

THE FUTURE OF SEARCH

SEARCH AND INTERNET OF THINGS

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THE FUTURE OF SEARCH ENGINES

Multimedia
youtube.com

Web
google.com
bing.com

Maps
maps.google.com

News
twitter.com

Persons/„Social“
twitter.com facebook.com

Products/Prices
amazon.com ebay.com

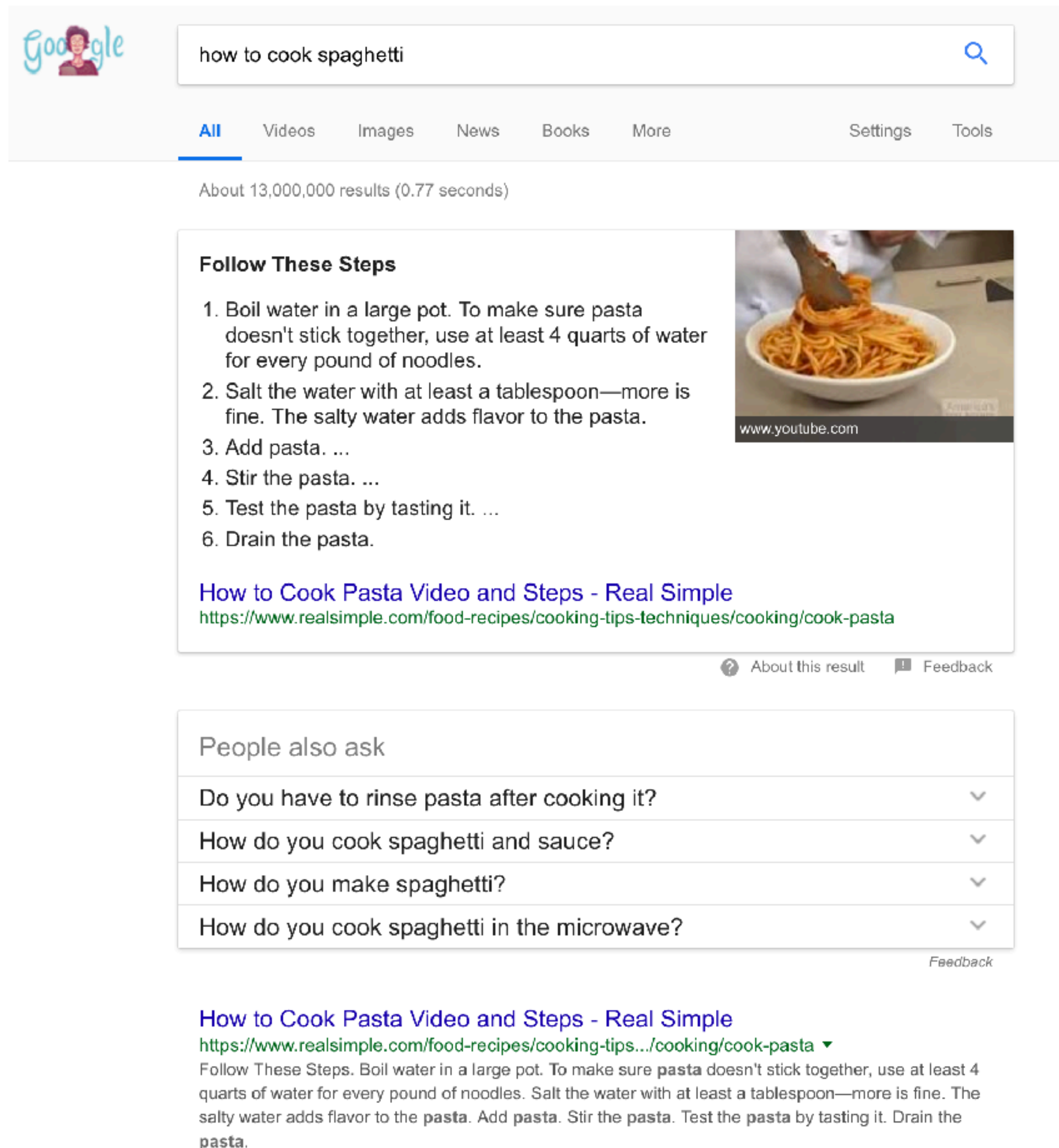
Source Code
github.com

Q/A
stackoverflow.com

File Sharing
thepiratebay.se

THE FUTURE OF SEARCH ENGINES

GOOGLE GIVES
DIRECT ANSWERS TO
QUESTIONS



Google

how to cook spaghetti

All Videos Images News Books More Settings Tools

About 13,000,000 results (0.77 seconds)

Follow These Steps

1. Boil water in a large pot. To make sure pasta doesn't stick together, use at least 4 quarts of water for every pound of noodles.
2. Salt the water with at least a tablespoon—more is fine. The salty water adds flavor to the pasta.
3. Add pasta. ...
4. Stir the pasta. ...
5. Test the pasta by tasting it. ...
6. Drain the pasta.

www.youtube.com

[How to Cook Pasta Video and Steps - Real Simple](https://www.realsimple.com/food-recipes/cooking-tips-techniques/cooking/cook-pasta)
<https://www.realsimple.com/food-recipes/cooking-tips-techniques/cooking/cook-pasta>

About this result Feedback

People also ask

- Do you have to rinse pasta after cooking it?
- How do you cook spaghetti and sauce?
- How do you make spaghetti?
- How do you cook spaghetti in the microwave?

