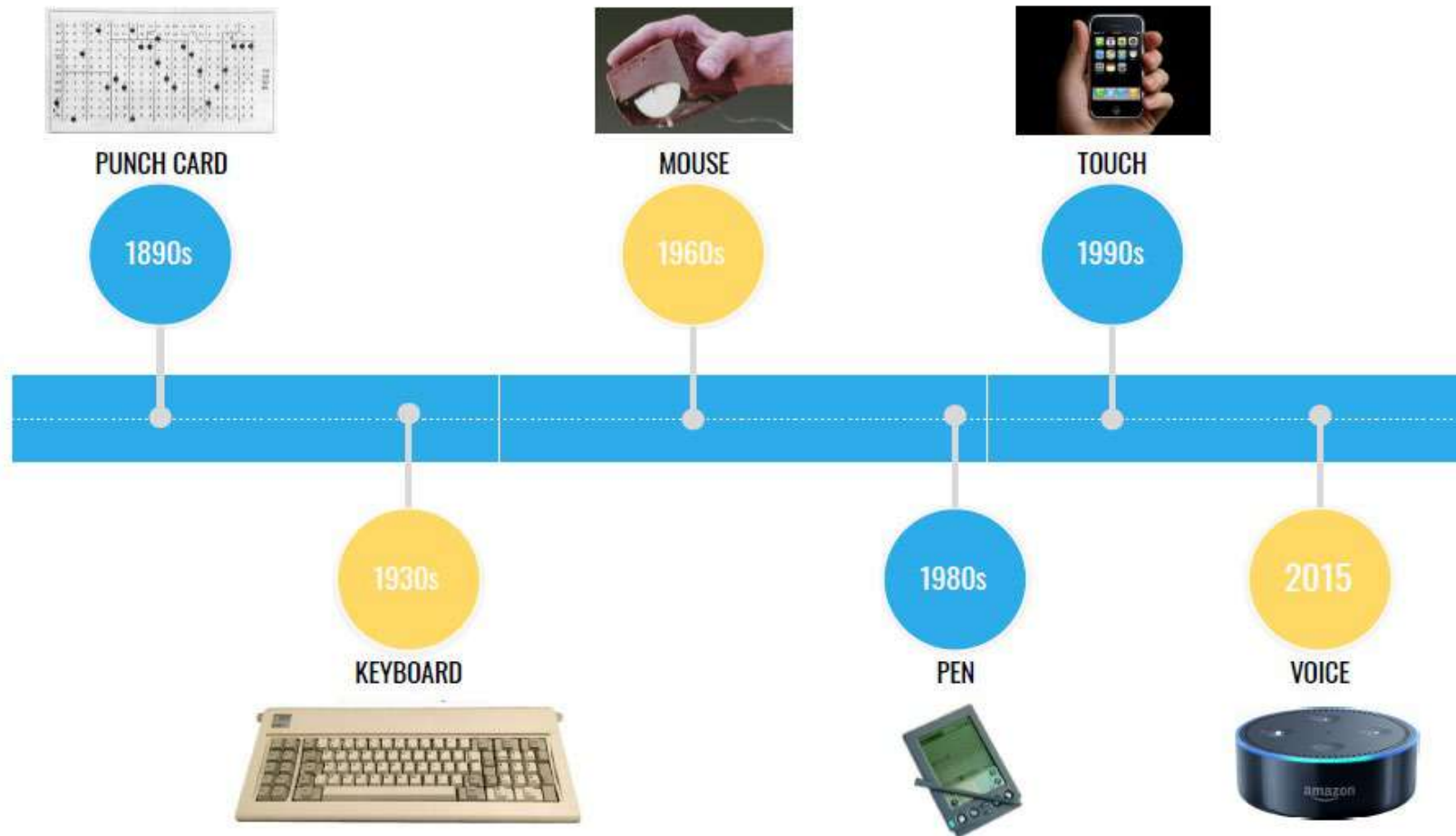


DialogFlow Bot

For Digital Currency

HCI Evolution Timeline

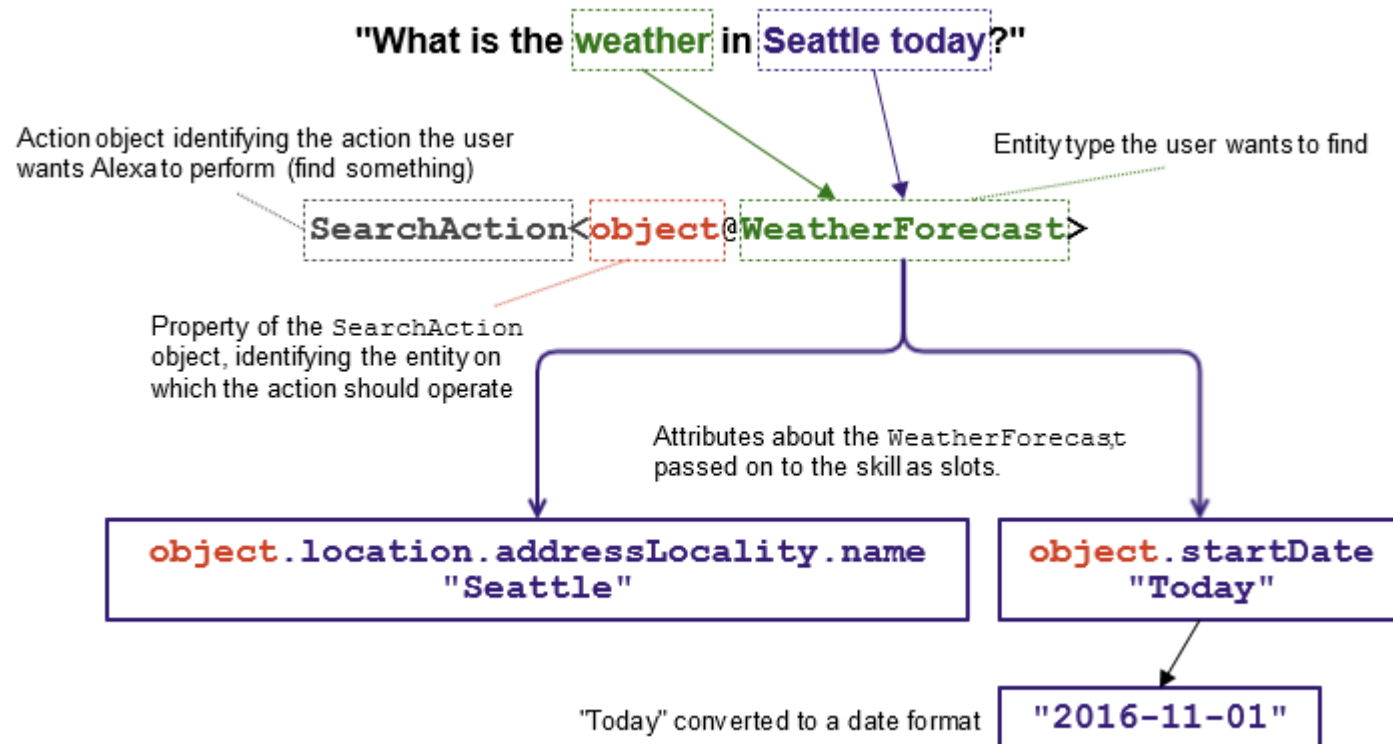


<https://www.youtube.com/watch?v=lwk6KzagxJo&feature=youtu.be>

Recapture

- To understand the request:

Intent represents an action that fulfills a user's spoken request. Intents can optionally have arguments called **slots**. The **sample utterances** are set of likely spoken phrases mapped to the intents.



