Google Home Midterm Presentation

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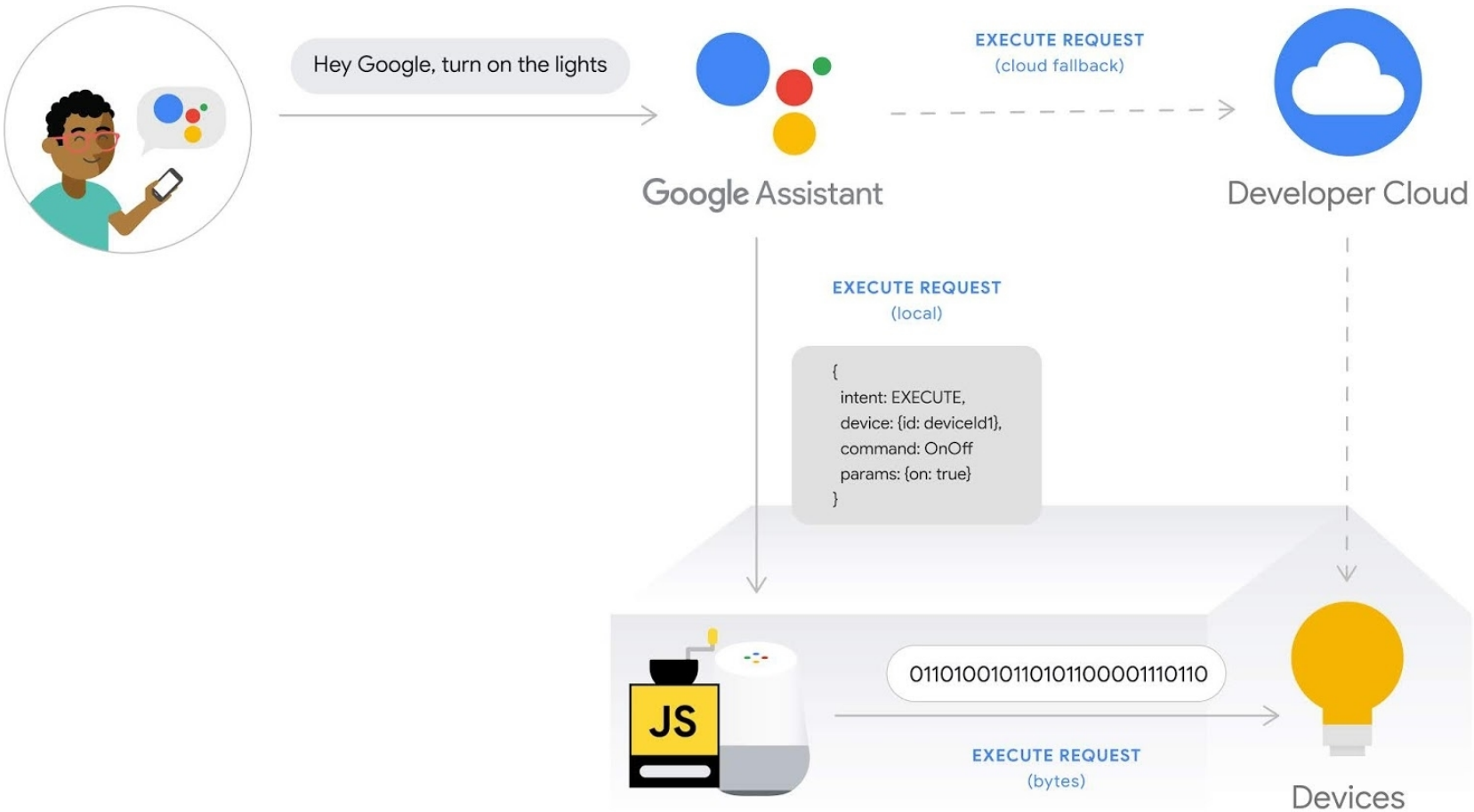
Overview

1. Overview
2. Developer Console
3. Dialogflow
4. Intents
5. Entities
6. Knowledge Base
7. Compatible Devices
8. Live Demo