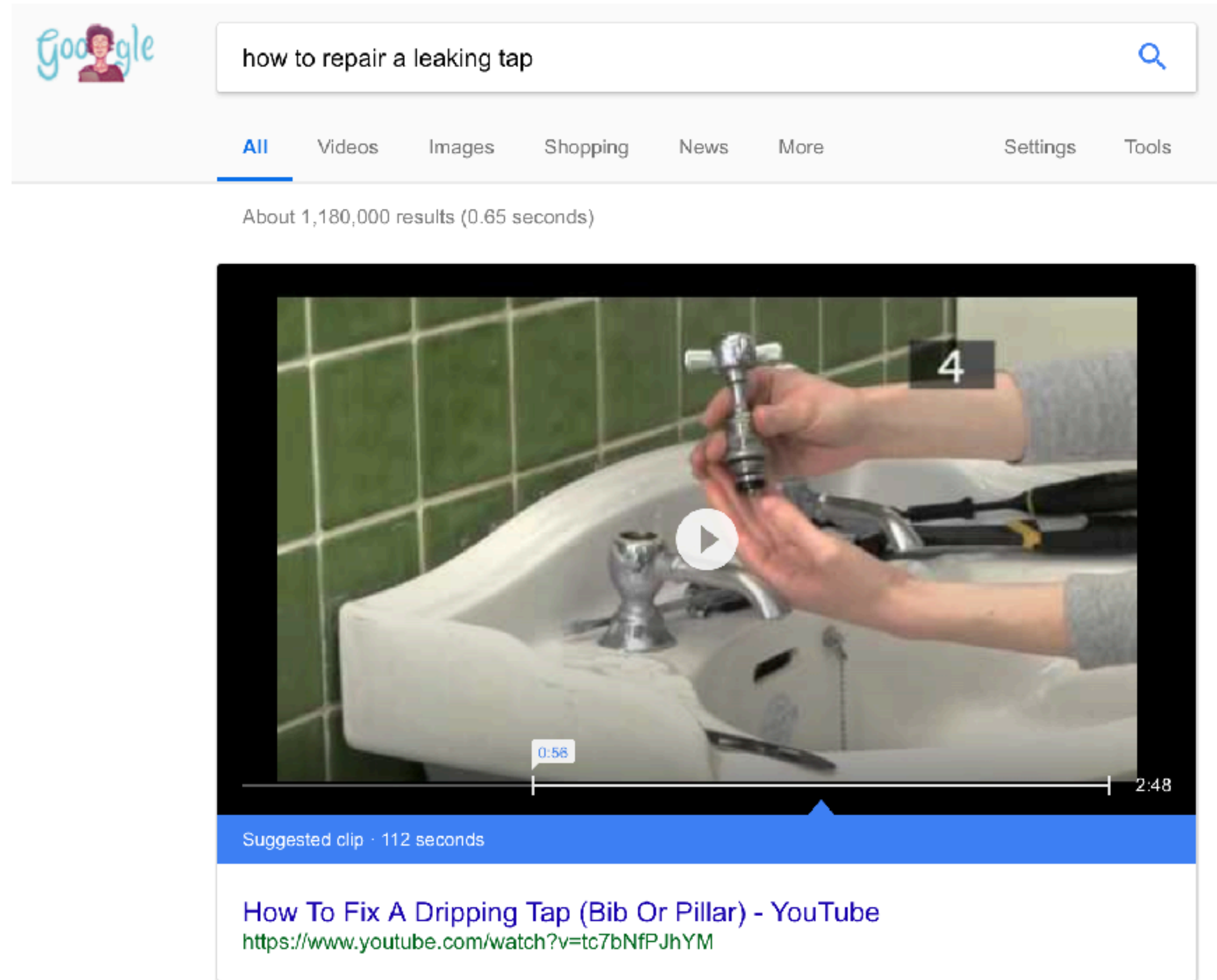
Feedback

[How to Cook Pasta Video and Steps - Real Simple](https://www.realsimple.com/food-recipes/cooking-tips-techniques/cooking/cook-pasta)
<https://www.realsimple.com/food-recipes/cooking-tips-techniques/cooking/cook-pasta>

Follow These Steps. Boil water in a large pot. To make sure **pasta** doesn't stick together, use at least 4 quarts of water for every pound of noodles. Salt the water with at least a tablespoon—more is fine. The salty water adds flavor to the **pasta**. Add **pasta**. Stir the **pasta**. Test the **pasta** by tasting it. Drain the **pasta**.

THE FUTURE OF SEARCH ENGINES

GOOGLE GIVES
DIRECT ANSWERS TO
QUESTIONS



The screenshot shows a Google search interface. The search bar contains the text "how to repair a leaking tap" and a magnifying glass icon. Below the search bar are navigation tabs for "All", "Videos", "Images", "Shopping", "News", and "More", along with "Settings" and "Tools". The search results indicate "About 1,180,000 results (0.65 seconds)". A video player is featured prominently, showing a person's hands working on a faucet in a sink. The video has a play button in the center, a progress bar at the bottom, and a timestamp of 0:58. Below the video player, there is a blue bar with the text "Suggested clip · 112 seconds". Underneath this bar, the video title "How To Fix A Dripping Tap (Bib Or Pillar) - YouTube" is displayed in blue, followed by the URL "https://www.youtube.com/watch?v=tc7bNfPJhYM" in green.

