Hands on workshop: Give voice to your toxic aware bot

March 2020

Hands on workshop: Give voice to your toxic aware bot

Roadmap:

- Build your toxic detector using keras
- Apify your model
- Build your bot with Comportia
- Integrate it to facebook messenger
- Add voice using Voxia

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Tools for NLP, chatbots and Voicebots

Tools

- Libraries
  - NLTK (Natural Language Toolkit)
  - Stanford CoreNLP
  - Apache OpenNLP
  - Spacy
  - Keras
  - Tensorflow
  - Pytorch
  - fastai

Tools

- Platforms

COMPORTIA

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Build and Apify your toxic detector using keras

Build your toxic detector using keras

Keras

Keras is a high-level neural networks API, written in Python and capable of running on top of TensorFlow, CNTK, or Theano. It was developed with a focus on enabling fast experimentation. Being able to go from idea to result with the least possible delay is key to doing good research.

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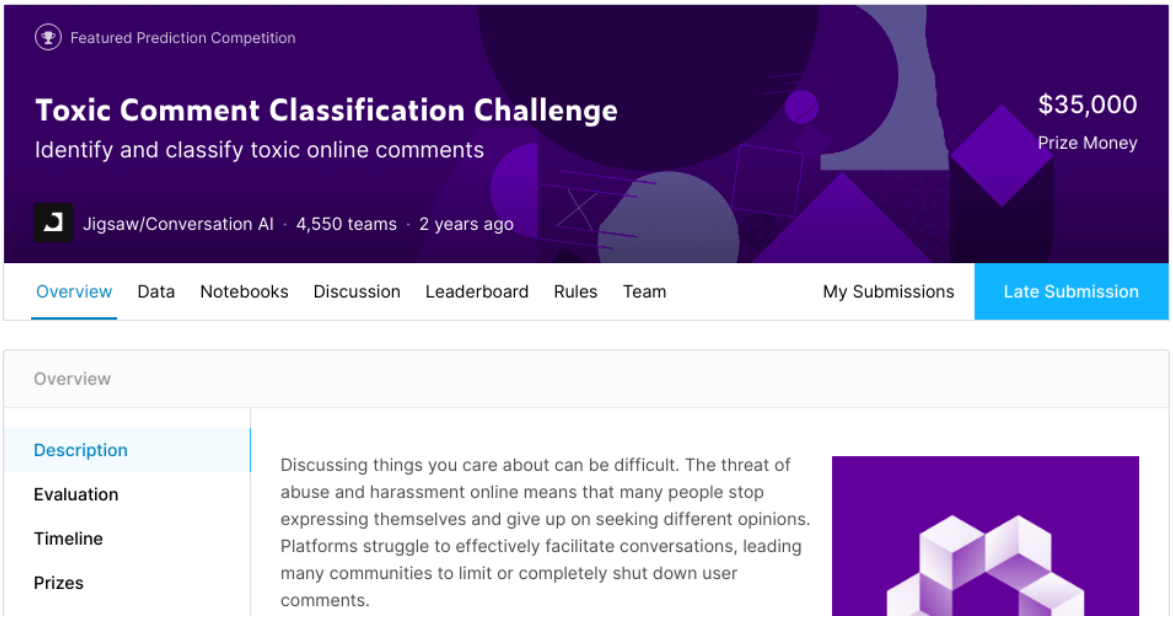
Keras utilities

Keras let's you define easily deep learning models including a set of utilities to work with different:

- Activation function: sigmoid, tanh, ReLU...
- Layers: Dense, Input, LSTM, Embedding, Dropout ...
- Optimizers: SGD, RMDProp, Adagard, Adadelta, Adam...
- Loss functions: Hinge, Binary Cross entropy, Categorical cross entropy ...

The database

Let's work with Toxic comments jigsaw database from https://www.kaggle.com/c/jigsaw-toxic-comment-classification-challenge

