

# Google Home Midterm Presentation

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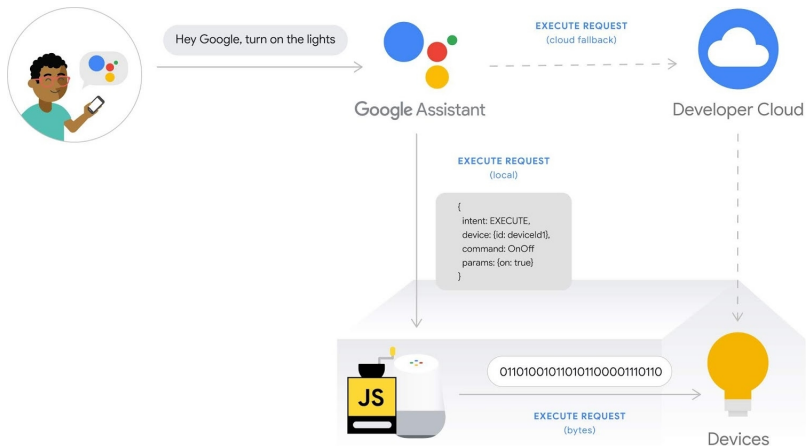
# Overview

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

# Execution Path



# Developer Console

The screenshot shows the Google Actions Console interface. At the top, there's a navigation bar with tabs: Overview, Develop (selected), Test, Deploy, and Analytics. The user is logged in as 'OlcSeminarGroup3'. On the left, a sidebar lists navigation options: Invocation (selected), Actions, Theme customization, Account linking, and Backend services. The main area is titled 'Invocation' and contains a configuration panel for an action named 'Intelligent Textbook'. The panel has a language dropdown set to 'English' and a 'Modify languages in Settings' link. Under 'Display name', there's a text input field containing 'Intelligent Textbook' and a link to 'Choose a name for your Action'. Below this, there are buttons to 'Click to hear the pronunciation of your name' and 'Modify the pronunciation if it doesn't sound right'. Under 'Google Assistant voice', there's a dropdown menu set to 'Female 1' and a checked checkbox for 'Match user's language setting'.

Actions Console

Overview **Develop** Test Deploy Analytics

OlcSeminarGroup3

Invocation

Save

English [Modify languages in Settings](#)

**Display name** ^

Choose a name for your Action. Users say or type this name to begin interacting with it. [Link](#)

Intelligent Textbook

Click to hear the pronunciation of your name

Modify the pronunciation if it doesn't sound right

**Google Assistant voice** ^

Select the type of voice you want to use for your app. [Link](#)

Female 1

☒ Match user's language setting ⓘ

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

## 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

**Dialogflow**

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Intents

Entities

Knowledge [beta]

Fulfillment

Integrations

Training

Validation

History

Analytics

Prebuilt Agents

Small Talk

Docs

Standard Free Upgrade

Support

**annotation differences**

Training phrases

Search training phrases

55 Add user expression

55 Explain the difference between a semi-automatic editing, manual editing, and automatic annotation

55 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
<input type="checkbox"/>	Enter name	Enter entity	Enter value	<input type="checkbox"/>

+ 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

 Dialogflow

OceSeminatGroup3

68

+

Intents

+

Entities

+

Knowledge base

+

Fulfillment

+

Integrations

+

Training

+

Validation

+

History

+

Analytics

+

Prebuilt Agents

+

Small Talk

+

Docs

+

Standard Free

Upgrade

Support

+

NLP\_tasks

SAVE

☒ Define synonyms

☐ Reassign 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 speech tagging	part of speech 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.

## Problem

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

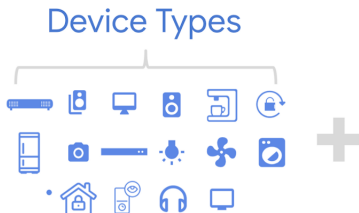
## Solution

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



## Traits

### Attributes - SYNC

Defines configuration options for traits.

### States - QUERY & EXECUTE

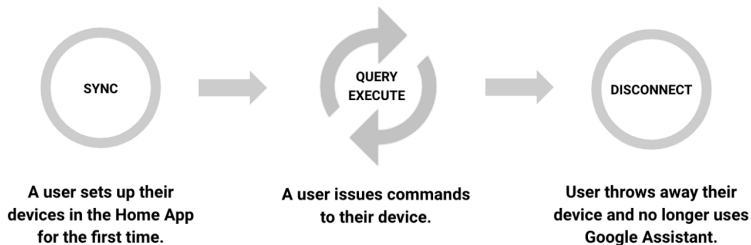
Defines the real-time state of the device.

### Commands - EXECUTE

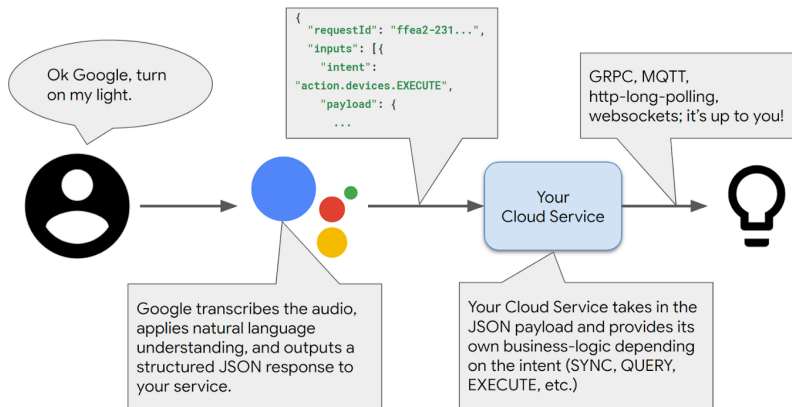
Used to change the state or perform a function on the device.

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

# Life Cycle



# Communication



# Sample Trait Schema

# Live Demo



Thank you for your  
attention!