[About this result](#) [Feedback](#)

People also ask

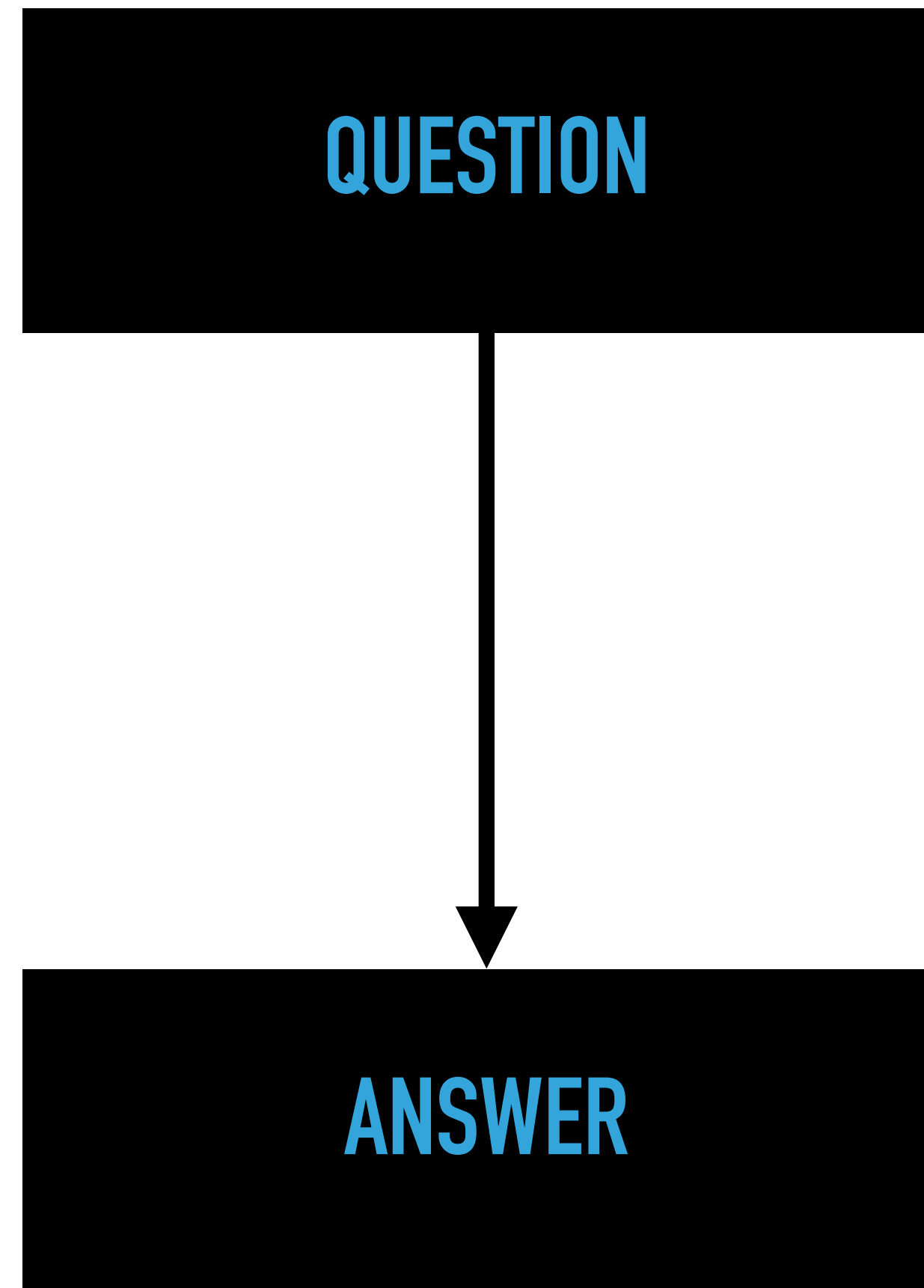
How do you fix a dripping tap? ▼

What is the cause of a dripping tap? ▼

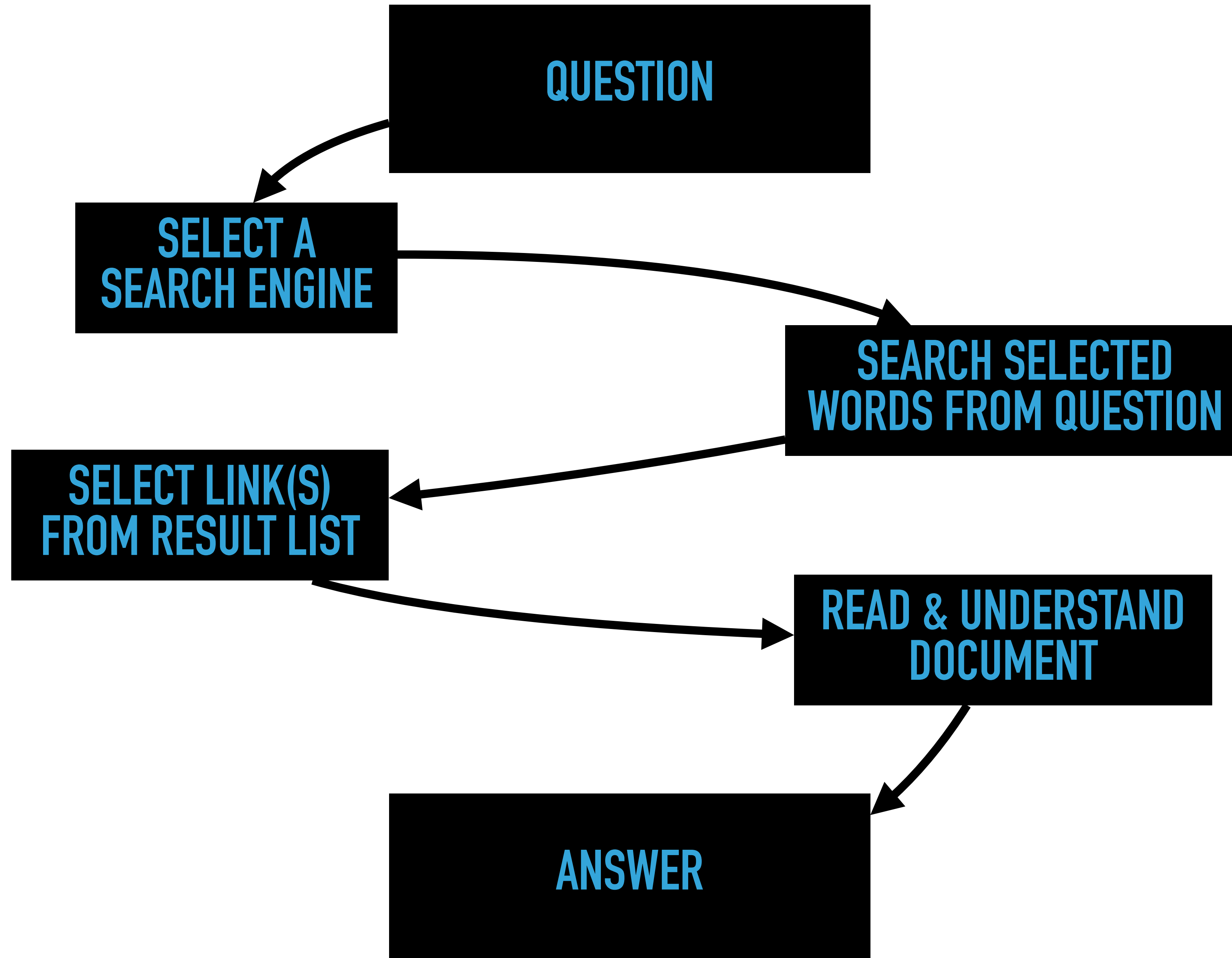
How do you stop a dripping tap? ▼

How do you change a washer on a tap? ▼

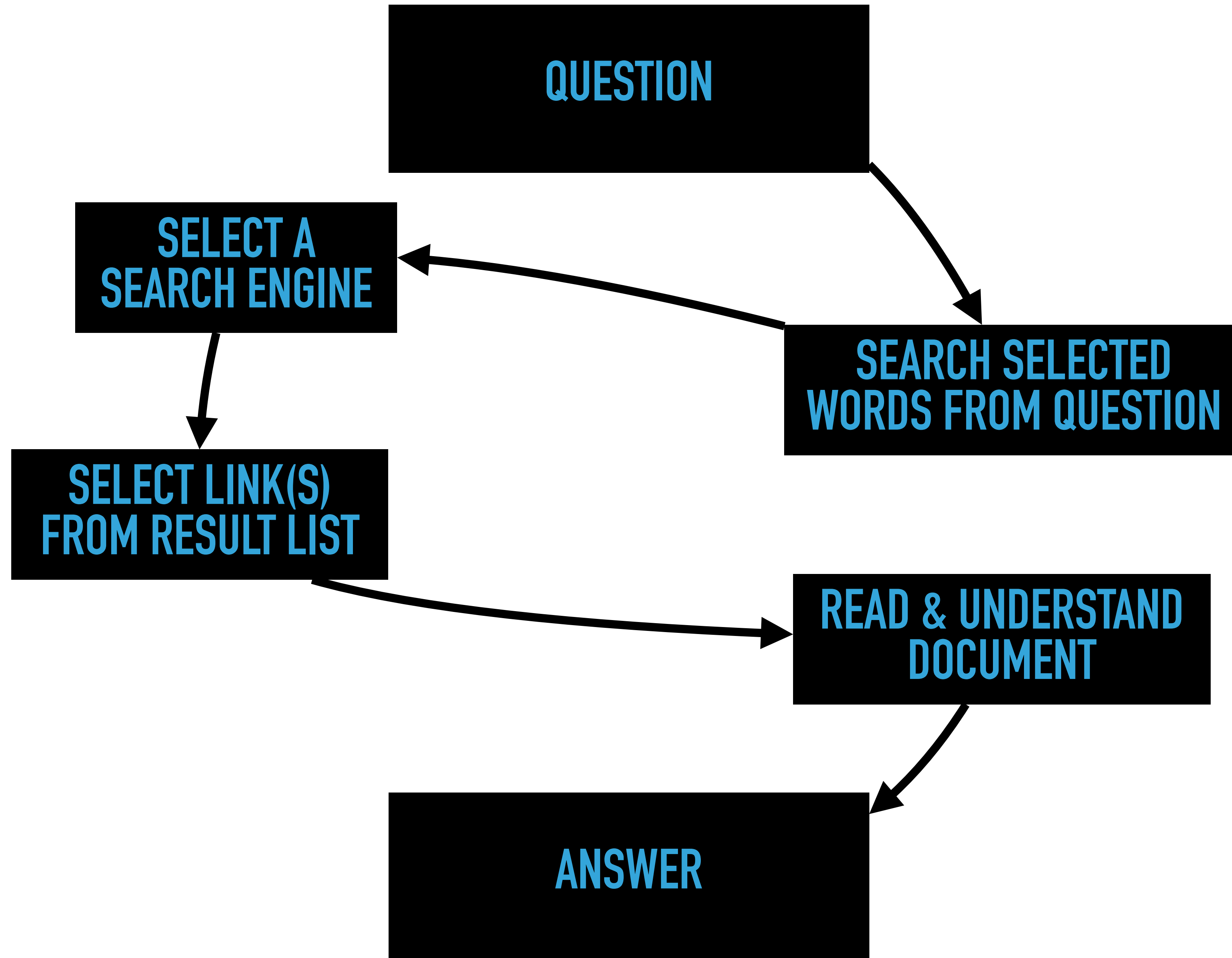
THE FUTURE OF SEARCH ENGINES: ANSWERS FOR QUESTIONS



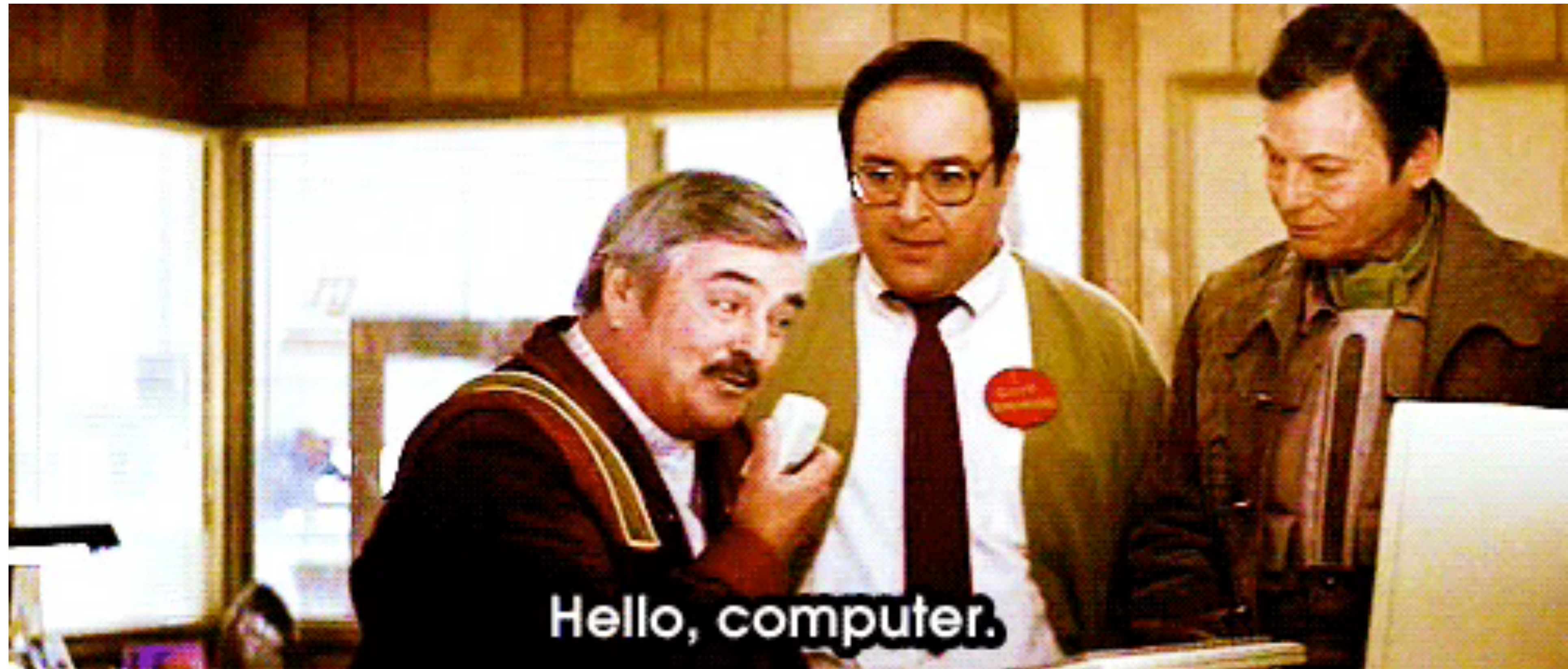