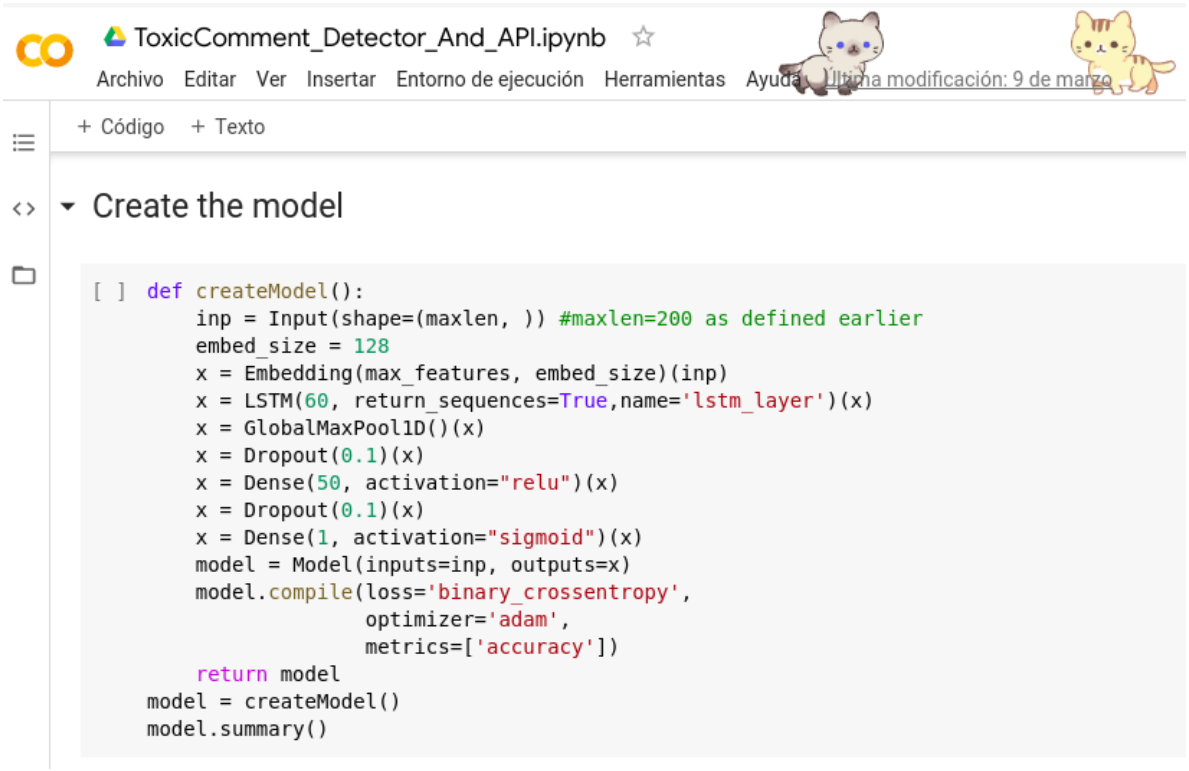


Apify your model

You will be Apifying your model with flask web server

Programming environment

We will be working with Google collab



Let's code

http://tiny.cc/toxicapi

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Build your bot in comportia

Comportia

COMPORTIA

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What is Comportia?

Comportia is a plattform to create and aministrate chatbots.

It works using intents and entities detection.

But also has an extra called bahaviours, which are used to perform specific actions.

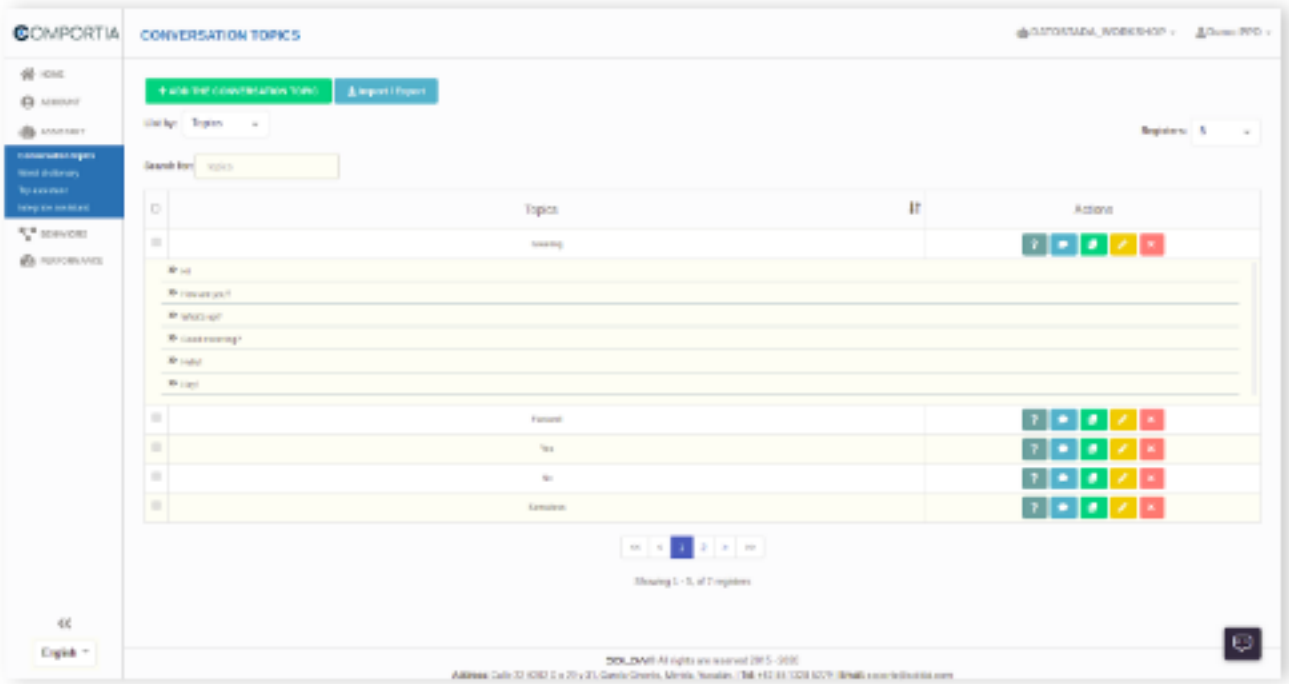
Intents

Are the themes or general sense of a sentence during a conversation:

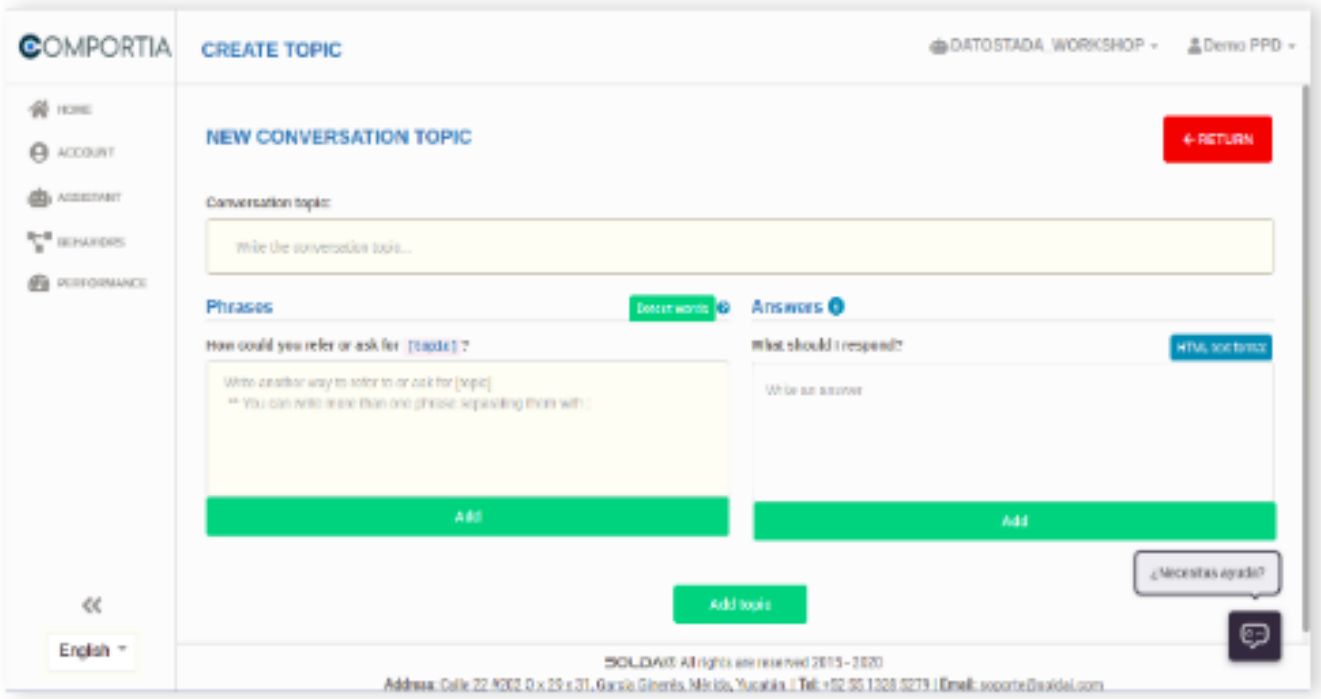
Example:

What is the cornavirus?

Intents



Intents


COMPORTIA
CREATE TOPIC
DATOSTADA WORKSHOP
Demo PPD
HOME
ACCOUNT
ASSISTANT
BEHAVIORS
PERFORMANCE
NEW CONVERSATION TOPIC
RETURN
Conversation topic:
Phrases
Answers
Add
Add
Add topic
English