Intent Components in Dialog AI

Intent Components

Contexts ?

Events ?

Training phrases ?

Action and parameters

Responses ?

Fulfillment ?

Context

- Contexts represent the current context of a user's request.
- This is helpful for differentiating phrases which may be vague or have different meanings depending on the user's preferences, geographic location, the current page in an app, or the topic of conversation.

Event

- Events allow you to **invoke an intent** based on a **non-verbal signal**, such as a **button click**, or the start of a new conversation with a bot.
- Events can be used by external services to **trigger** Dialog Flow intents, for example the Google Assistant built-in intents.

Parameters

Parameters allow people to specify **variable** parts of an utterance, for example city or date. Slots are commonly used in task and information-focused skills. There are two classes of slot types:

1. Amazon's **Built-in Entities**, like **@sys.firstname** and **@sys.date**
2. User's **Custom Entities**

Built-in Entities

@sys.location

@sys.number-integer

@sys.geo-county-us

@sys.age

@sys.temperature

@sys.geo-country

@sys.unit-weight-name

@sys.airport

@sys.time

@sys.unit-information-name

@sys.phone-number

@sys.music-genre

@sys.number-sequence

@sys.number

@sys.zip-code

@sys.given-name

@sys.last-name

@sys.unit-speed-name

Intent Components in Dialog AI

Intent Components

Contexts ?

Events ?

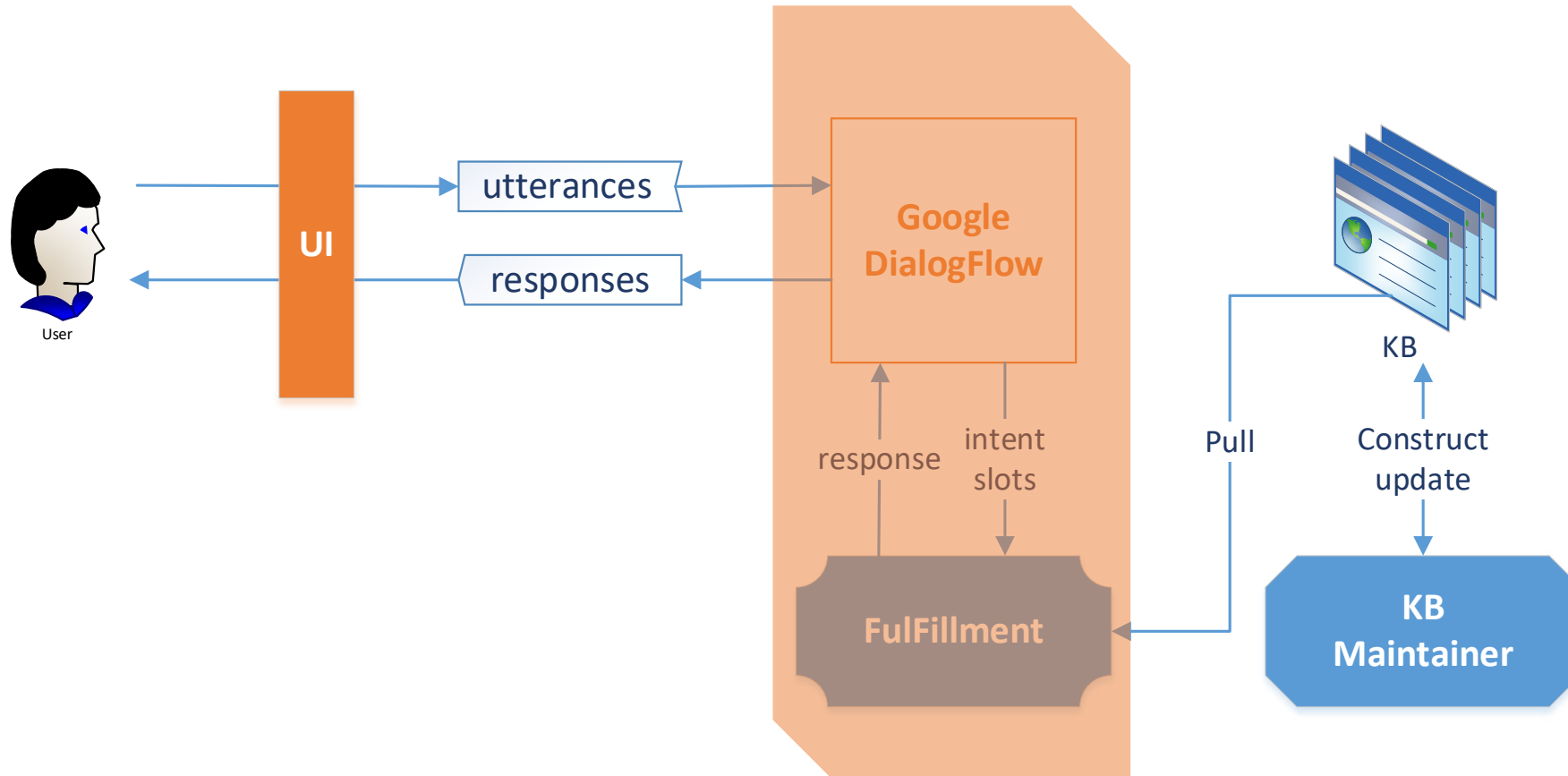
Training phrases ?

