

Using the Building Blocks of Chatbots



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Overview

Agents translate user requests to actionable data i.e intents

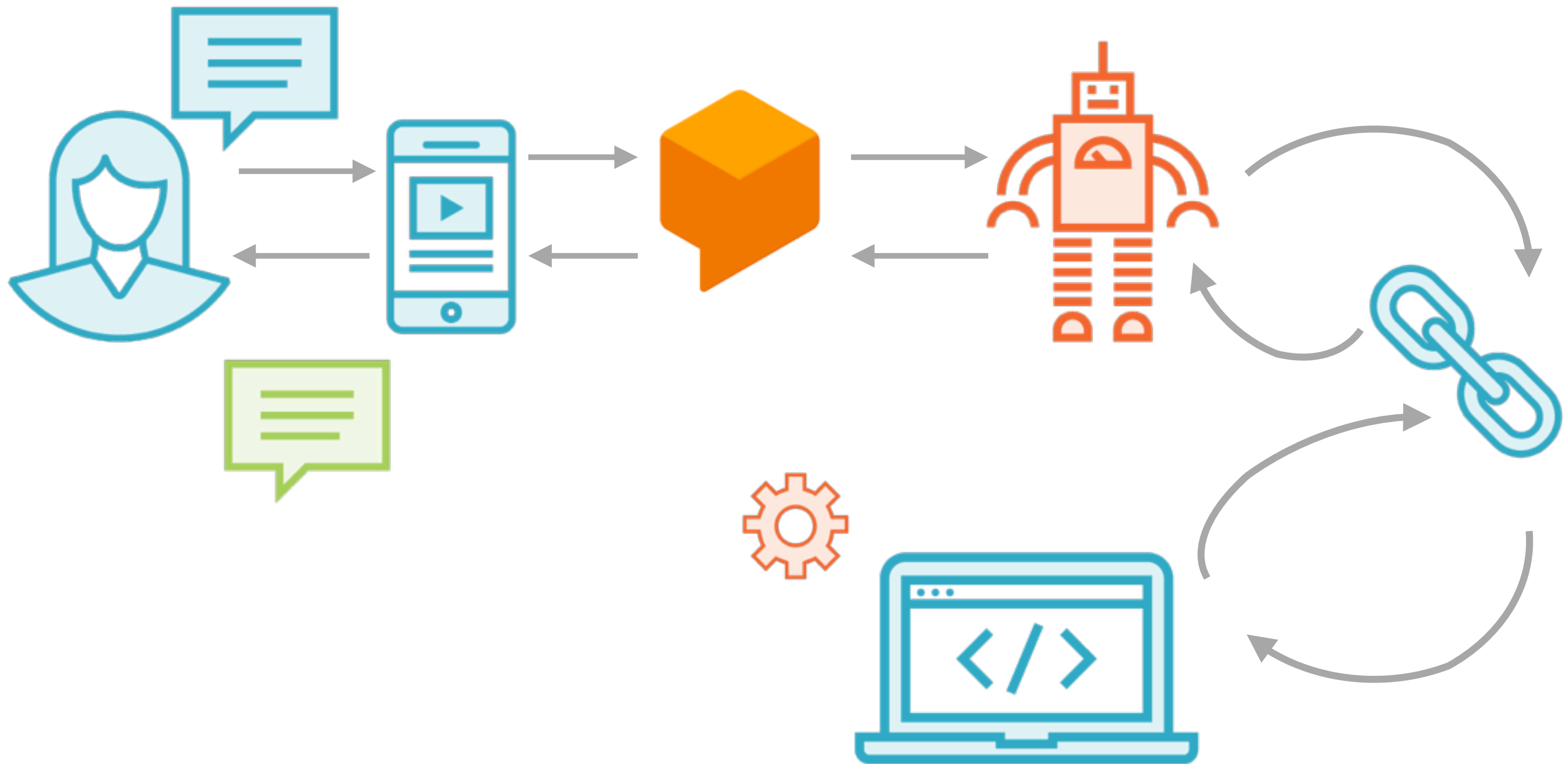
Entities help extract information from user speech with the help of prompts