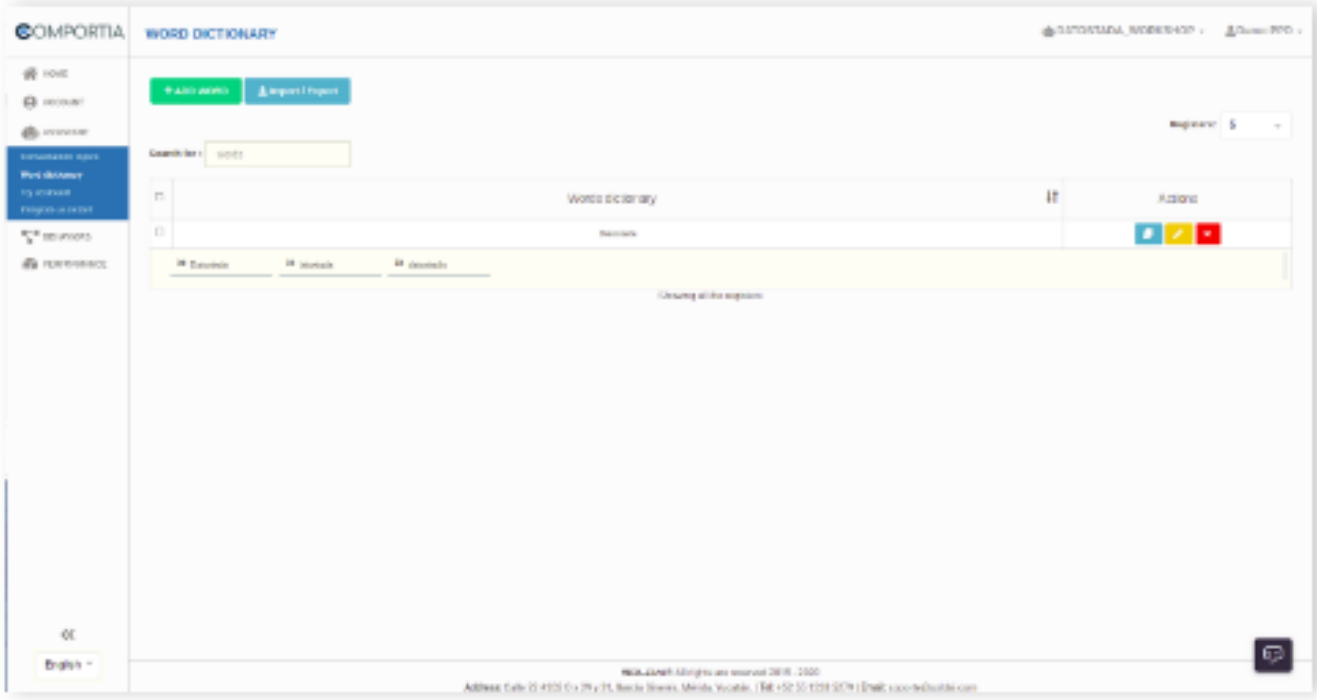
Entities

Are the objects mentioned during the interactions, those things that the user refers as specific instances inside an intent.

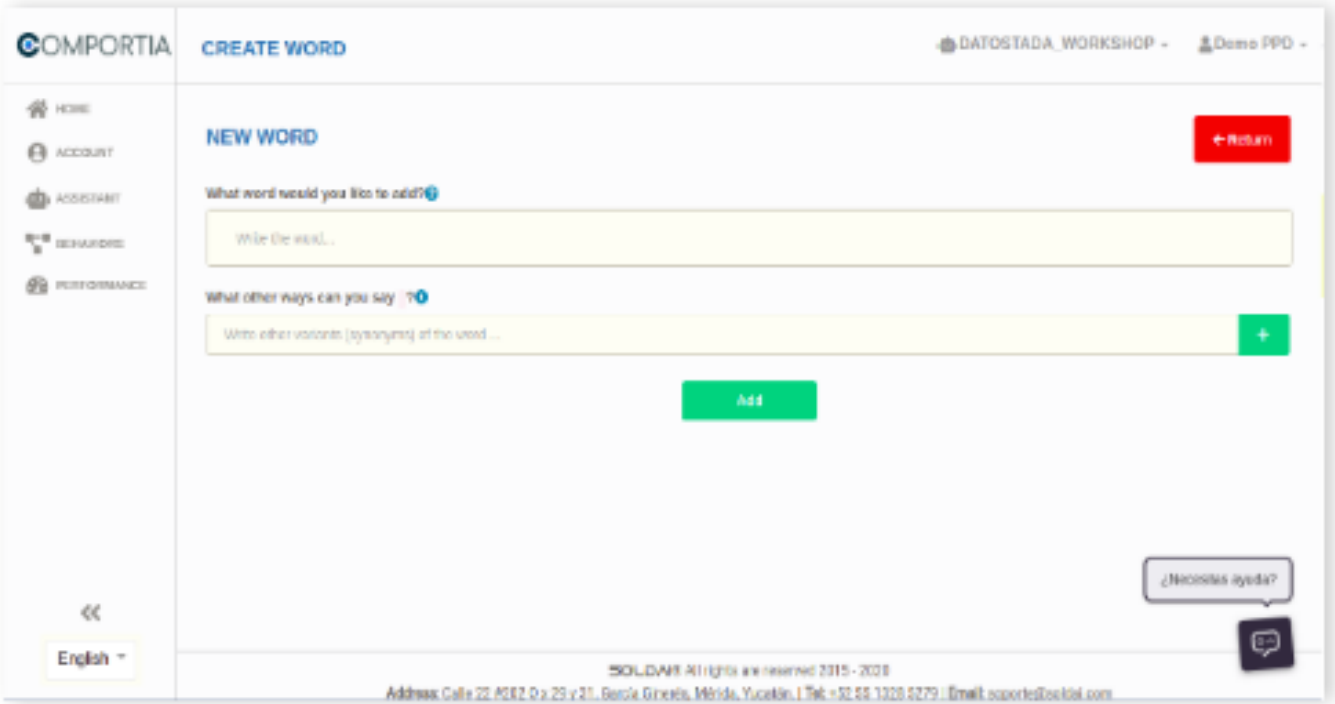
They are useful to address specific points in the conversation. Example:

What is the **cornavirus**?