Action and parameters

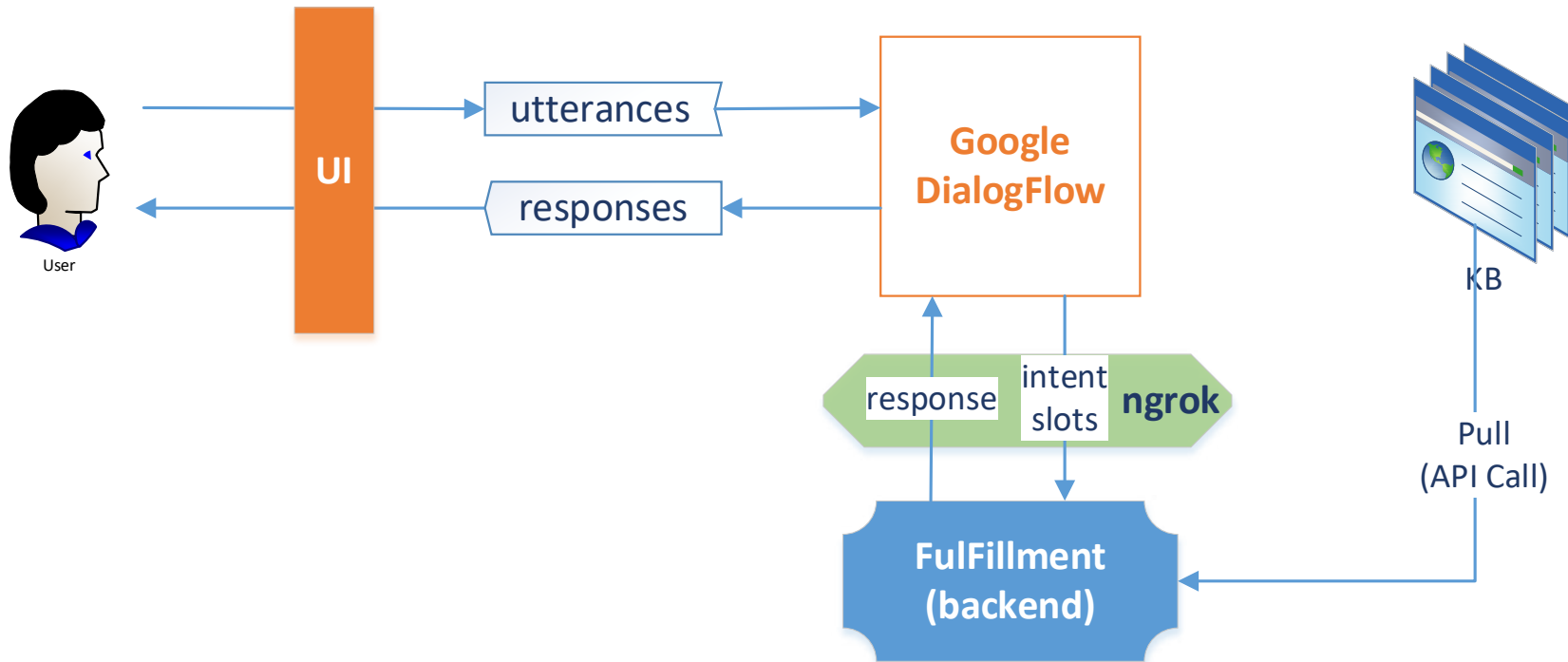
Responses ?

Fulfillment ?

Recapture



Target for Today



Preparation

- Google Dialog API account
- Download source code from Luminus
 - pip install
 - flask
 - Requests
- Download *ngrok.exe* or ngrok binary to your machine from ngrok.com
 - cd into the folder holding *ngrok.exe*
 - ngrok.exe http 5000

```
Select Anaconda Prompt - ngrok.exe http 5000
ngrok by @inconshreveable

Session Status      online
Account             aobo (Plan: Free)
Update              update available (version 2.3.35, Ctrl-U to update)
Version             2.3.18
Region              United States (us)
Web Interface        http://127.0.0.1:4040
Forwarding           http://d58ff39c.ngrok.io -> http://localhost:5000
Forwarding           https://d58ff39c.ngrok.io -> http://localhost:5000

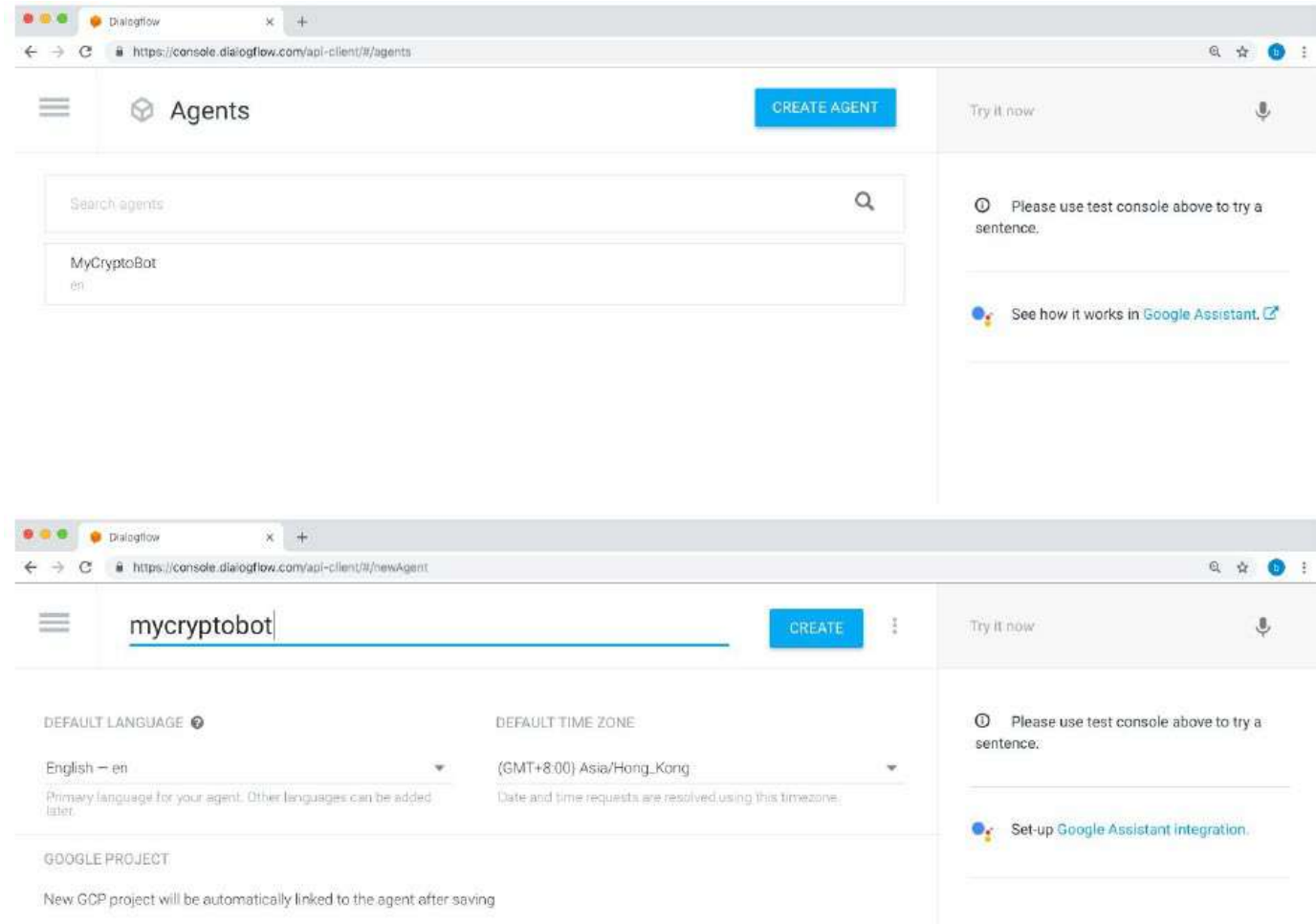
Connections         ttl    opn    rt1    rt5    p50    p90
                   0      0      0.00   0.00   0.00   0.00
```