User expressions are annotated to specify parameters which customize queries

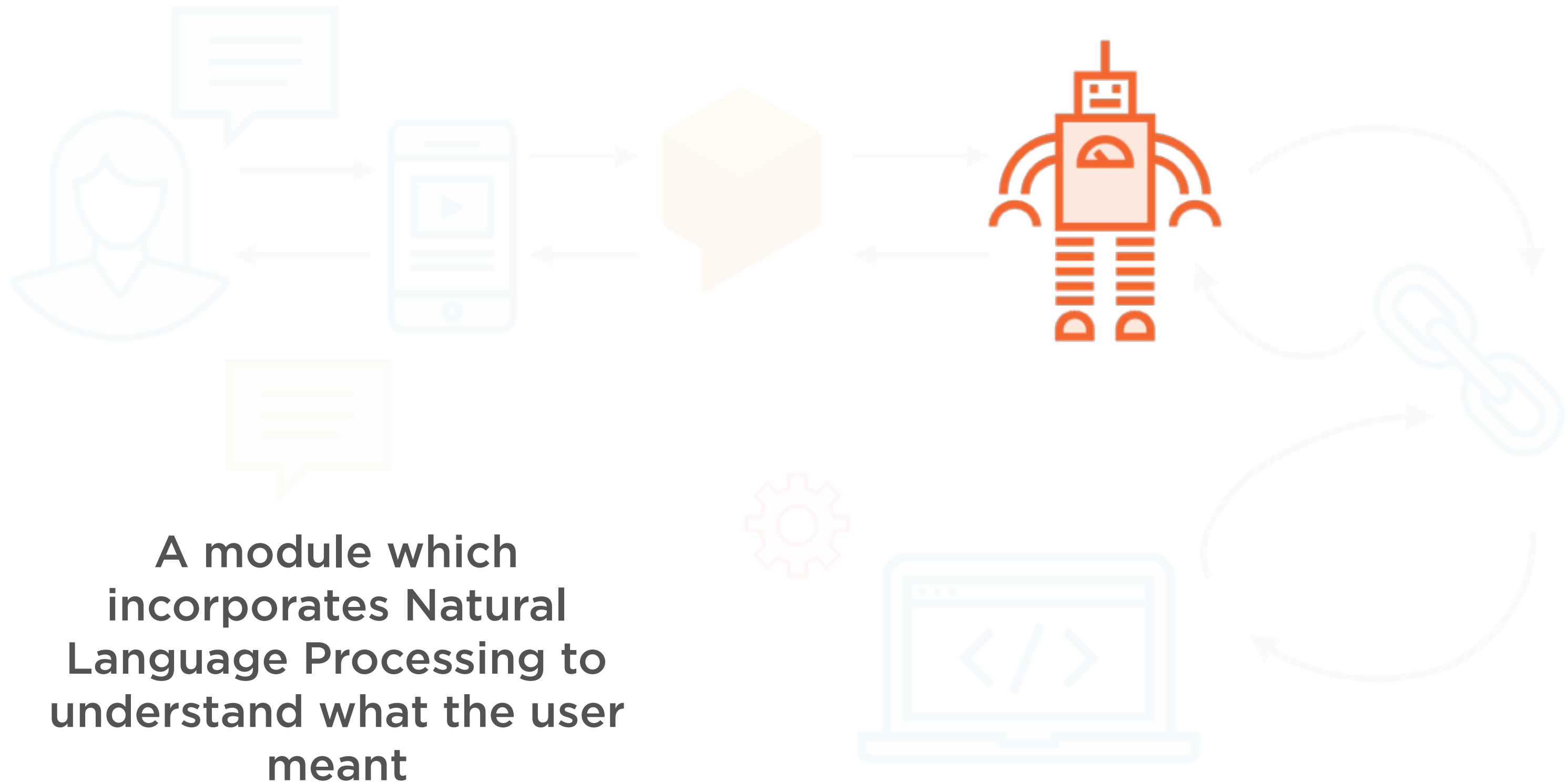
Smalltalk helps make bots friendly and chatty with no additional code