Entities



Entities

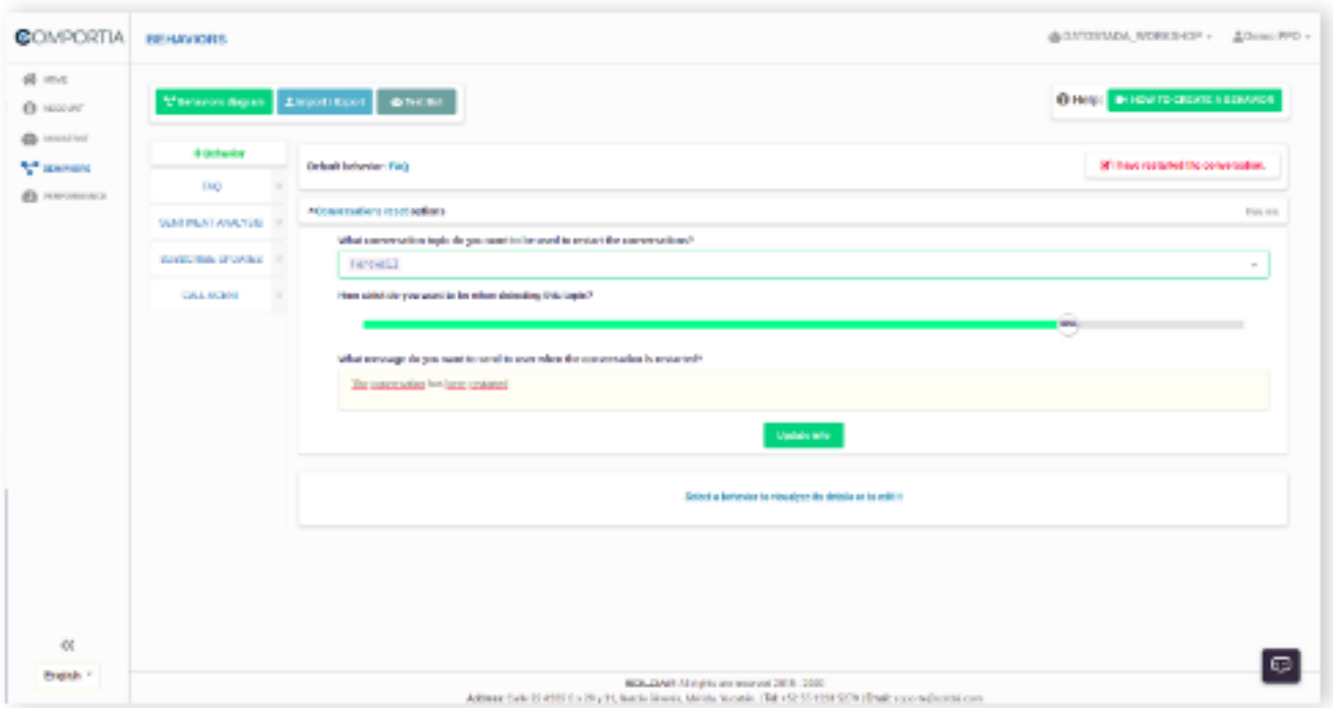

COMPORTIA
CREATE WORD
DATOSTADA_WORKSHOP
Demo PPD
NEW WORD
Return
What word would you like to add?
What other ways can you say ?
Add
¿Necesitas ayuda?
English