Demo DialogFlow Bot

For Digital Currency

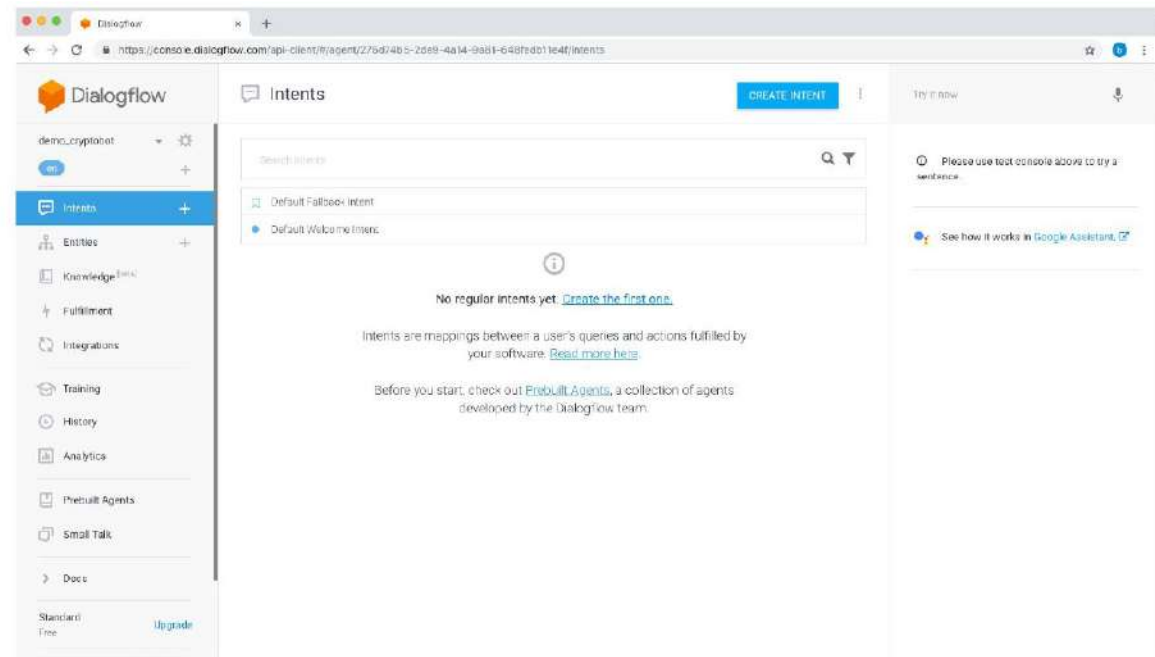
Let's create a simple DialogFlow bot

- Create an Agent



DialogFlow bot for Digital Currency

- Create an Intent
 - *The backend Fulfillment should recognize the name of intent (in this case “GetPriceIntent”)*



Click Save to create the “GetPriceIntent”

DialogFlow bot for Digital Currency

- Add Training Utterances & Hardcode Response

Training phrases ?

Search training phrases 🔍 ^

” Add user expression

” price of bitcoin

” what is the price of bitcoin

Responses ? ^

DEFAULT +

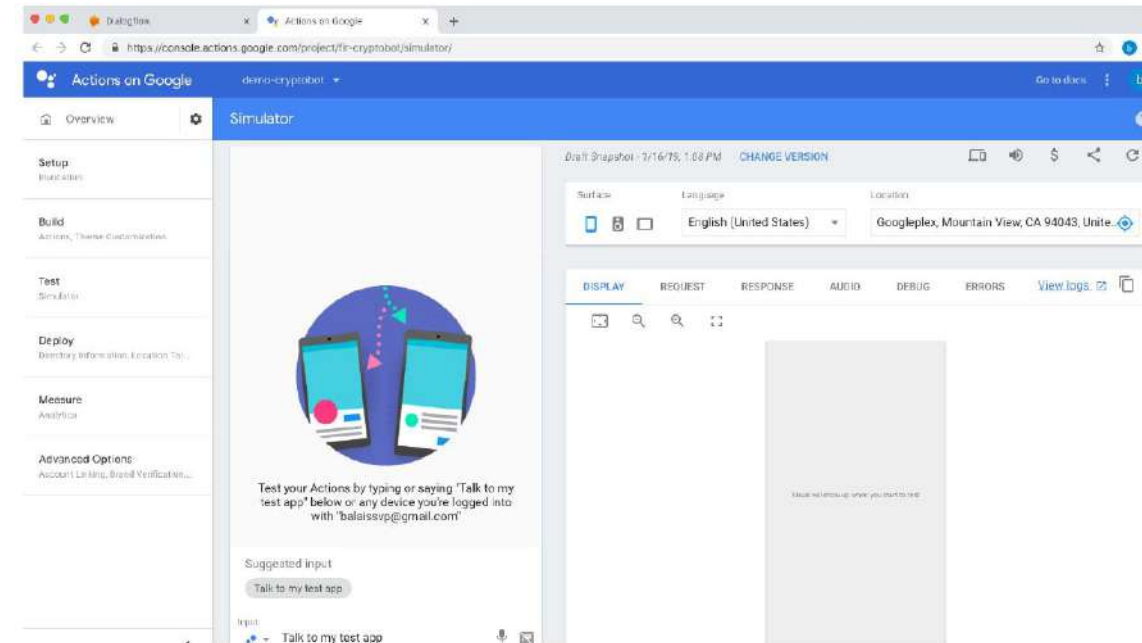
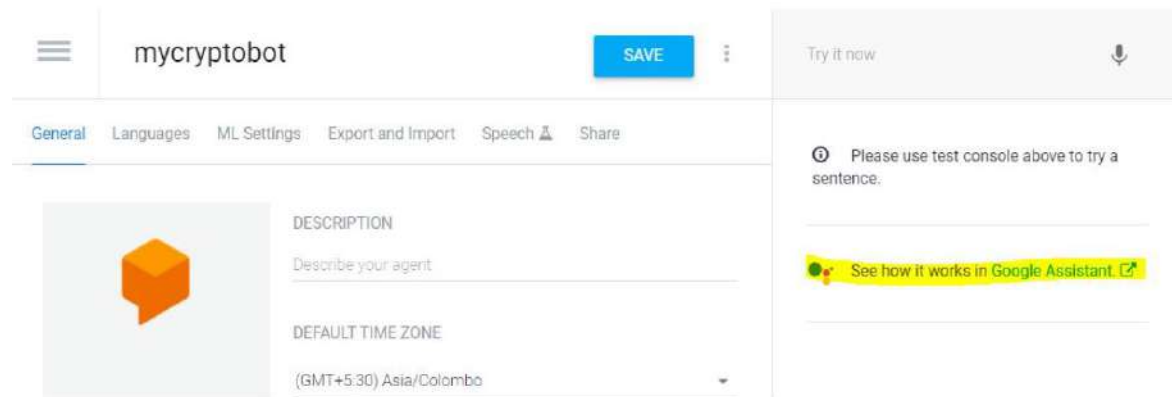
Text response ? 🗑