HUMAN/MANUAL PROCESS TO GET ANSWERS USING SEARCH ENGINES



AUTOMATICALLY CREATE AN ANSWER:



THE FUTURE FROM THE PAST



Star Trek IV 1986 - nobody uses a keyboard in the future

THE FUTURE OF SEARCH ENGINES: PERSONAL ASSISTANTS

DIGITAL PERSONAL ASSISTANTS IN VARIOUS SHAPES

SMART SPEAKER



GOOGLE, APPLE, AMAZON, MICROSOFT, XIAOMI:
WHERE IS A **FOSS** PERSONAL ASSISTANT?

GOOGLE HOME
GOOGLE NOW

APPLE HOMEPOD
SIRI

AMAZON ECHO
ALEXA

XIAOMI
MI AI

HARMAN CARDON
CORTANA

THE FUTURE OF SEARCH ENGINES: A FREE PERSONAL ASSISTANT



SUSI.AI

SEARCH



PERSONAL ASSISTANTS



INTERNET OF THINGS

(MAYBE A REFERENCE IMPLEMENTATION FOR A MICROCONTROLLER OS STANDARD WOULD BE HELPFUL)

**CHALLENGE:
NO-CODE SKILLS**

PERSONAL ASSISTANTS

SUSI.AI

**CHALLENGE:
MAKE IT INTELLIGENT**

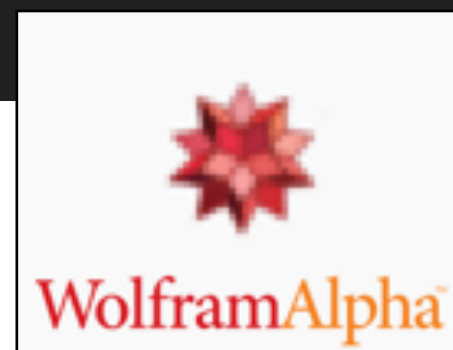
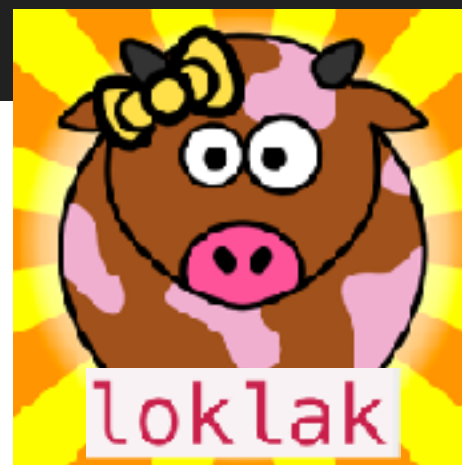
**CHALLENGE:
COMMON PROTOCOL**