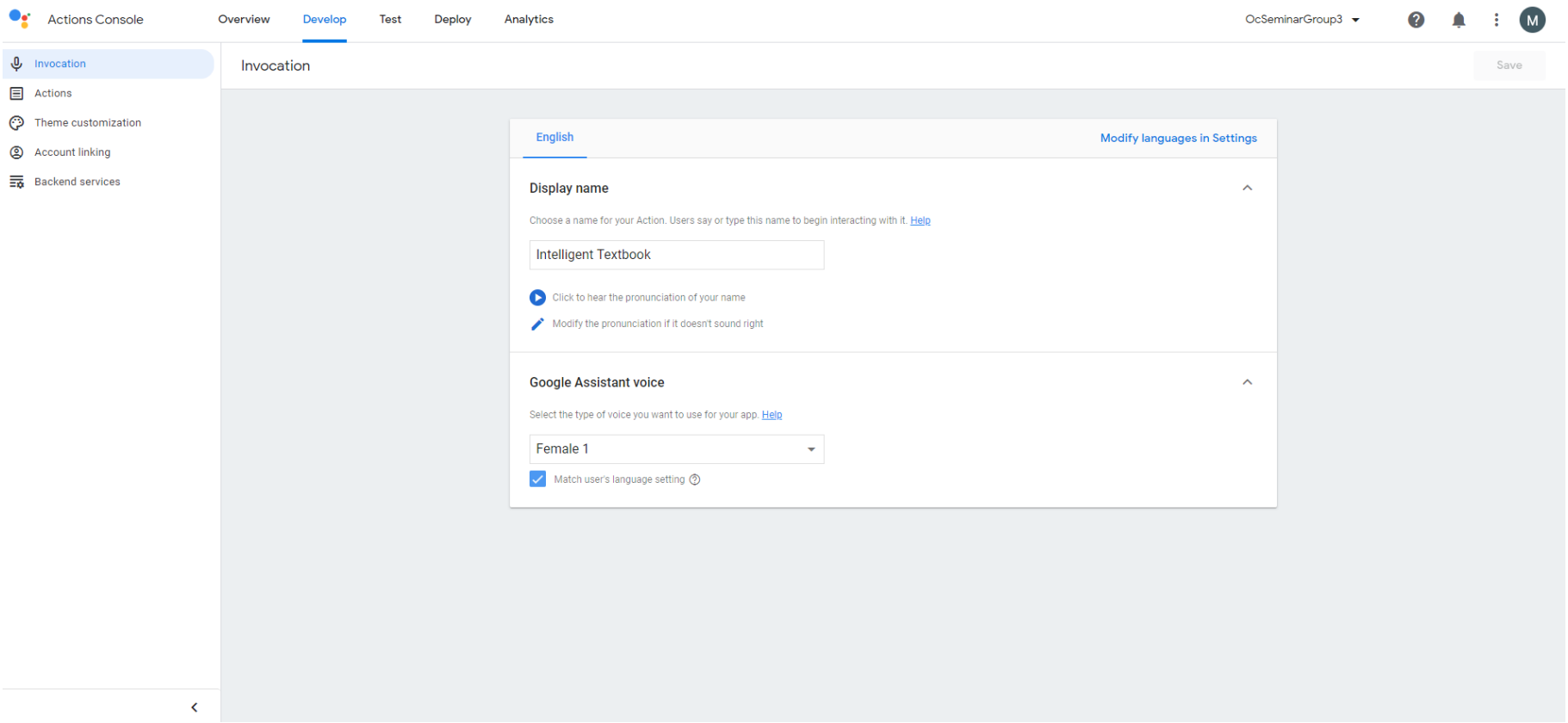
Overview

- founded by Google in 2016
- development through googles developer console and Dialogflow
- creating skills pretty easy
- no programming skill required