Behaviours

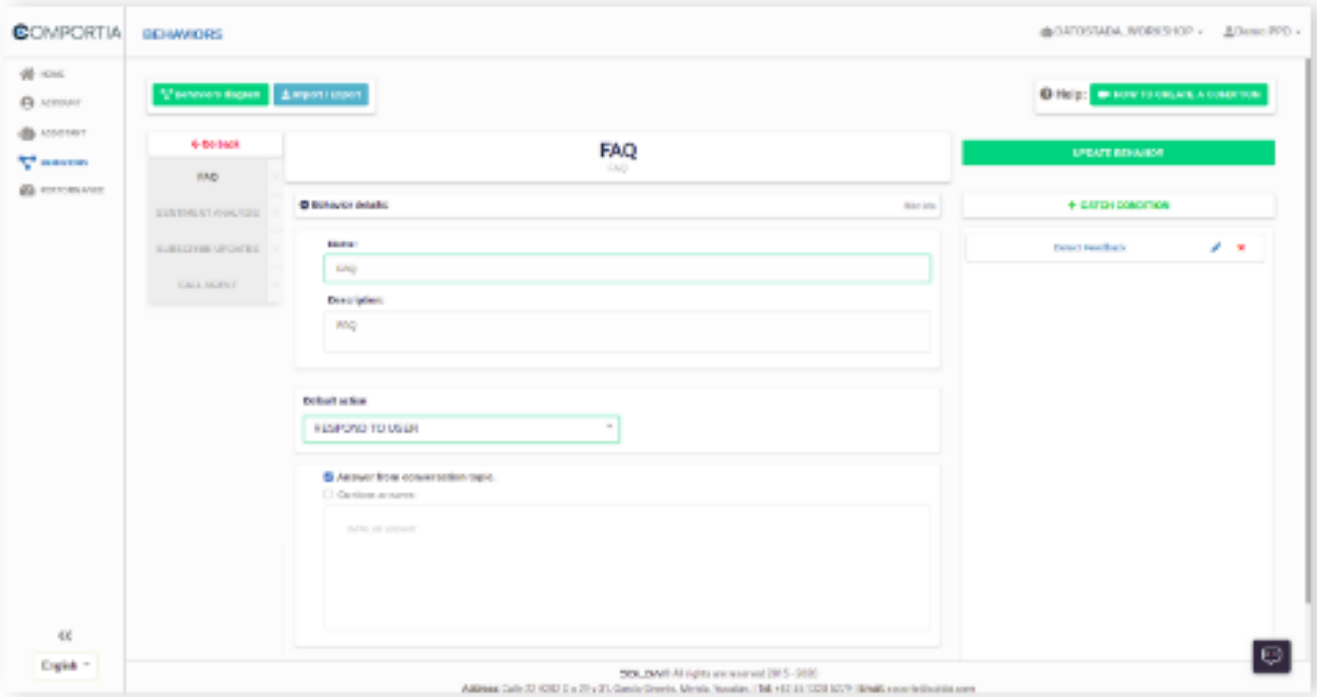
They are flows to make decissions based on state machines, where each state machine have a set of states and each state can have multiple sets of conditions, actions and transitions.

The states in the plattform are calles **behaviours**.

Behaviours

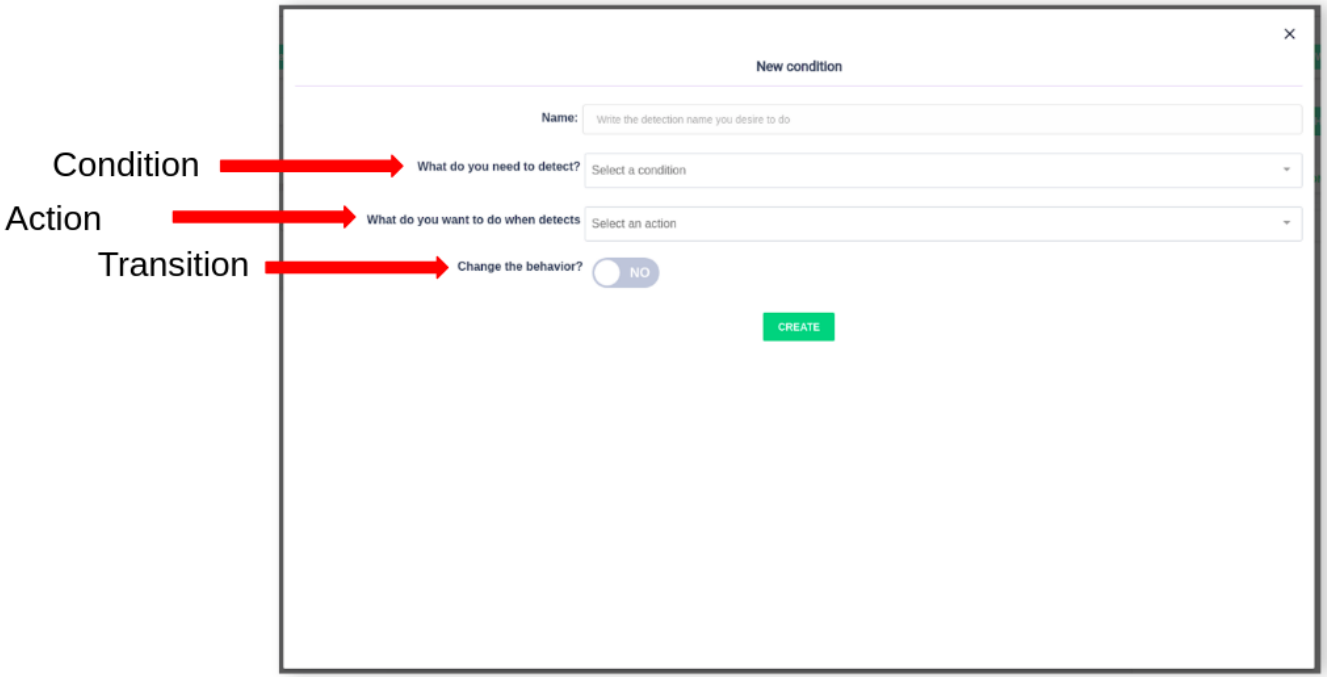


Behaviours


COMPORTIA
BEHAVIORS
FAQ
UPDATE BEHAVIOR
+ CATCH CONDITION
English

Behaviours

Behaviours


Condition
Action
Transition
New condition
Name:
Write the detection name you desire to do
What do you need to detect?
Select a condition
What do you want to do when detects
Select an action
Change the behavior?
NO
CREATE