API TO DATA SERVICE

**ULTIMATE CHALLENGE:
„KILLER APPLICATION“**

**CHALLENGE:
OPEN DATA SOURCES**

SEARCH



INTERNET OF THINGS

NGMOS

**NEXT GENERATION MICROCONTROLLER
OPERATION SYSTEM**

**CHALLENGE:
MISSING STANDARD**

**CHALLENGE:
NO-CODE SKILLS**

**CHALLENGE:
COMMON PROTOCOL**

**CHALLENGE:
MAKE IT INTELLIGENT**

**CHALLENGE:
OPEN DATA SOURCES**

**CHALLENGE:
MISSING STANDARD**

**ULTIMATE CHALLENGE:
„KILLER APPLICATION“**

WIKI-LIKE LANGUAGE:
„LANGUAGE OF THOUGHT“

- DATA SOURCES DELIVER JSON
- ADDRESSING RESULTS USING JSONPATH

SEARCH AS AN EXPERT SYSTEM
CONCEPT IN SUSI

SUSI ECOSYSTEM:
USER-GENERATED SKILLS TO APIS

NGMOS
NEXT GENERATION MICROCONTROLLER
OPERATION SYSTEM

PRIVACY

**ONGOING:
LARGE LIBRARY OF SKILLS**

**MISSING:
DECISION TREES, BACKTRACKING**

**IDEA / PROPOSAL:
A STANDARD FOR ESP8266-LIKE DEV.**

**BIGGEST CHALLENGE:
ON-DEVICE TTS+STT**

SUSI LANGUAGE OF THOUGHT

PERSONAL ASSISTANT DEVELOPMENT COMPARISON

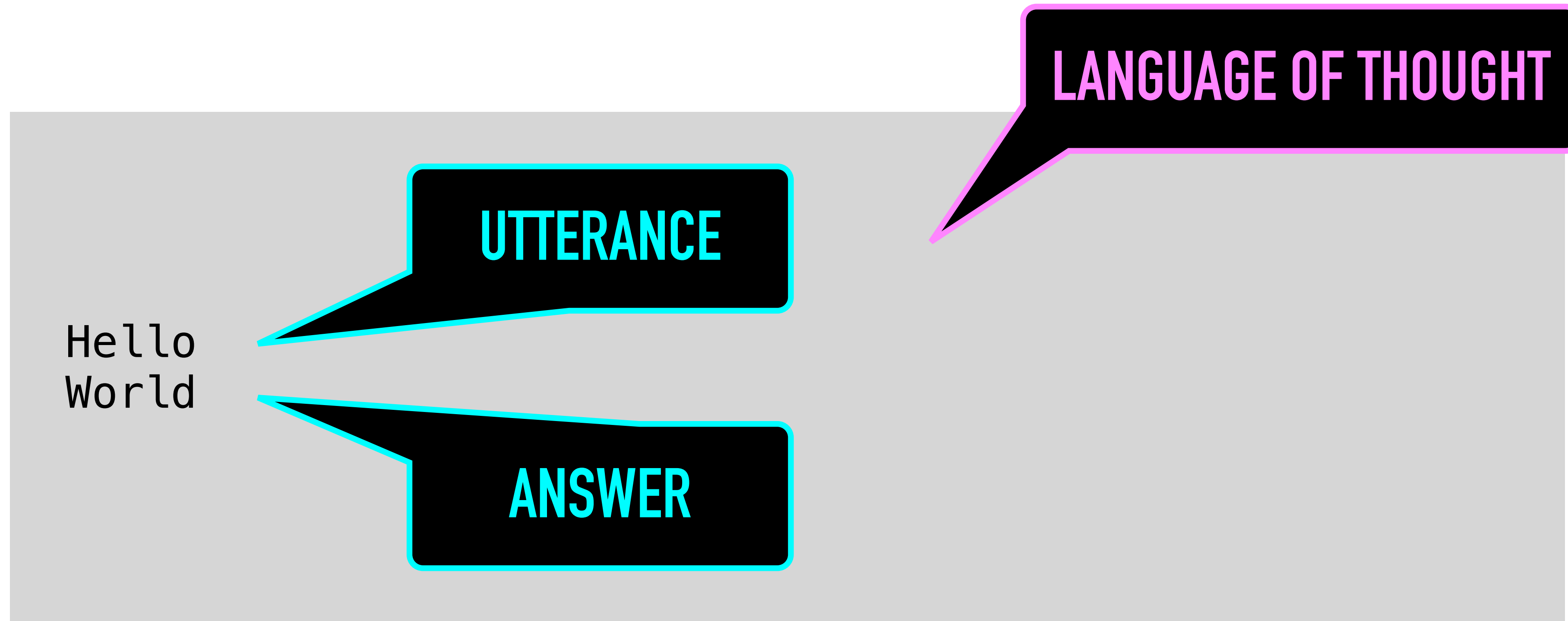
| Alexa | Siri | Cortana | Google Now |
|-----------------------------------|------------------------------------|---------|---------------------------------------|
| Java, Python AWS Lambda | Javascript, Java Objective-C | C# | C++, Java Python, Javascript |

| Mycroft | Snips | RASA | SUSI |
|---------|--------|--------|---|
| Python | NodeJS | Python | SUSI LoT a Skill Markup Language |

SUSI SKILLS – LANGUAGE OF THOUGHT

EXAMPLE:

HELLO WORLD



SUSI SKILLS – LANGUAGE OF THOUGHT

EXAMPLE:

COMPUTE TEMPERATURE CONVERSION

```
fahrenheit to celsius *  
!javascript:$!$  
(($1$-32)/1.8).toFixed(4);  
eol
```


SUSI SKILLS – LANGUAGE OF THOUGHT

EXAMPLE:

SEARCH TWEETS

```
tweet about *
!console:$text$
{
"url":"http://api.loklak.org/api/search.json?q=$1$",
"path":"$.statuses"
}
eol
```

SUSI DREAMS: TEMPORARY SKILLS

START A CHAT WITH SUSI
AT [HTTP://CHAT.SUSI.AI](http://chat.susi.ai)

The screenshot displays two browser windows side-by-side. The left window is an Etherpad editor at <https://dream.susi.ai/p/quicktest>. The right window is the SUSI.AI Chat interface at <https://chat.susi.ai>.