1 The price of bitcoin is \$3000

2 Enter a text response variant

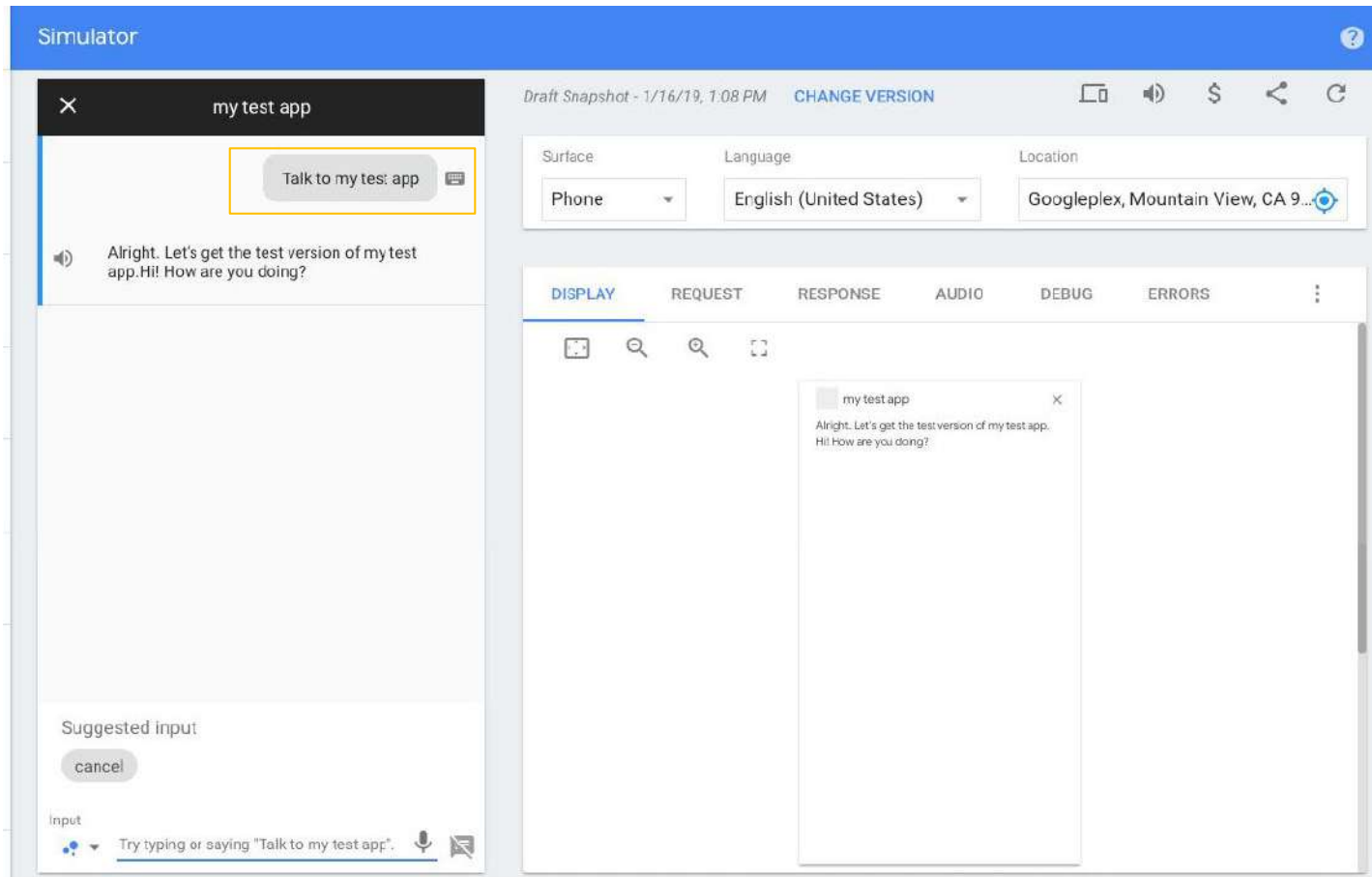
DialogFlow bot for Digital Currency

- Test your prototype



DialogFlow bot for Digital Currency

- Test your prototype



NLU Pipeline

- Deterministic : *FST* to compile sample *utterances*
- Stochastic : Machine learning models for *entity*, *slot* and *intent* prediction

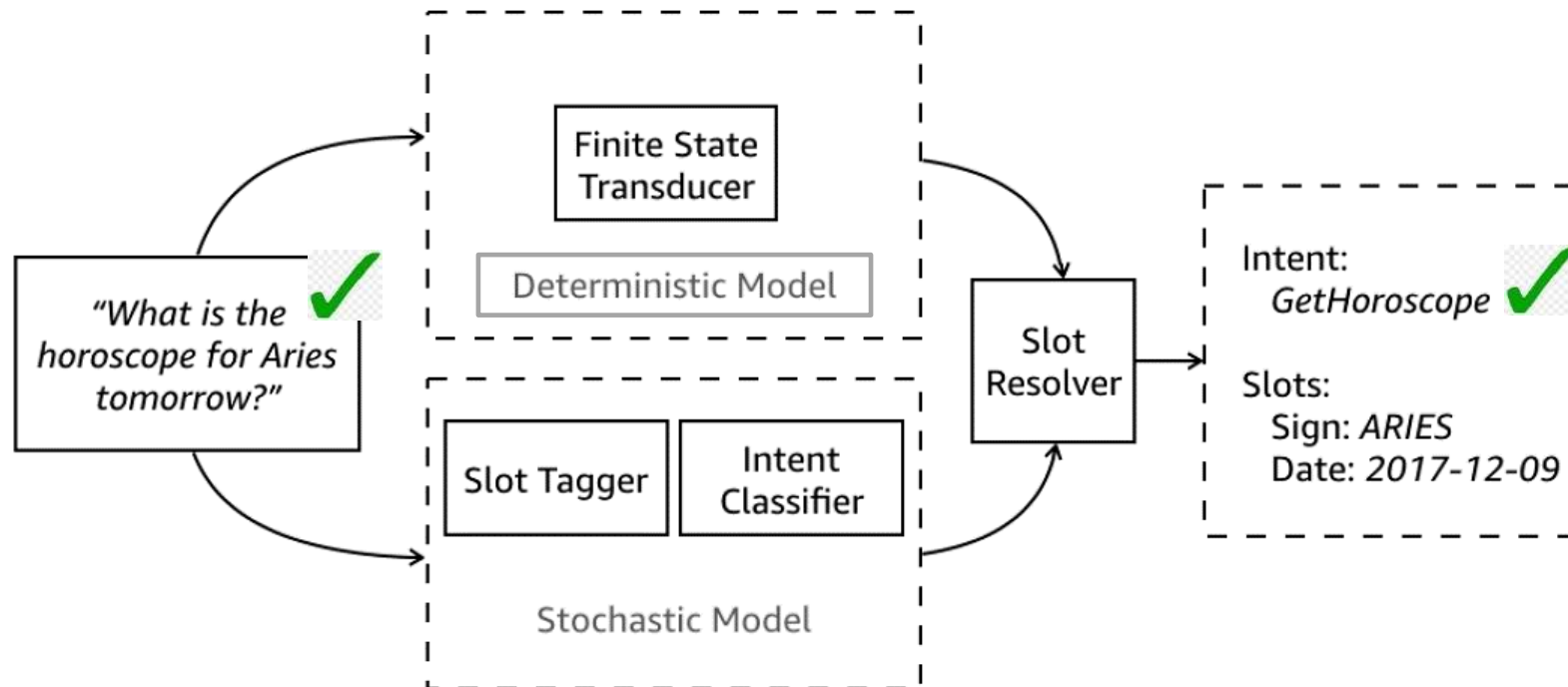
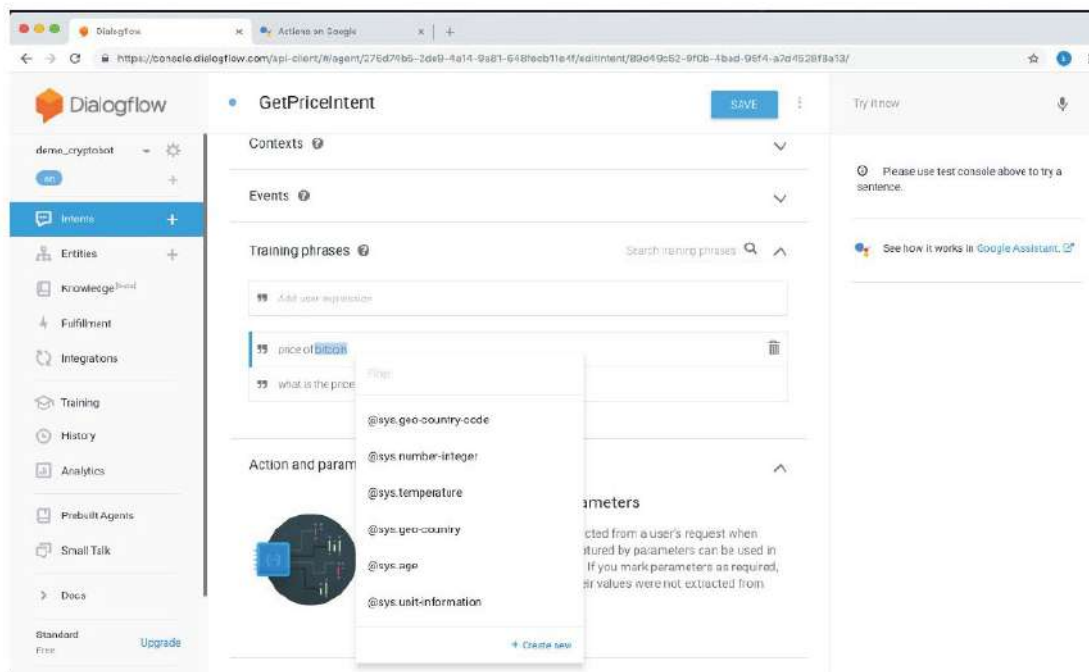


