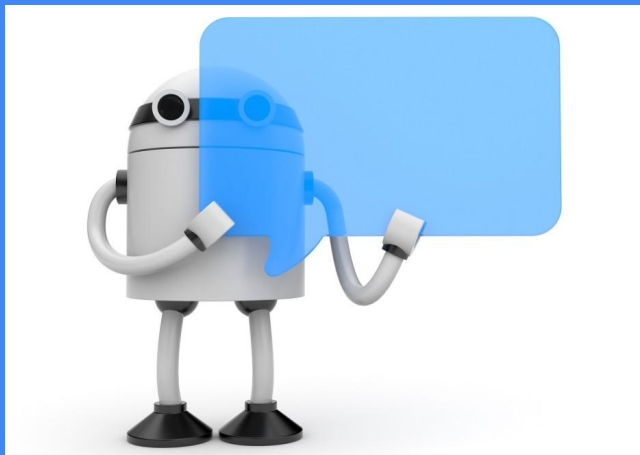


How to Build a Chatbot under 30 minutes



Gautham Santhosh

Powered with <3 by GitHub

Chatbots , huh !

chatbot

/ˈtʃɑːtbɒt/

noun

plural noun: chatbots

a computer program designed to simulate conversation with human users, especially over the Internet.

"chatbots often treat conversations like they're a game of tennis: talk, reply, talk, reply"

Origin

ENGLISH

chat

ENGLISH

bot

→ chatbot

1990s

1990s: from chat¹ + bot².

Translate chatbots to

Use over time for: chatbots



The Motivation

Movies



That Dumb thing

Build bot in 15 mins with nodejs [Link](#)

Problems:

1. It's stupid -_-
2. It's really stupid , it just gives text to specific replies.
3. Making it smart required me to use NLTK.
4. Too many lines of code.
5. I'm lazy

Risky Dumb thing

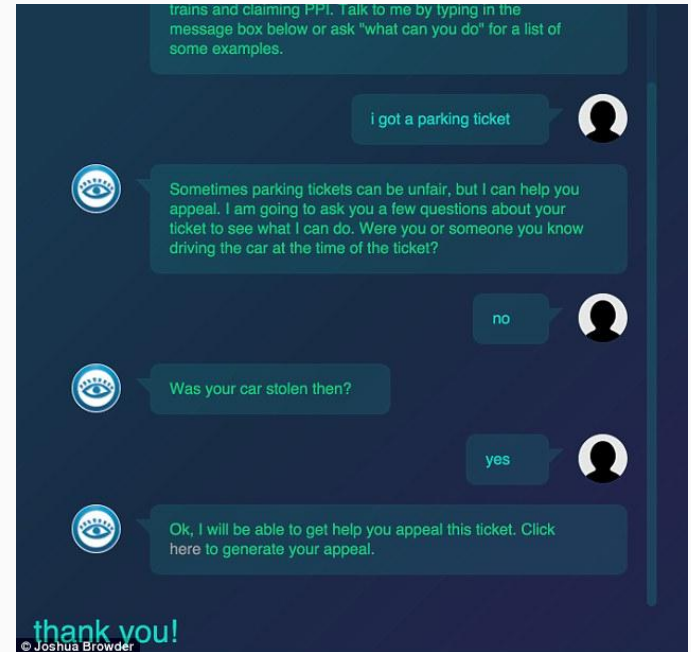
DoNotPayBot

A chatbot programmed by a British teenager has successfully challenged 160,000 parking tickets since its launch last year.

About 250,000 people have used the free service so far, said its creator, Joshua Browder.

The Do Not Pay bot currently works in the UK and New York in the US. It asks a series of questions to determine the validity of a penalty notice. It can also be used to work out compensation for delayed flights. Mr Browder told the BBC he hoped it proved bots could be useful.

<http://www.bbc.com/news/technology-36650317>



Google acquires API.AI, a company helping developers build bots that aren't awful to talk to

Create Agent



Click on the arrow and
select 'Create new agent'



PizzaAgent



⊕ Create new agent

☰ View all agents



Domains



Agents


Create Agent

Search agents...



