



# Workshop - Chatbots

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# Workshop Requirements

- Cheat Sheet url


[www.psl.co/workshop](http://www.psl.co/workshop)

- Mongo + Robo 3T (or similar) (optional)

- BotFramework Emulator V4 (Download link in the cheat sheet)

# About me

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- Not at all photogenic
- Biggest dream: Solve GYM   
(and understand the solution)
- Technical lead at PSL developing virtual assistants

**GH:** <https://github.com/Blesfia>



@blesfia

# Agenda

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**Defining concepts**



**Requirements of  
our clients**



**Building a chatbot**

# Defining concepts



Scalability



Multi-language



Multiple platforms



Our experience in similar projects



Good practices



Don't do this!

# Defining concepts (Simple chatbot)

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**Channel**

**Application**

- Facebook, Web, Skype, Slack

# Defining concepts (Intelligent Chatbot)

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**Channel**

- Facebook, Web, Skype, Slack

**Application**

**NLU**

- TTI(Text to intent)
- STT (Speech to text)

# Customer #1

- Customer service
- Answer to the company's FAQ
- Facebook
- Easy customization



Customer  
#1



# Customer #2

- Customer service
- Answer to the company's FAQ
- Connection to multiple channels
- Easy customization

Customer  
**#2**



Dialogflow

# Customer #3

- Mixed purpose
- Complex jobs and proactive messaging
- Connection to multiple channels

# NodeConf Cheat Sheet

**[www.psl.co/workshop](http://www.psl.co/workshop)**



# Multiple Platforms

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A good system should allow adding and removing components with minimal effort

**BotBuilder**

**BotKit**

**[www.psl.co/workshop](http://www.psl.co/workshop)**

# Let's begin

**[www.psl.co/workshop](http://www.psl.co/workshop)**



# Actual status of the project

- Gitignore: <https://www.gitignore.io/>
- Editorconfig: <https://editorconfig.org/>
- VSCode: Gitlens, Tslint  
(deprecated), EditorConfig
- Install dependencies: **"npm i"**
- Run in dev mode: **"npm run dev"**



# Echo console bot

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- Let's go for # 2
- Adapters, activities, context

```
[Nest] 11208 - 2019-06-10 20:28 [NestFactory] Starting Nest application...
[Nest] 11208 - 2019-06-10 20:28 [BotHandlerService] Say "quit" to end.
[Nest] 11208 - 2019-06-10 20:28 [InstanceLoader] AppModule dependencies initialized +3ms
[Nest] 11208 - 2019-06-10 20:28 [InstanceLoader] BotModule dependencies initialized +2ms
[Nest] 11208 - 2019-06-10 20:28 [NestApplication] Nest application successfully started +5ms
Hola
I heard you say "Hola"
Bienvenidos a la NodeConf
I heard you say "Bienvenidos a la NodeConf"
Nos vemos!
I heard you say "Nos vemos!"
quit
Bye!
[nodemon] clean exit - waiting for changes before restart
```

I... can...  
remember...  
you :-)

- BotFrameworkAdapter # 3
- BotStorage (Memory) # 4

Welcome Live Chat (http://loca... x)

Restart conversation | Save transcript

http://localhost:3000/api/v1/bot/messages/bot-framework

Bienvenido!

Just now

Hola

Just now

I heard you say "Hola", this is your message 1

Just now

como estas?

Just now

I heard you say "como estas?", this is your message 2

Just now

sabes decir algo mas?

Just now

I heard you say "sabes decir algo mas?", this is your message 3

Just now

quit

Hola?

Send failed. Retry.

Hola!?

Send failed. Retry.

Type your message

# NLU + Default Responses

- Recognizers (LUIS, RASA, DialogFlow...)
- Let's go for # 5

# Waterfall Dialogs

**D**efault dialog

**B**alance dialog

**C**hange language

**F**ind events



# Multilanguage

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The ability to change the source of the data is important



**i18n**

**i18next**

# Advice

- Every developer should be able to debug on their machine.
- Design the code to be easily modified and extended.
- Make your framework bend to your needs. Don't let the framework control you.



Thanks