Image from 8. "Just ASK: building an architecture for extensible self-service spoken language understanding."

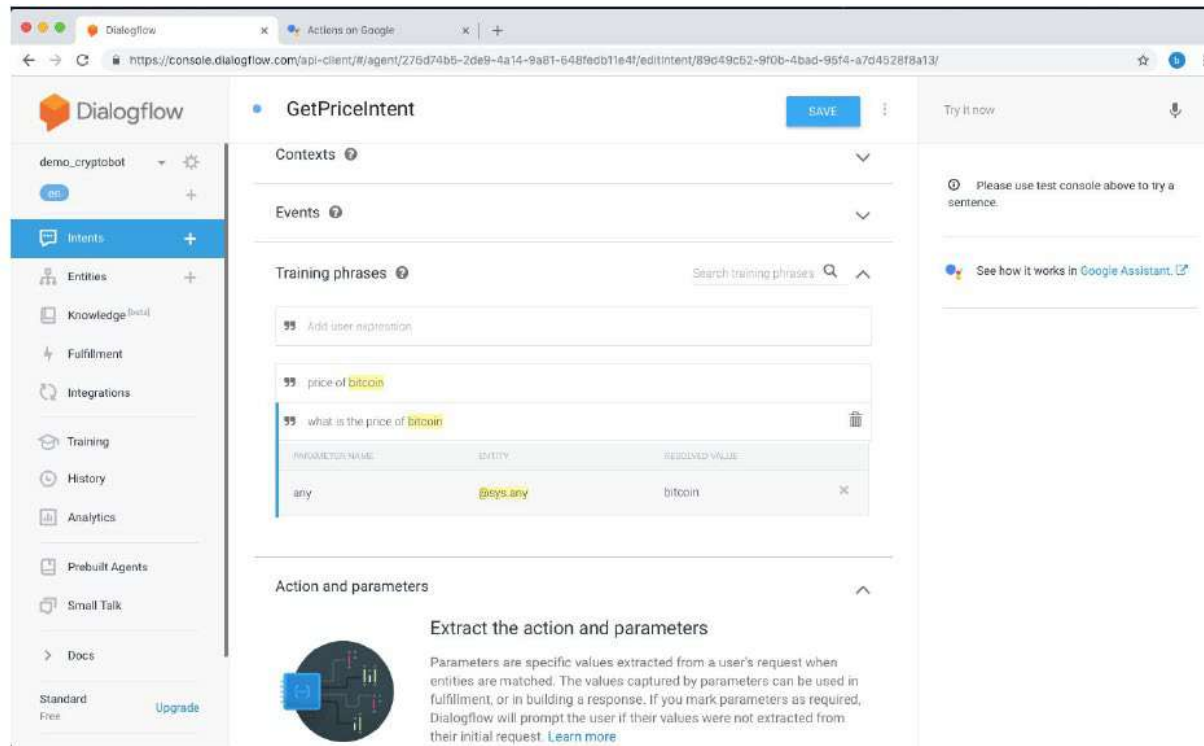
DialogFlow bot for Digital Currency

- Double Click on the portion “*bitcon*” of Training phrase, to annotate with proper entities
- A pop-up list will appear as shown in the figure



DialogFlow bot for Digital Currency

- Bitcoin Name is not a pre-defined Entity



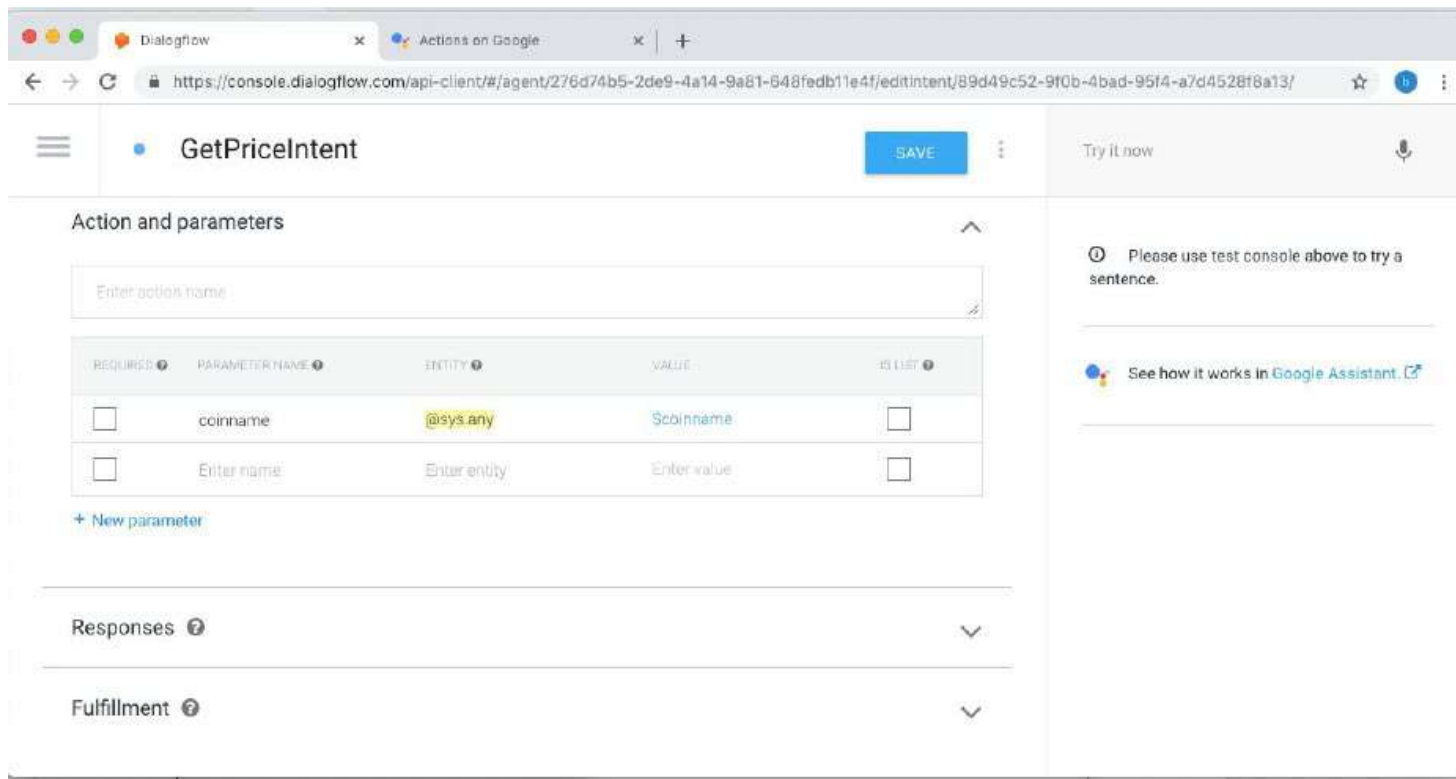
The screenshot shows the DialogFlow console interface for a bot named 'demo_cryptobot'. The 'Intents' tab is selected, and the 'GetPriceIntent' is being edited. The 'Training phrases' section contains two phrases: 'price of bitcoin' and 'what is the price of bitcoin'. Below these, a table shows the extracted entities for the phrase 'what is the price of bitcoin':