Execution Path



Developer Console



Developer Console cont'd

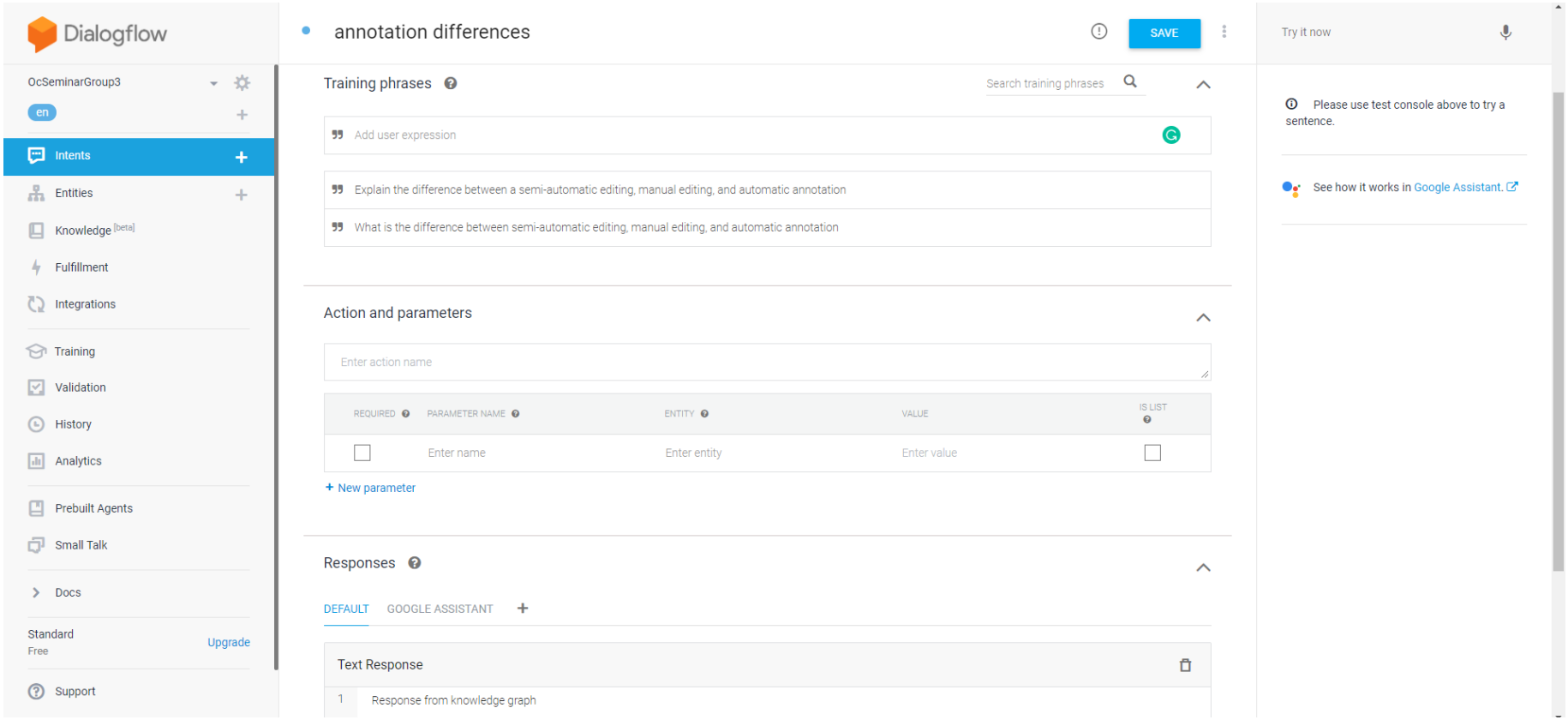
- gives an overview of your skill
- specifies general settings
- gives the user the ability to test their skill
- deployment of the skill

