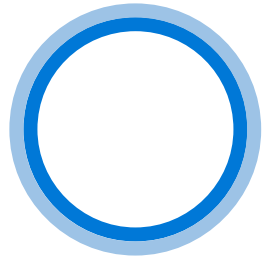
AzureBot BOT 8:27 PM
Available VMs are:

- devbox (Status: Deallocated, ResourceGroup: DEVBOX, Size: Standard_DS2)

+ Message @azurebot

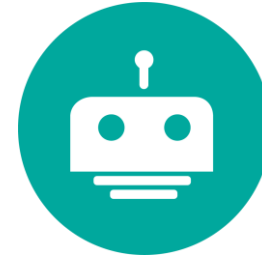
Návrh a architektura

Bot vs. Agent



Agent

- virtuální asistent(ka)
- zná uživatele
- má přístup k jeho poloze, kalendáři, kontaktům, e-mailům...
- pamatuje si



Bot

- má přesně daný účel
- je transakční
- neví o uživateli více, než je potřeba k dokončení úkolu

Scénáře

„Bot je aplikace, která vykonává automatizovatelnou činnost.“

Jednouúčelový

- ovládání VM, objednání jízdenky

Helpdesk

- vyhledávání v KB, zakládání support ticketu

Konference

- vyhledávání v programu, upozornění na přednášku

Dilema

Chci rychle dosáhnout cíle, ne si pokecat.

„list vm“

„start vm martinovo“

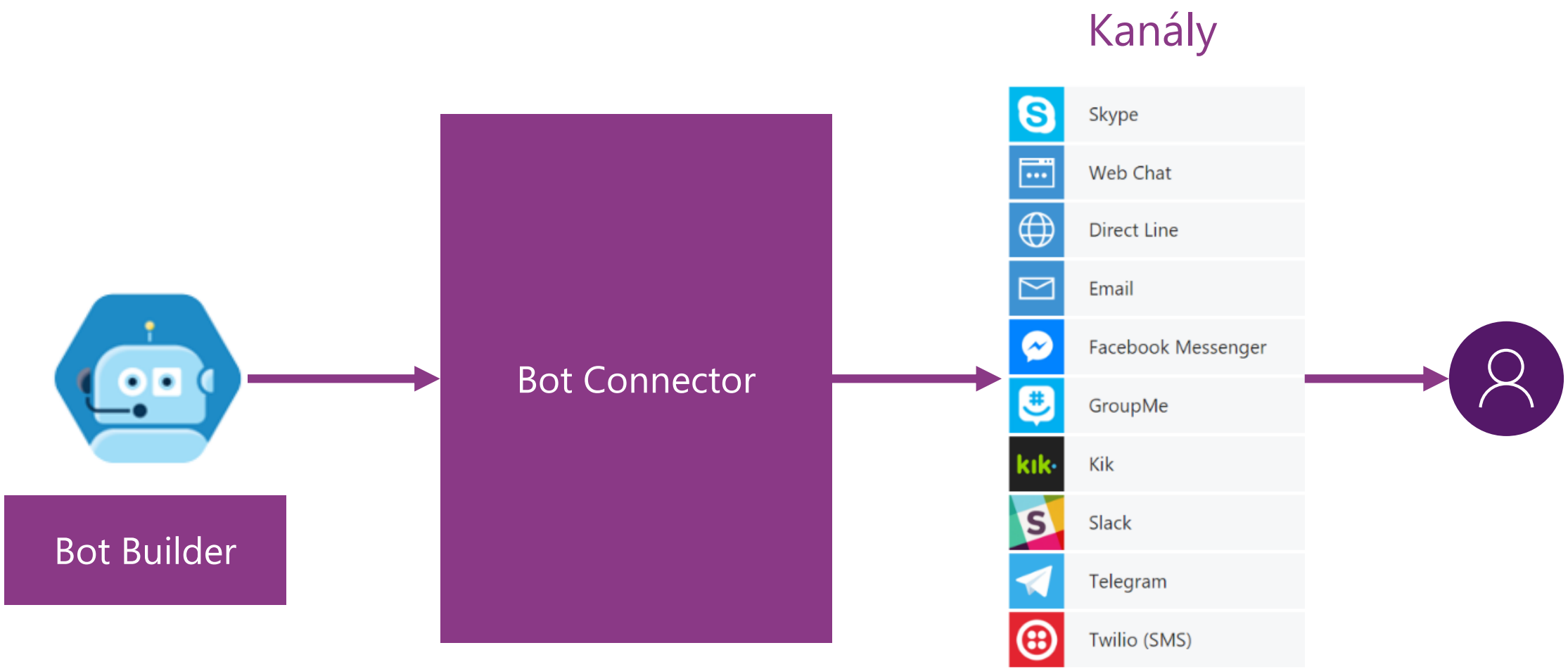
Nechci si pamatovat příkazy...