PARAMETER NAME	ENTITY	RESOLVED VALUE
any	@sys.any	bitcoin

The 'Action and parameters' section is expanded, showing a diagram of a flow and a text box that reads: 'Extract the action and parameters. Parameters are specific values extracted from a user's request when entities are matched. The values captured by parameters can be used in fulfillment, or in building a response. If you mark parameters as required, Dialogflow will prompt the user if their values were not extracted from their initial request. [Learn more](#)'.

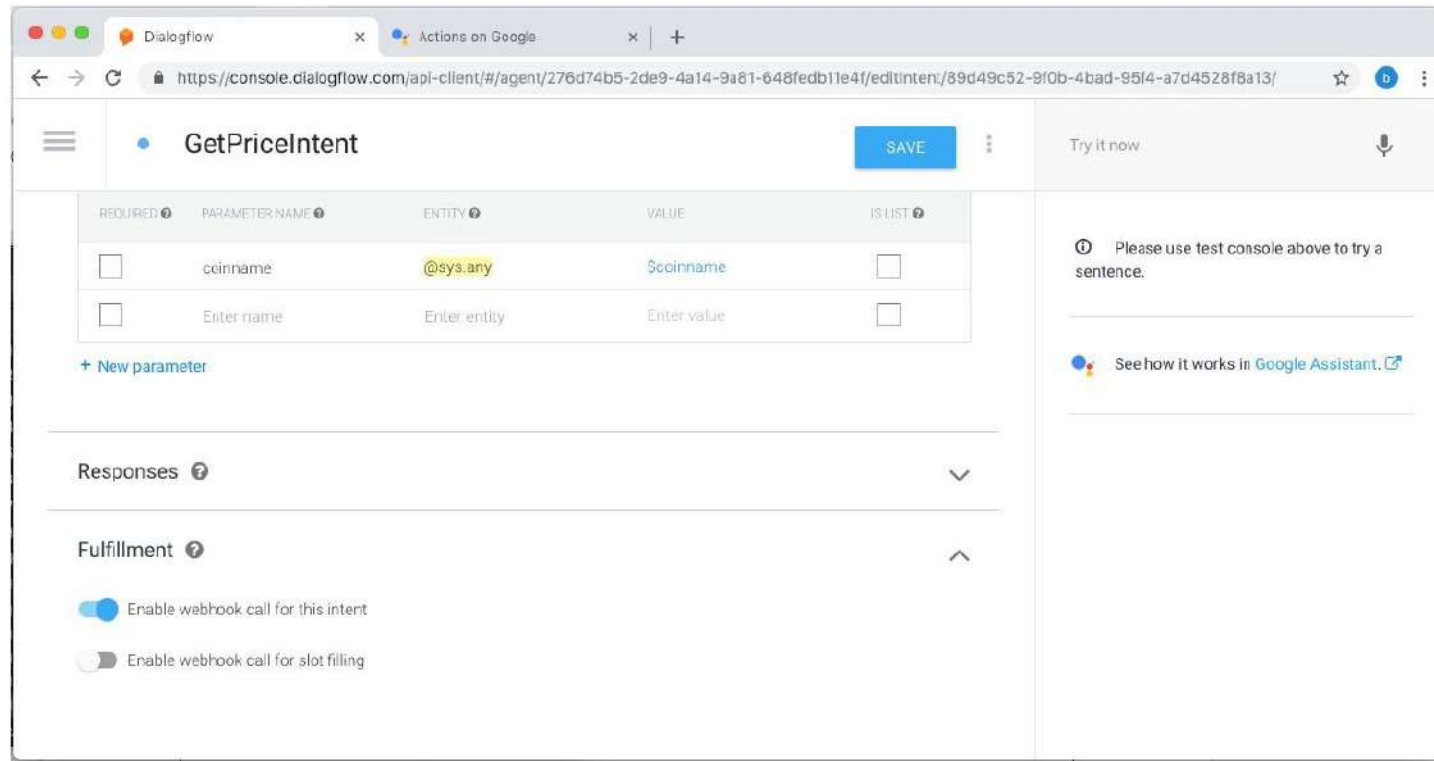
DialogFlow bot for Digital Currency

- Rename the parameter name from ***any*** to ***coinname*** .
- This ***coinname slot*** should be recognized by backend