Conditions

List of conditions available in Comportia:

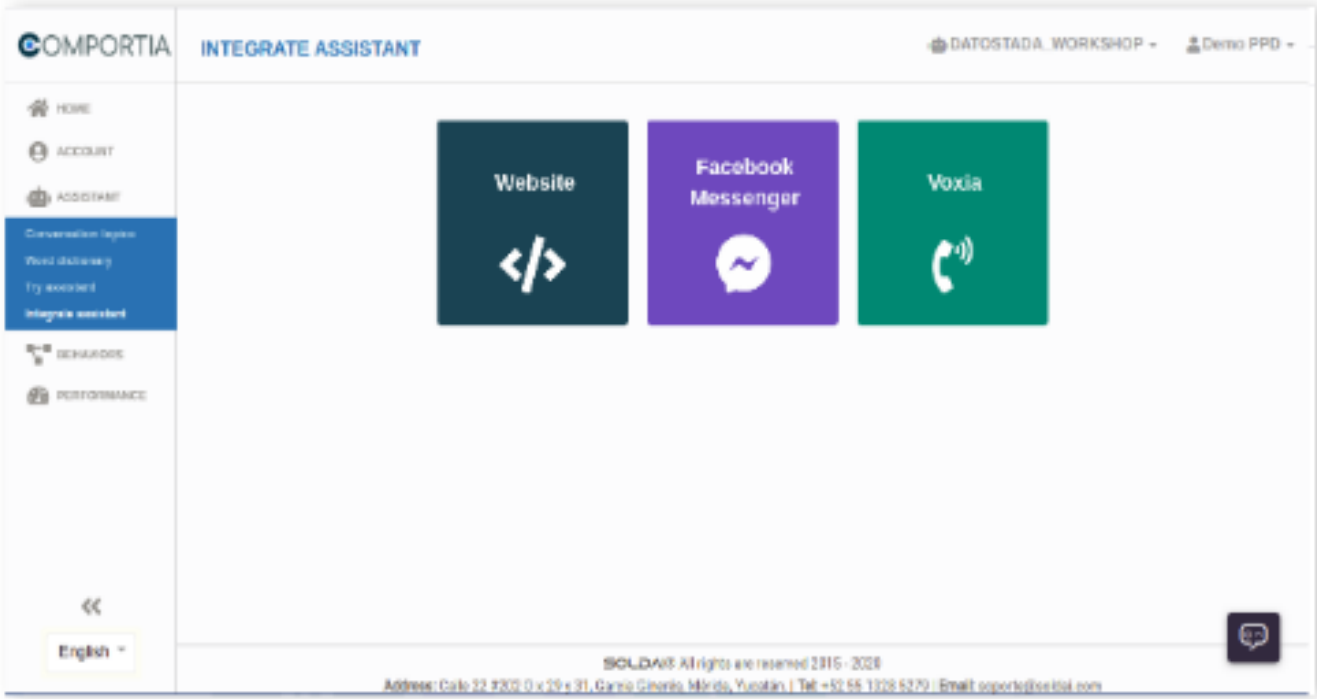
- Comments
- Conversation themes
- Dates
- Email
- Multiple choices
- API validation
- Number
- Data verifications