Agents

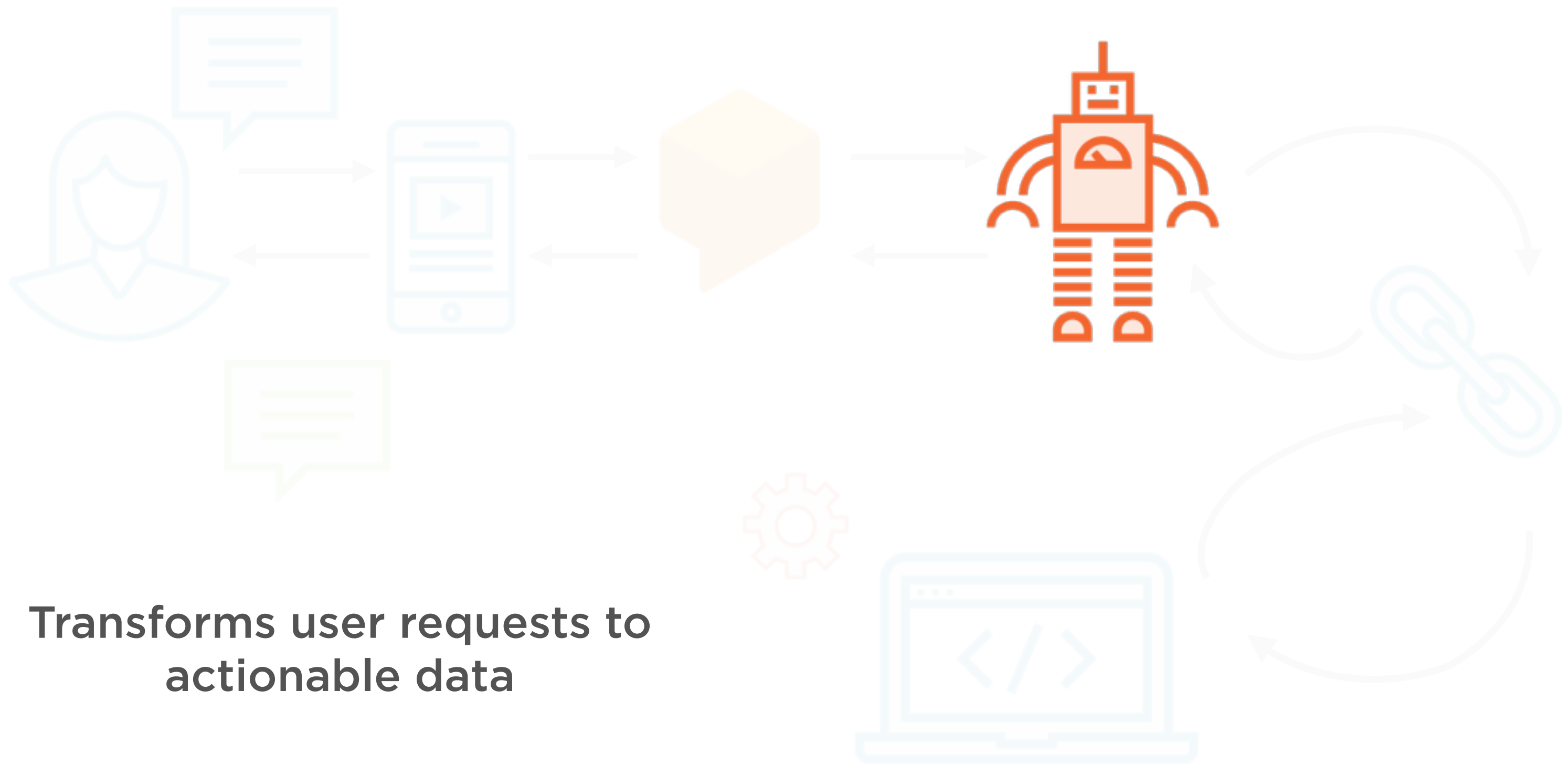
Flow of Conversation



Agent



Agent



Agents **manage conversation flow** with the user using intents, entities, contexts and other building blocks