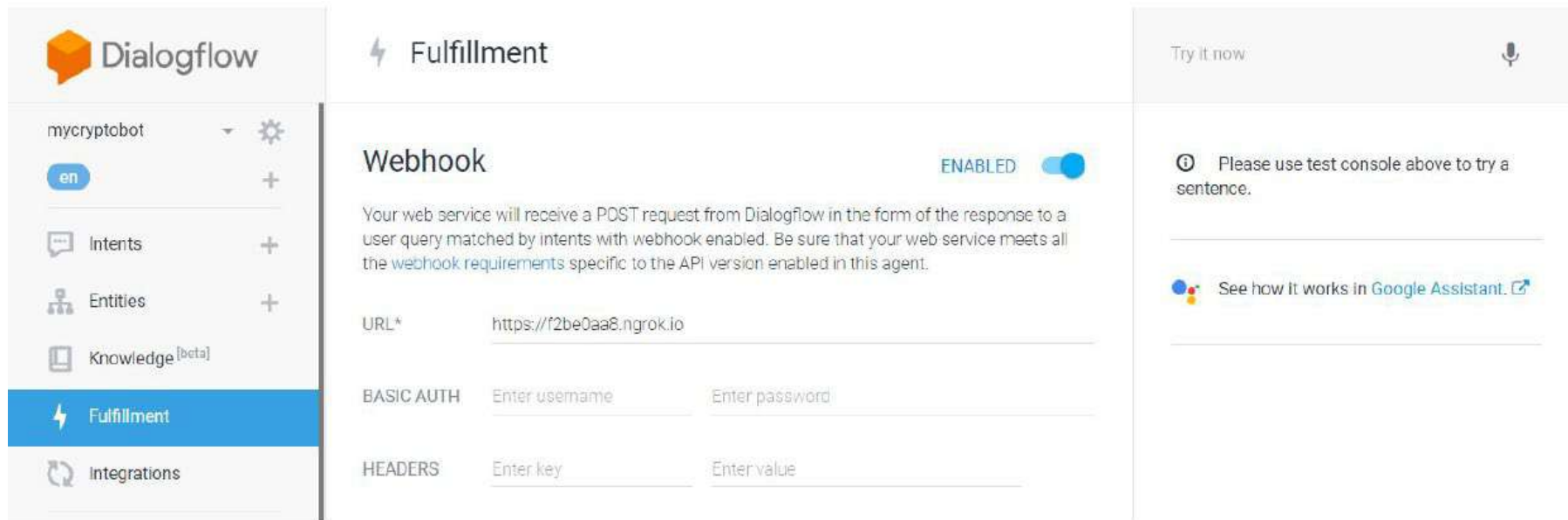
DialogFlow bot for Digital Currency

- Enable the Webhook call for this intent



DialogFlow bot for Digital Currency

- Enable Fulfillment



The screenshot shows the Dialogflow Fulfillment configuration interface. On the left is a sidebar with the Dialogflow logo and navigation links: mycryptobot, en, Intents, Entities, Knowledge [beta], Fulfillment (highlighted), and Integrations. The main area is titled 'Fulfillment' and features a 'Webhook' section with an 'ENABLED' toggle. Below this, a text block explains that the web service will receive a POST request. The configuration fields include: URL* (https://f2be0aa8.ngrok.io), BASIC AUTH (with fields for Enter username and Enter password), and HEADERS (with fields for Enter key and Enter value). On the right, a 'Try it now' section with a microphone icon contains an information message and a link to 'See how it works in Google Assistant'.

Dialogflow

mycryptobot

en

Intents

Entities

Knowledge [beta]

Fulfillment

Integrations

Fulfillment


Webhook ENABLED


Your web service will receive a POST request from Dialogflow in the form of the response to a user query matched by intents with webhook enabled. Be sure that your web service meets all the [webhook requirements](#) specific to the API version enabled in this agent.


URL*

BASIC AUTH

HEADERS

Try it now 

 Please use test console above to try a sentence.

 See how it works in [Google Assistant](#).

DialogFlow bot for Digital Currency

- Create temporal URL

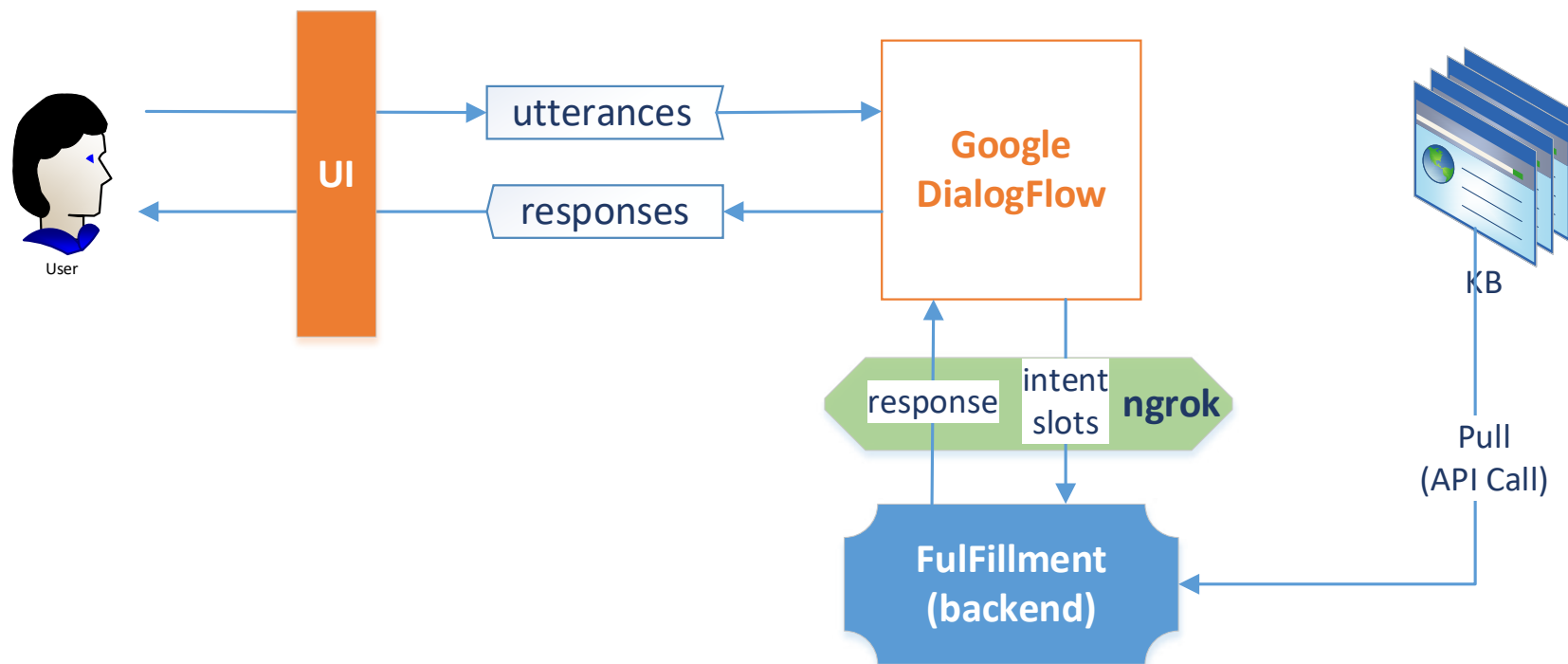
```
ngrok by @inconshreveable (Ctrl+C to quit)

Session Status      online
Session Expires    6 hours, 31 minutes
Version             2.2.8
Region              United States (us)
Web Interface       http://127.0.0.1:4040
Forwarding           http://67d4e01e.ngrok.io -> localhost:5000
Forwarding           https://67d4e01e.ngrok.io -> localhost:5000

Connections          ttl      opn      rt1      rt5      p50      p90
                    12       0       0.00     0.00     0.03     0.45

HTTP Requests
-----
```

Target



DialogFlow bot for Digital Currency

- Setup the backend
 - `dialogflow_python_backend` in python
 - `pip install`
 - flask
 - request
- JSON API key has to be specified accordingly
 - <https://pro.coinmarketcap.com/>

The world's cryptocurrency data authority has a professional API made for you.

GET YOUR API KEY NOW