PizzaAgent

Create Entities



PizzaAgent-1

Intents

Entities

Domains

Training ^[beta]

Integrations

Entities

If something == Entities:
Do something

Create Entity

Click the plus button to add a new entity

No entities yet. [Create the first one.](#)

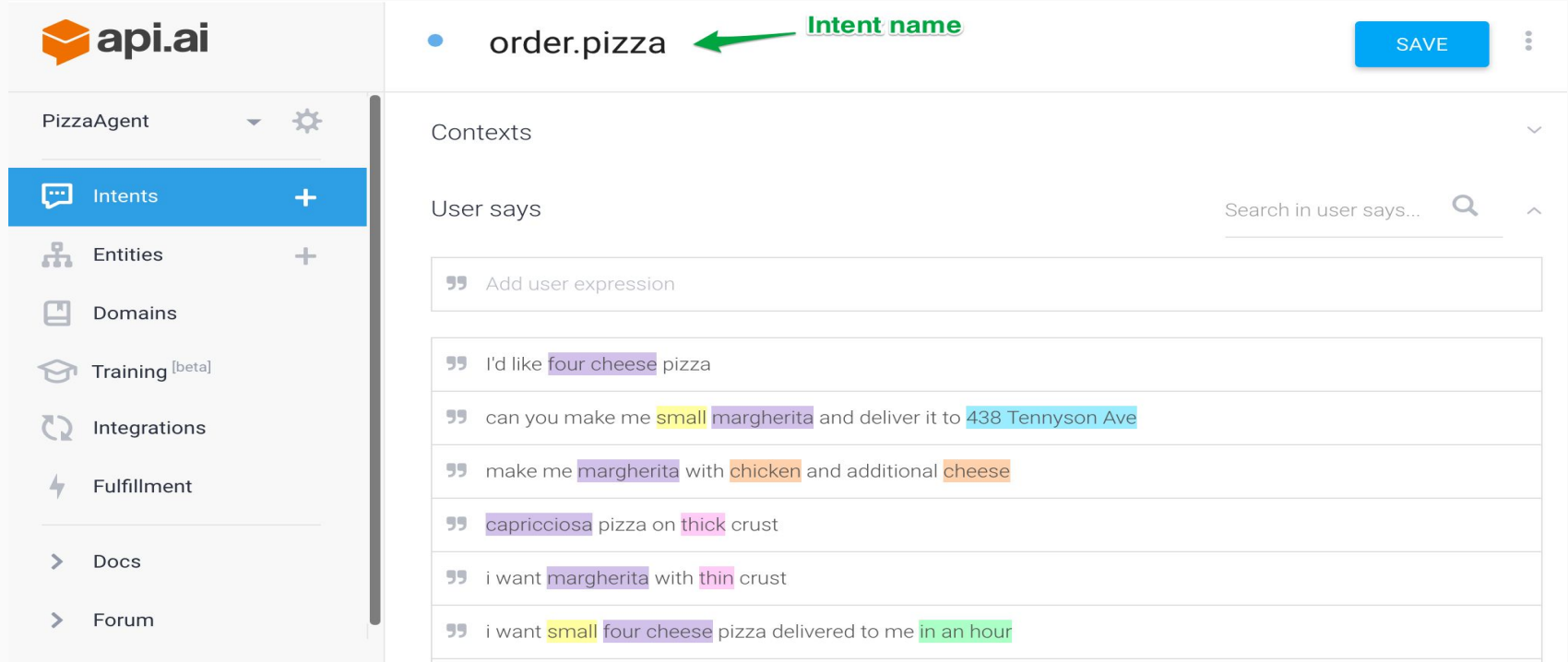
Entities are objects your app or device takes action on. [Read more here.](#)

We've already created some entities, so you don't have to describe everything from scratch. [Read about system entities here.](#)

Entities represent concepts or objects that are often specific to a use case. They are used for storing possible parameter values (along with their synonyms) that need to be returned in the [JSON response to a query](#).

Create Indents

An intent determines what kind of user requests should be understood and to what actionable data ([JSON response](#)) those requests should be converted.