„Všechny virtuály“

„Zapni martinovo“

Bot Framework





Bot Builder

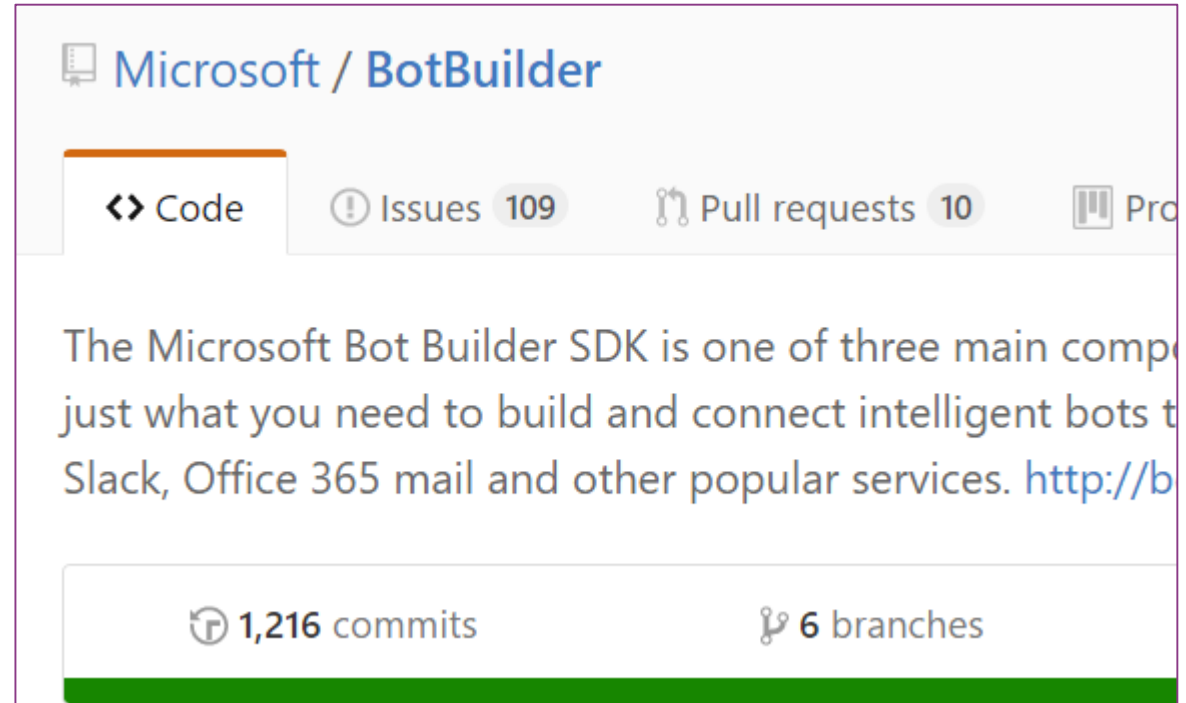
.NET a Node.js SDK

Forms

State Management

Dialog Flow

Cognitive (LUIS)



<https://github.com/Microsoft/BotBuilder>

Bot Framework Emulator

Lokální emulace uživatele,
konverzace

Umí i tlačítka
JSON zprávy

Microsoft Bot Framework Channel Emulator (3.0.0.59)

Local Port: 9000 | Emulator Url: http://localhost:9000/ | Bot Url: http://localhost:3979/api/mess: | Microsoft App Id | Microsoft App Password

User: User1 | ConversationNames: Conv1 | New | Members: 1 | Typing | Send | Locale: en-US

Chat

ahoj, jak je to asi dlouhé?