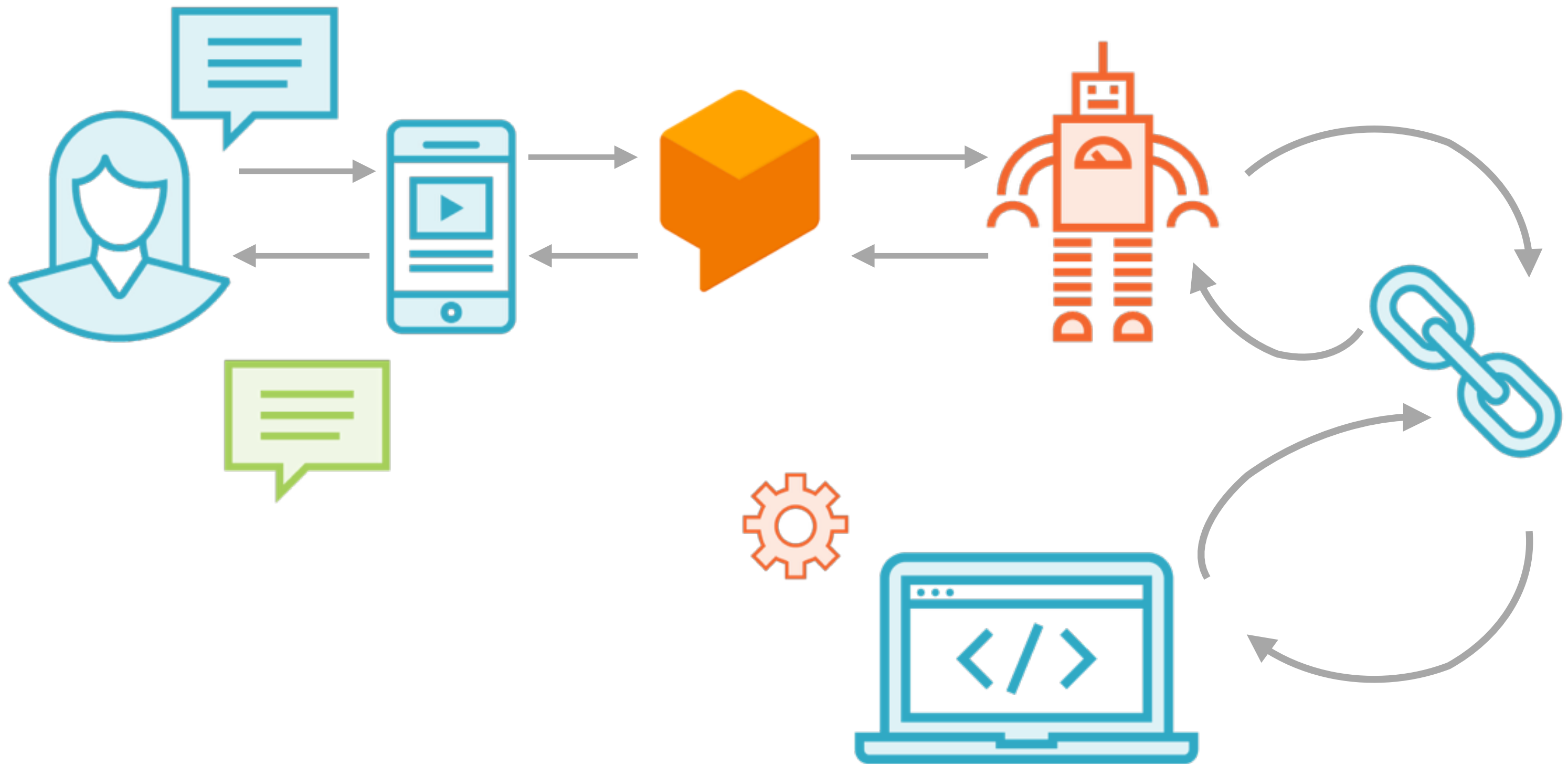
Demo

**Build an agent which helps plan
business trips**

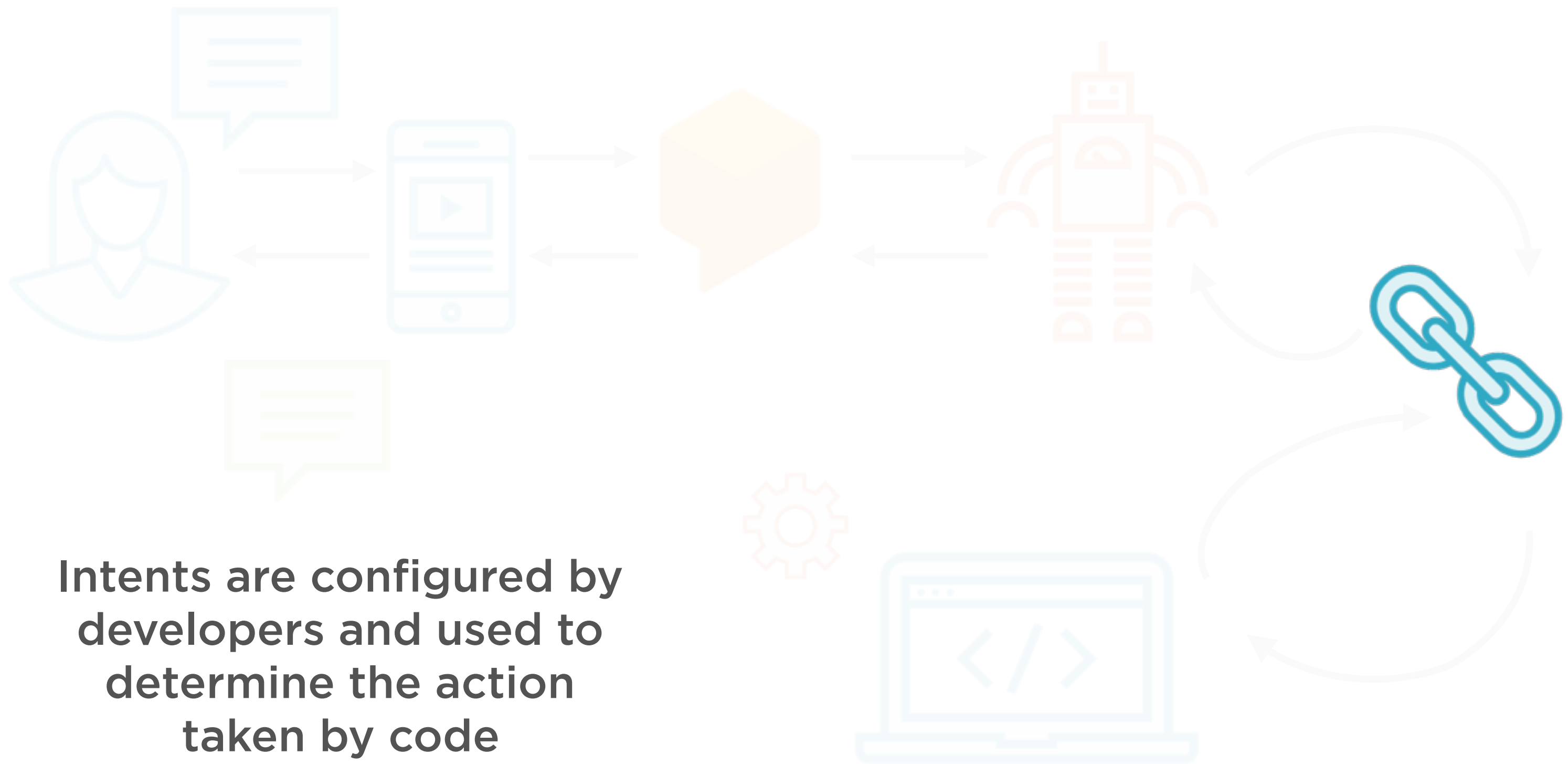
Intents



Flow of Conversation



Intent



Intent maps what a user says and
what your software should
execute

Default Intents

Welcome

Greet the user, exchange pleasantries (partially configured)

Fallback

Default or fall through intent when no others match (fully configured)