The screenshot displays the 'api.ai' console interface. On the left is a sidebar with navigation options: PizzaAgent, Intents (selected), Entities, Domains, Training [beta], Integrations, Fulfillment, Docs, and Forum. The main area shows the configuration for the 'order.pizza' intent, which is highlighted with a green arrow and the label 'Intent name'. A 'SAVE' button is in the top right. Below the intent name are sections for 'Contexts' and 'User says'. The 'User says' section contains a list of example user expressions with specific words highlighted in colored boxes to show entity recognition: 'I'd like four cheese pizza', 'can you make me small margherita and deliver it to 438 Tennyson Ave', 'make me margherita with chicken and additional cheese', 'capricciosa pizza on thick crust', 'i want margherita with thin crust', and 'i want small four cheese pizza delivered to me in an hour'.

api.ai

PizzaAgent

Intents +

Entities +

Domains

Training [beta]

Integrations

Fulfillment

Docs

Forum

• **order.pizza** ← Intent name SAVE

Contexts

User says

Search in user says...

” Add user expression

” I'd like four cheese pizza

” can you make me small margherita and deliver it to 438 Tennyson Ave

” make me margherita with chicken and additional cheese

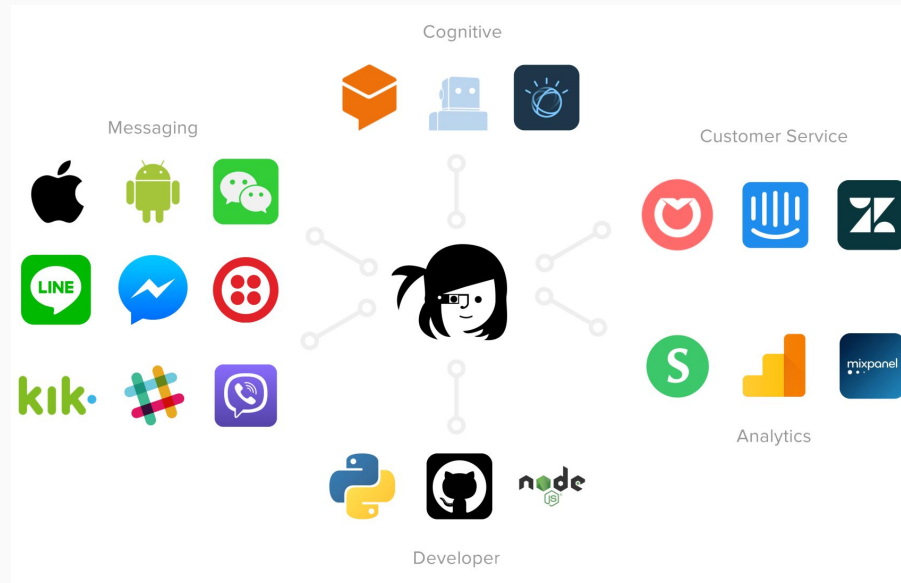
” capricciosa pizza on thick crust

” i want margherita with thin crust

” i want small four cheese pizza delivered to me in an hour

Demo: <https://console.api.ai>

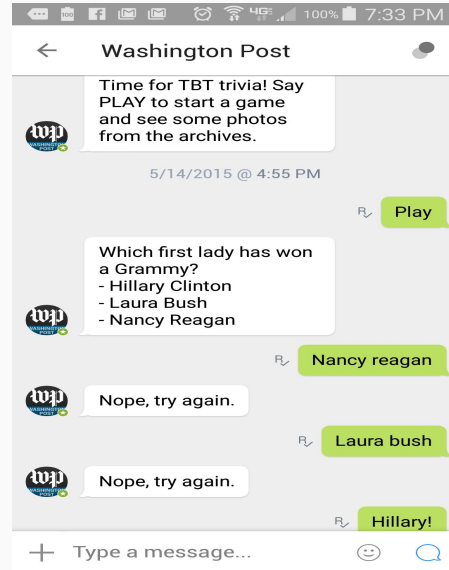
There are many other ways





I'm so confused.