Code in Etherpad:

```
1 Hello Computer
2 Hello User
3
4 I feel *
5 Why do you fell $1$
6
7 tweet about *
8 !console:$text$
9 {
10 "url": "http://api.loklak.org/api/search.json?q=\$1\$",
11 "path": "$$.statuses"
12 }
13 eol
14
15 compute * to the power of *
16 !javascript:$1$^$2$ = !$1$
17 Math.pow($1$, $2$)
18 eol
19
```

Chat Log:

- dream quicktest (1:25 PM)
- dreaming enabled for quicktest (1:25 PM)
- hello computer (1:25 PM)
- Hello User (1:25 PM)
- I feel amazed! (1:25 PM)
- Why do you fell amazed (1:25 PM)
- compute 2 to the power of 10 (1:25 PM)
- 2^10 = 1024.0 (1:25 PM)

START TESTING WITH
„DREAM <DREAMNAME>“

A SUSI DREAM IS AN ETHERPAD
AT [HTTP://DREAM.SUSI.AI](http://dream.susi.ai)

Chat 0

THE SUSI CONTENT MANAGEMENT SYSTEM

OUR DEVELOPMENT ENVIRONMENT WORKS LIKE A WIKI SYSTEM

ALL EDITS ARE PUBLISHED TO GITHUB

The image displays two overlapping browser windows. The background window is the SUSI.AI 'Edit Skill' interface, showing a skill named 'atomic' in the 'Knowledge' category. The skill's metadata includes author 'Chetan Kaushik', a GitHub URL, and a description. The skill's logic is defined in a JSON-LD format, including an example and an expected output. The foreground window is a GitHub repository view for 'fossasia/susi_skill_data', showing the 'general' branch with a list of folders and their latest commit times. The folders listed are Business and Finance, Communication, Connected Car, Food and Drink, Games, Trivia and Accessories, Health and Fitness, Knowledge, Lifestyle, Movies and TV, Music and Audio, News, Novelty and Humour, Problem Solving, Productivity, Shopping, and Social.

SUSI.AI - Edit Skill
https://skills.susi.ai/Knowledge/atomic/edit/en

Category: Knowledge

Skill Name: atomic

```
1 ::name Atomic
2 ::author Chetan Kaushik
3 ::author_url https://github.com/chaos
4 ::description A skill to find the atomic mass of an element
5 ::dynamic_content Yes
6 ::developer_privacy_policy
7 ::image images/atomic.png
8 ::terms_of_use
9
10 Tell the atomic mass of *
    do you know the atomic
    atomic mass of * | see
    search for atomic mass
11 !example:atomic mass of r
12 !expect:The atomic mass of
    number given for longe
13 !console:The atomic mass of
14 {
15   "url": "https://api.wolfram.com/v2/appcenter/
    =plaintext&output=JSON
16   "path": "$.queryresult.pods
17 }
```

fossasia / susi_skill_data
Branch: master susi_skill_data / models / general /

| Folder | Update | Time |
|-------------------------------|-----------------------------|----------------|
| Business and Finance | update | 10 minutes ago |
| Communication | update | 20 days ago |
| Connected Car | Added more languages (#339) | 6 months ago |
| Food and Drink | No commit message | 2 months ago |
| Games, Trivia and Accessories | Updated Skill Quiz_game | 2 months ago |
| Health and Fitness | Deleted Doctors at SUSI | 3 months ago |
| Knowledge | update | 10 minutes ago |
| Lifestyle | No commit message | 2 months ago |
| Movies and TV | update | 2 months ago |
| Music and Audio | Created Make_food | 3 months ago |
| News | Created susnews | 2 months ago |
| Novelty and Humour | Created Magic_ball | 2 months ago |
| Problem Solving | Updated Skill gci_task | 2 months ago |
| Productivity | Added more languages (#339) | 6 months ago |
| Shopping | Created test_skill | 3 months ago |
| Social | Created <Skill_name> | 19 days ago |

DEBUGGING ANSWERS

what is the answer on the question about live the universe and everything

2:13 PM ✓

Forty-two

2:13 PM < 👍 👎

ALL ANSWERS CAN BE EXPLAINED

explain

2:13 PM ✓

My previous answer is defined in the skill /susi_skill_data/models/general/Games, Trivia and Accessories/en/hitchhiker_persona.txt. You can help to improve this skill and

[edit it in the code repository here.](#)

2:13 PM < 👍 👎

DEBUGGING ANSWERS

The screenshot shows a chat interface with two messages and their corresponding 'explain' responses. A callout box highlights that the 'explain' utterance is defined in a skill.

Message 1: My previous answer is defined in the skill `/susi_skill_data/models/general/Games, Trivia and Accessories/en/hitchhiker_persona.txt`. You can help to improve this skill and [edit it in the code repository here](#).

Response 1: explain
2:13 PM ✓

Message 2: My previous answer is defined in the skill `/susi_server/conf/os_skills/operation/en/en_0001_foundation.txt`. You can help to improve this skill and [edit it in the code repository here](#).