You sent ahoj, jak je to asi dlouhé?
which was 27 characters

JSON

```
{
  "type": "message",
  "timestamp": "2016-10-08T09:06:53.371026Z",
  "from": {
    "id": "56800324",
    "name": "Bot1"
  },
  "conversation": {
    "id": "8a684db8",
    "name": "Conv1"
  },
  "recipient": {
    "id": "2c1c7fa3",
    "name": "User1"
  },
  "text": "You sent ahoj, jak je to asi dlouhé? which was 27 characters",
  "replyToId": "5ad47236be5a414db7254f2a7770ebfa"
}
```

202 Accepted

Visual Studio Template

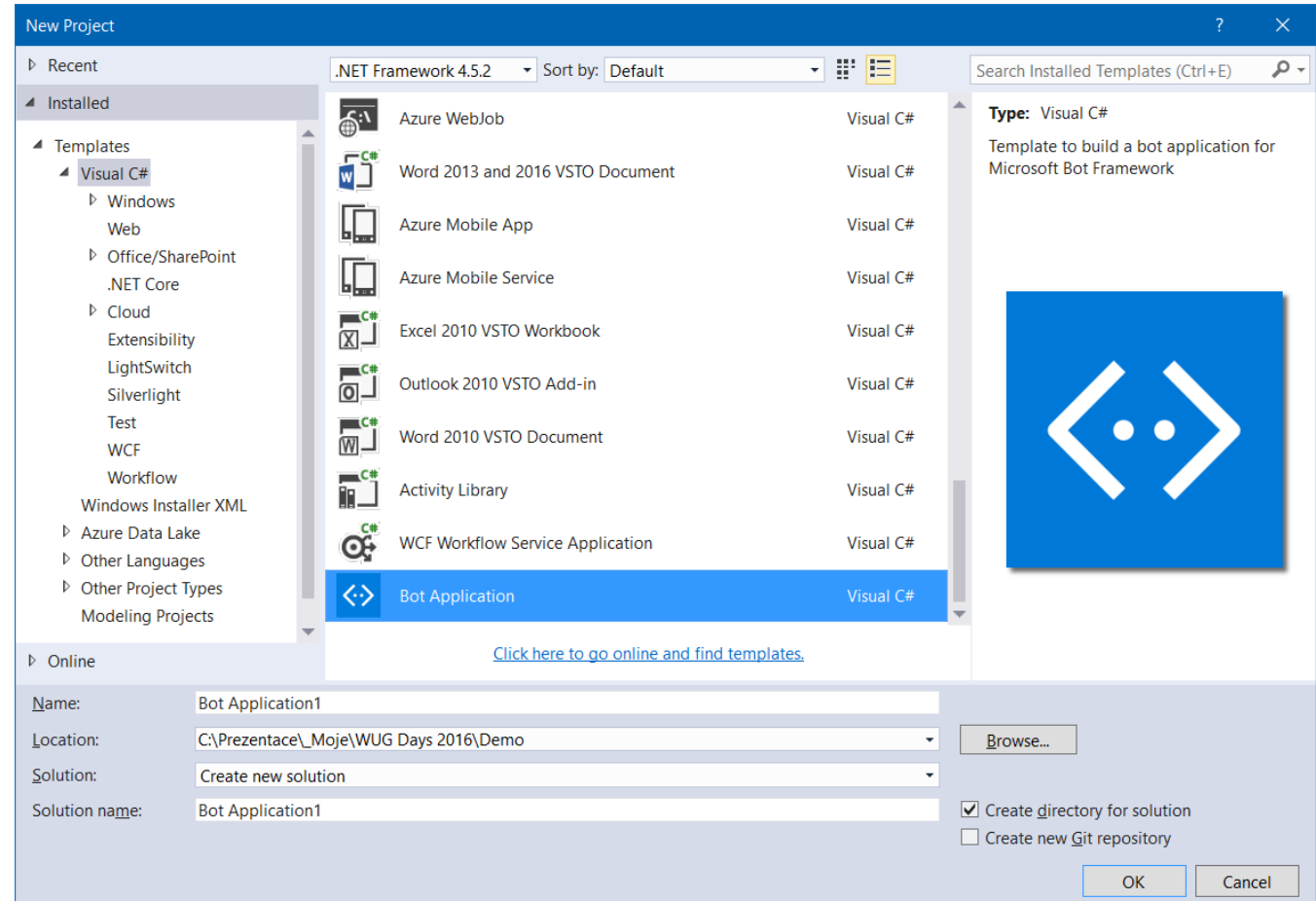
ASP.NET WebAPI

Microsoft.Bot.Builder NuGet

Je třeba aktualizovat!

... ale ne všechno!