Actions

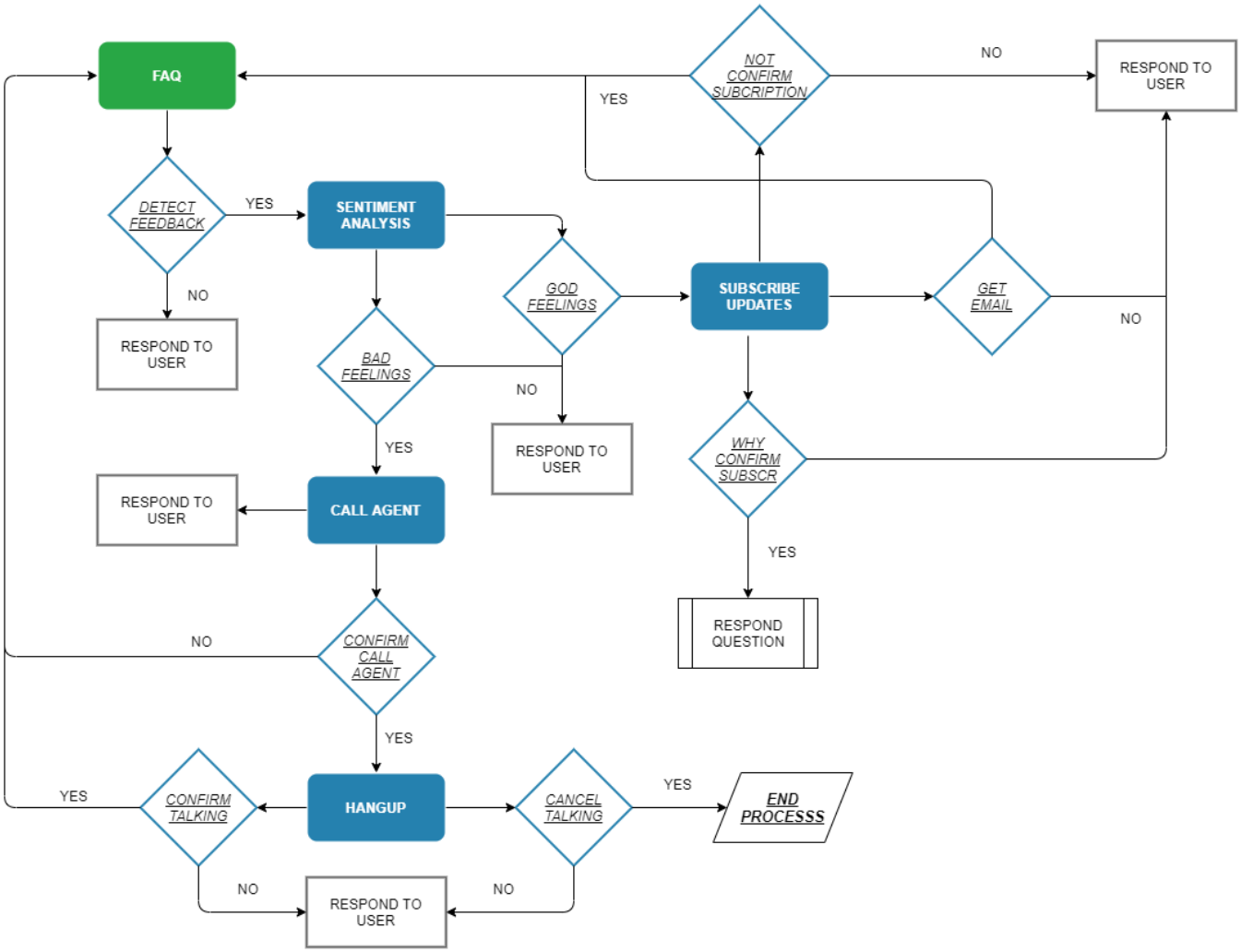
List of actions available in Comportia:

- Answer to the user
- Send email
- API call
- No answer

Integrations



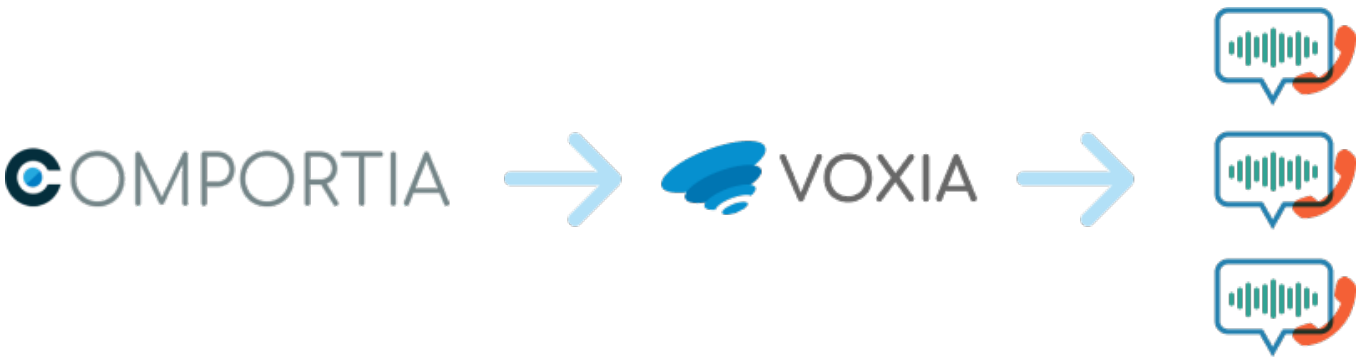
Workflow


FAQ
DETECT FEEDBACK
YES
NO
SENTIMENT ANALYSIS
RESPOND TO USER
BAD FEELINGS
GOD FEELINGS
NO
YES
RESPOND TO USER
CALL AGENT
RESPOND TO USER
SUBSCRIBE UPDATES
NOT CONFIRM SUBCRIPTION
NO
YES
RESPOND TO USER
GET EMAIL
NO
WHY CONFIRM SUBSCR
YES
RESPOND QUESTION
CONFIRM CALL AGENT
NO
YES
CONFIRM TALKING
YES
HANGUP
CANCEL TALKING
YES
END PROCESSS
NO
RESPOND TO USER
NO

Add voice to your bot using Voxia

Voxia

Voxia



Help us improve

http://tiny.cc/datostadaeval