Dialogflow

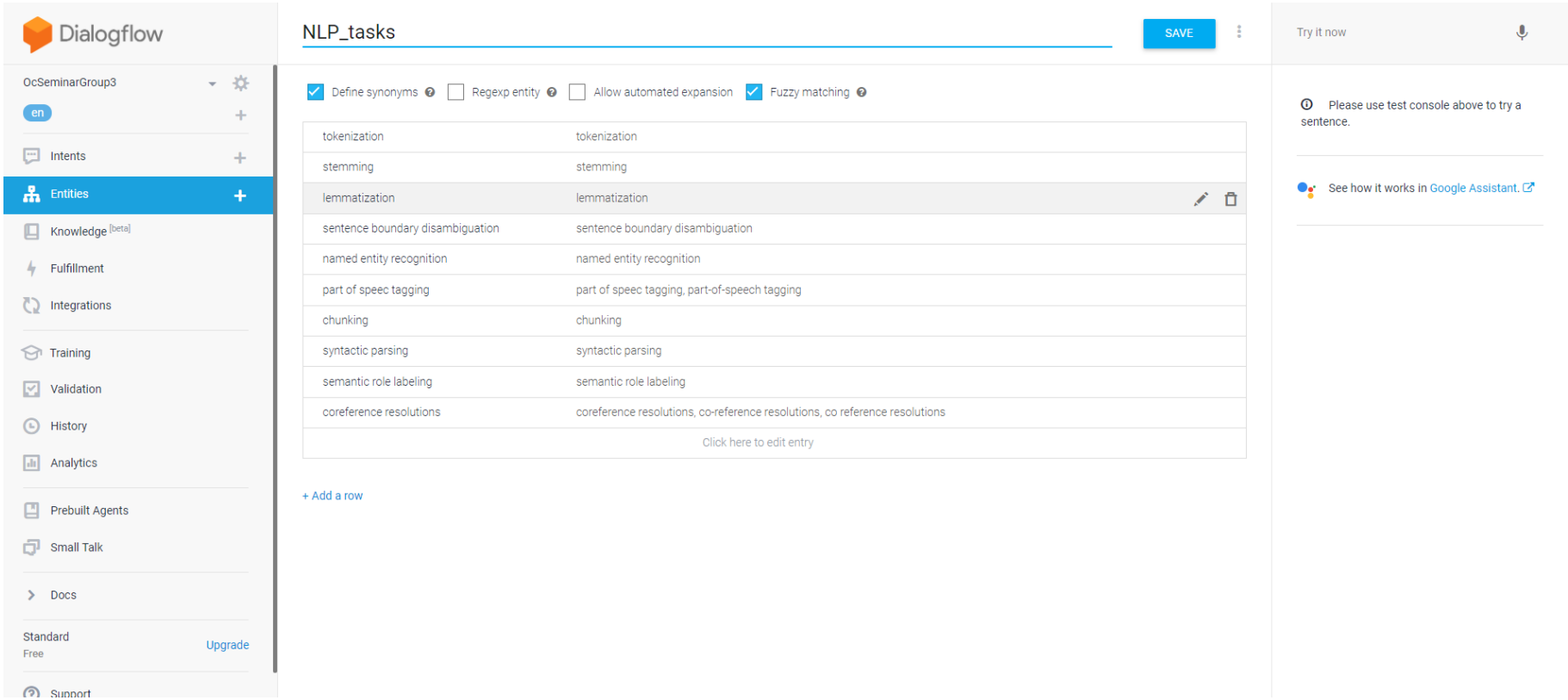
Specific Settings

- Intents
  - simple messaging objects
  - describes what smart home Action to perform
- Entities
  - smart objects like time or colours
  - can be customised
- Knowledge Base
  - complement defined intents
  - used to find automated responses

Intents


Dialogflow
OcSeminarGroup3
en
Intents
Entities
Knowledge [beta]
Fulfillment
Integrations
Training
Validation
History
Analytics
Prebuilt Agents
Small Talk
Docs
Standard
Free
Upgrade
Support
annotation differences
SAVE
Training phrases
Search training phrases
Add user expression
Explain the difference between a semi-automatic editing, manual editing, and automatic annotation
What is the difference between semi-automatic editing, manual editing, and automatic annotation
Action and parameters
Enter action name
REQUIRED
PARAMETER NAME
ENTITY
VALUE
IS LIST
Enter name
Enter entity
Enter value
+ New parameter
Responses
DEFAULT
GOOGLE ASSISTANT
Text Response
1
Response from knowledge graph
Try it now
Please use test console above to try a sentence.
See how it works in Google Assistant.

Entities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NLP_tasks
SAVE
Define synonyms
Regexp entity
Allow automated expansion
Fuzzy matching
tokenization | tokenization
stemming | stemming
lemmatization | lemmatization
sentence boundary disambiguation | sentence boundary disambiguation
named entity recognition | named entity recognition
part of speec tagging | part of speec tagging, part-of-speech tagging
chunking | chunking
syntactic parsing | syntactic parsing
semantic role labeling | semantic role labeling
coreference resolutions | coreference resolutions, co-reference resolutions, co reference resolutions
Click here to edit entry
+ Add a row
Try it now
Please use test console above to try a sentence.
See how it works in Google Assistant.

Knowledge Base

Problem

We need to somehow add the Knowledge Base from Group 1 into our skill.

Solution

There is a Knowledge Base feature which is already implemented in Dialogflow however here we only can use documents like texts or csv files or pdfs. So we are not exactly sure how to handle this at the moment.