Intent Sections



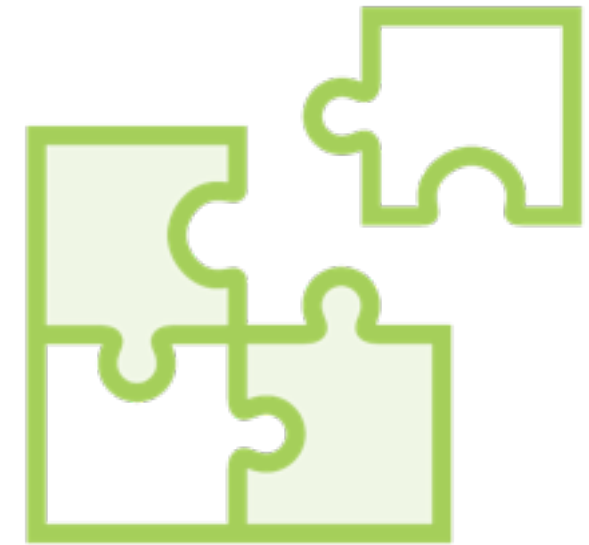
User says



Action



Response



Context

Intent Sections



User says



Action



Response



Context

Demo

Configure and explore default intents

Demo

Make your bot chatty using Smalltalk

Demo

Create custom intents

Custom Intents



BookFlights



BookRooms



BookCars

Entities

A Conversation



Book a room for me please

Which city do you plan to visit?

Bangalore

What date should I book for?

This Friday

Any room preference?

A double room



Slots to be Filled



Book a room for me please

Which **city** do you plan to visit?

Bangalore

What **date** should I book for?

This Friday

Any **room** preference?

A double room



Parameter values



Book a room for me please

Which city do you plan to visit?

Bangalore

What date should I book for?

This Friday

Any room preference?

A double room



Entities are used to extract
parameter values from user
queries

Entities



Book a room for me please

Which **city** do you plan to visit?

Bangalore

What **date** should I book for?

This Friday

Any **room** preference?

A double room



Entities

city

date

room

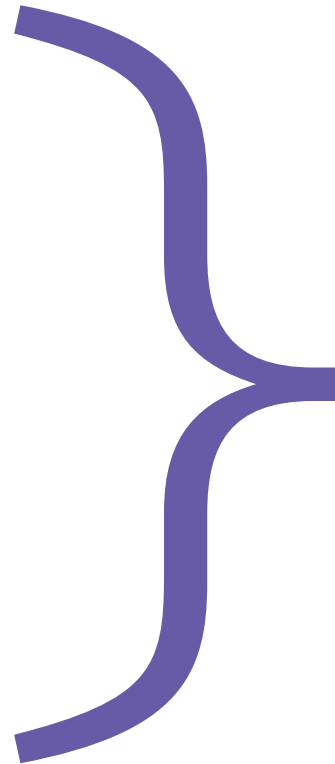
**All the information we need in a user
query will have a corresponding
entity**

Type of Data Expected

city

date

room



System entities

Developer entity

Entities

city

date

room

User entities are those that can be
defined at a session level i.e. a user's
playlist

Demo

Create developer entities used to extract values for custom intents:

- BookFlights
- BookRooms
- BookCars

BookFlights Intent

From city

To city

Date

Flight type

BookFlights Intent

From city

To city

Date

Flight type

BookFlights Intent

From city

To city

Date

Flight type

BookRooms Intent

City

Date

Room type

BookRooms Intent

City

Date

Room type

BookRooms Intent

City

Date

Room type

BookCars Intent

City

Date

Car type

Demo

Configure the BookFlights intent with:

- Expressions with annotations
- Parameters
- Prompts

A Conversation



Book a room for me please

Which city do you plan to visit?

Bangalore

What date should I book for?

This Friday

Any room preference?

A double room



Prompts



Book a room for me please

Which city do you plan to visit?

Bangalore

What date should I book for?

This Friday

Any room preference?

A double room



Demo

Configure the BookRooms and BookCars intent with:

- Expressions with annotations
- Parameters
- Prompts

Demo

Explore the JSON request sent for fulfillment

Summary

Implemented the TripPlanner agent allows booking flights, hotel rooms and cars

Enabled Smalltalk for friendly conversations

Used entities to extract information, configured user expressions, prompts and responses