Bots get confused a lot



Framing the reply is the hard part



Tips

1. Always use small loops of text.
2. Use contexts to fetch info.
3. Use quick replies , they are awesome

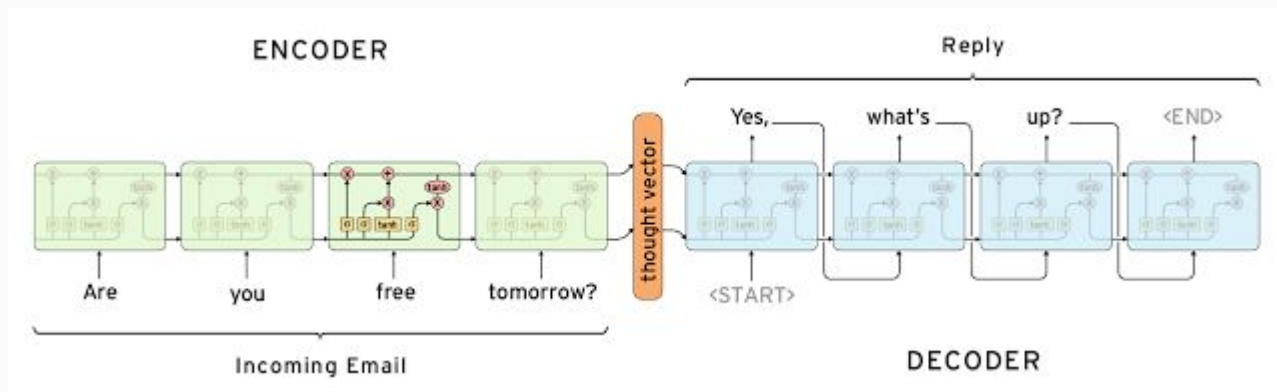
Awesome lists :

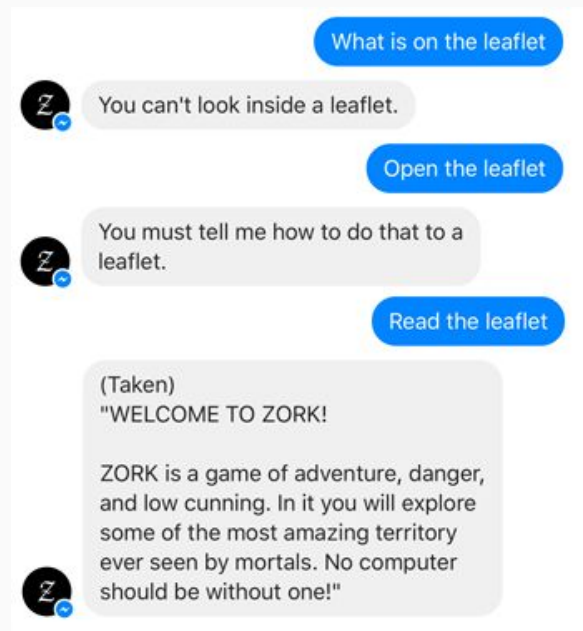
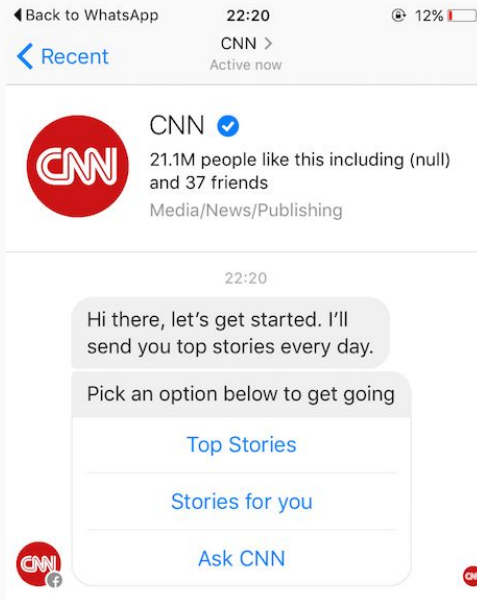
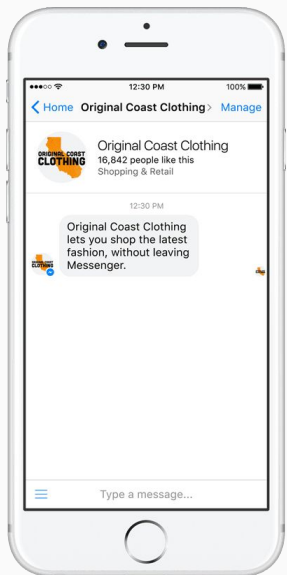
<https://github.com/abdelhai/awesome-bots>

<https://github.com/hackerkid/bots>

Going deeper

Generative models (harder) don't rely on pre-defined responses. They generate new responses from scratch. Generative models are typically based on Machine Translation techniques, but instead of translating from one language to another, we “translate” from an input to an output (response).





Thank You