Compatible Devices

Device Types & Traits

- various device types (air purifier to yogurt maker)
- capabilities of a device $\Rightarrow$ traits

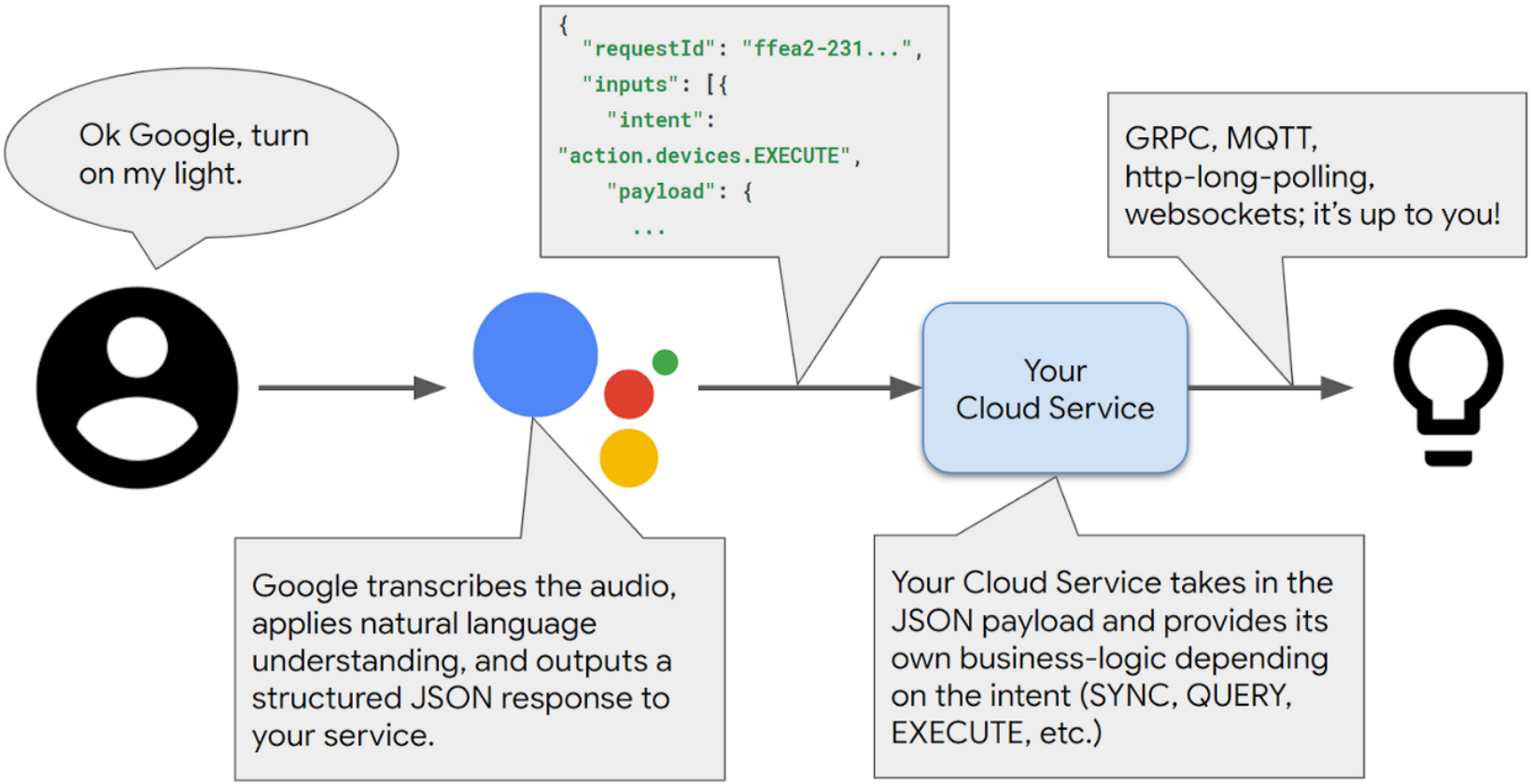
Life Cycle

A user sets up their devices in the Home App for the first time.

A user issues commands to their device.

User throws away their device and no longer uses Google Assistant.

Communication



Sample Trait Schema

Live Demo

Thank you for your attention!