System.IdentityModel.Tokens.Jwt = 4.0.2



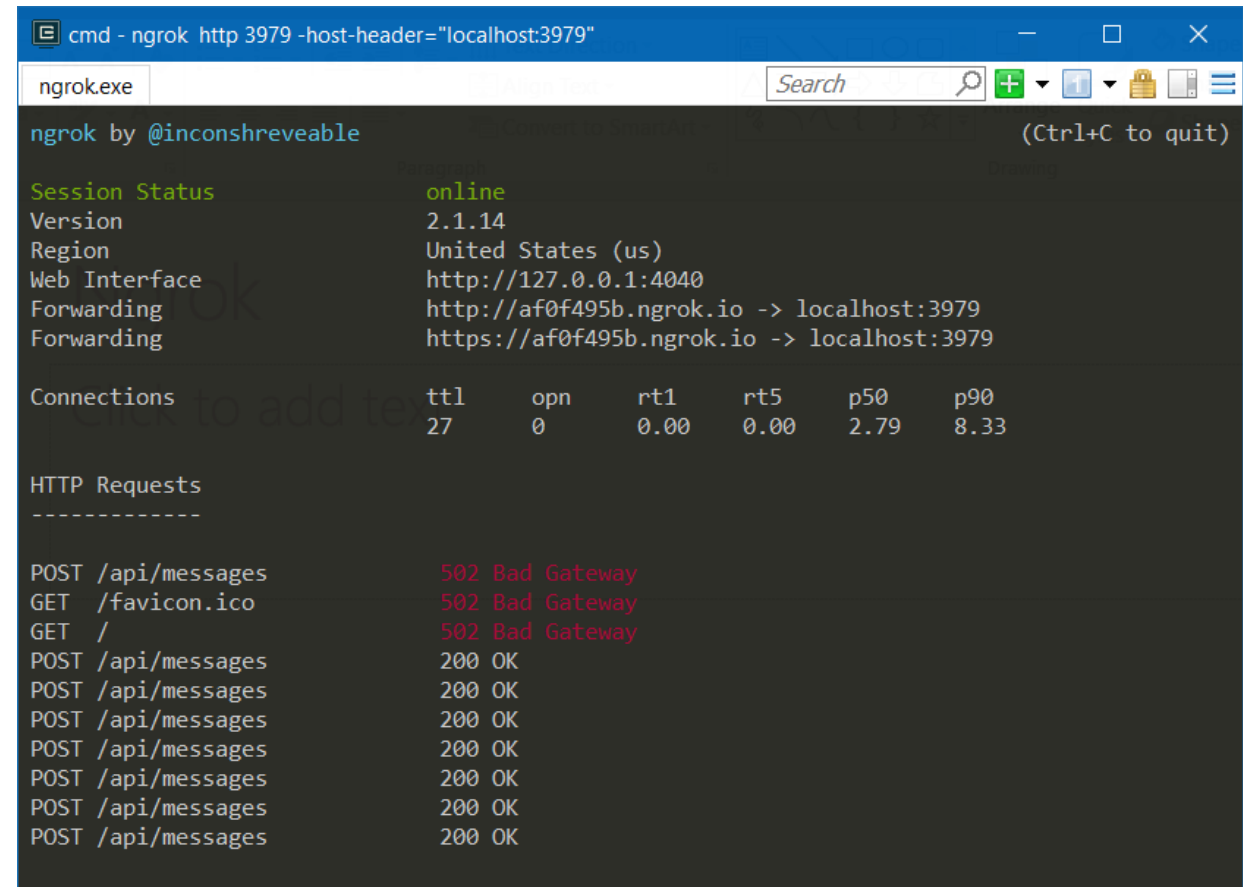
Ngrok

Skype bot se na localhost nepřipojí

Ngrok dělá tunel na port

```
ngrok http 3979
```

Vygeneruje URL



```
cmd - ngrok http 3979 -host-header="localhost:3979"
ngrok.exe
ngrok by @inconsreveable (Ctrl+C to quit)

Session Status      online
Version             2.1.14
Region              United States (us)
Web Interface        http://127.0.0.1:4040
Forwarding           http://af0f495b.ngrok.io -> localhost:3979
Forwarding           https://af0f495b.ngrok.io -> localhost:3979

Connections         ttl    opn    rt1    rt5    p50    p90
                   27     0      0.00   0.00   2.79   8.33

HTTP Requests
-----
POST /api/messages  502 Bad Gateway
GET /favicon.ico    502 Bad Gateway
GET /                502 Bad Gateway
POST /api/messages  200 OK
POST /api/messages  200 OK
POST /api/messages  200 OK
POST /api/messages  200 OK
POST /api/messages  200 OK
POST /api/messages  200 OK
POST /api/messages  200 OK
POST /api/messages  200 OK
POST /api/messages  200 OK
```

<http://ngrok.io>

Demo: Bot 0-80...

Microsoft Bot Framework

Martin Šimeček

@deedx

martin.simecek@microsoft.com