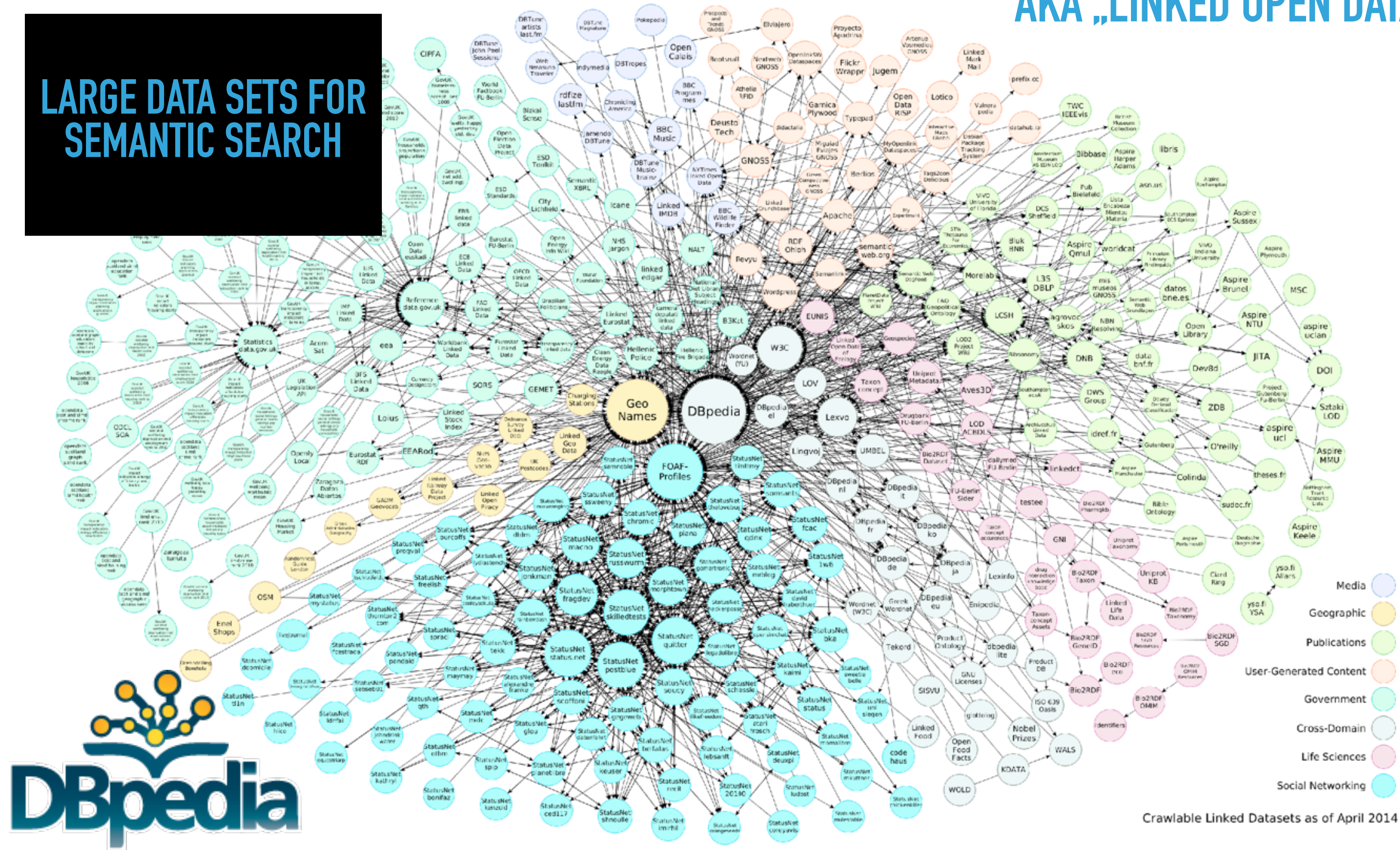
Response 2: explain
2:15 PM ✓

Callout: ALSO THE 'EXPLAIN' UTTERANCE IS DEFINED IN A SKILL

AVAILABILITY OF VERY LARGE DATA SETS: „GIANT GLOBAL GRAPH“

AKA „LINKED OPEN DATA“

LARGE DATA SETS FOR SEMANTIC SEARCH



Example http://dbpedia.org/page/Open_Data_Institute

AVAILABILITY OF DOMAIN SPECIFIC DATA

ebay Shop by category Search... All Categories Search Advanced

Back to search results | Listed in category: Business & Industrial > Manufacturing & Metalworking > Welding > Protective Gear > Welding Goggles
Clothing, Shoes & Accessories > Costumes, Reenactment, Theater > Accessories > Glasses

BUY 3, GET 1 FREE (add 4 to cart) See all eligible items

New Welding Cutting Welders Safety Goggles Glasses Flip Up Dark Green Lenses
★★★★★ 6 ratings

Item condition: **New**
Quantity: More than 10 available / 1,126 sold

List price: \$6.98
You save: \$2.96 (42% off)
Now: **US \$4.02** [Buy It Now](#) [Add to cart](#)

147 watching [Add to watch list](#) [Add to collection](#)

1,126 sold Experienced seller More than 95% s

Shipping: \$15.52 International Priority Shipping to Germany via the Global Shipping Program | See details
Item location: Aurora, Nebraska, United States
Ships to: United States and many other countries | See details

Import charges: \$0.00 (amount confirmed at checkout) No additional import charges on delivery

Delivery: Estimated between **Mon. Mar. 28** and **Tue. Apr. 5** Includes international tracking

Have one to sell? [Sell now](#)

CRAWLING
+
ENRICHMENT

schema.org Home Schem

priceCurrency

Thing > Property > priceCurrency

The currency (in 3-letter ISO 4217 format) of the price or a price component, when attached to PriceSpecification and its subtypes.

Usage: Between 500,000 and 1,000,000 domains

Values expected to be one of these types

Text

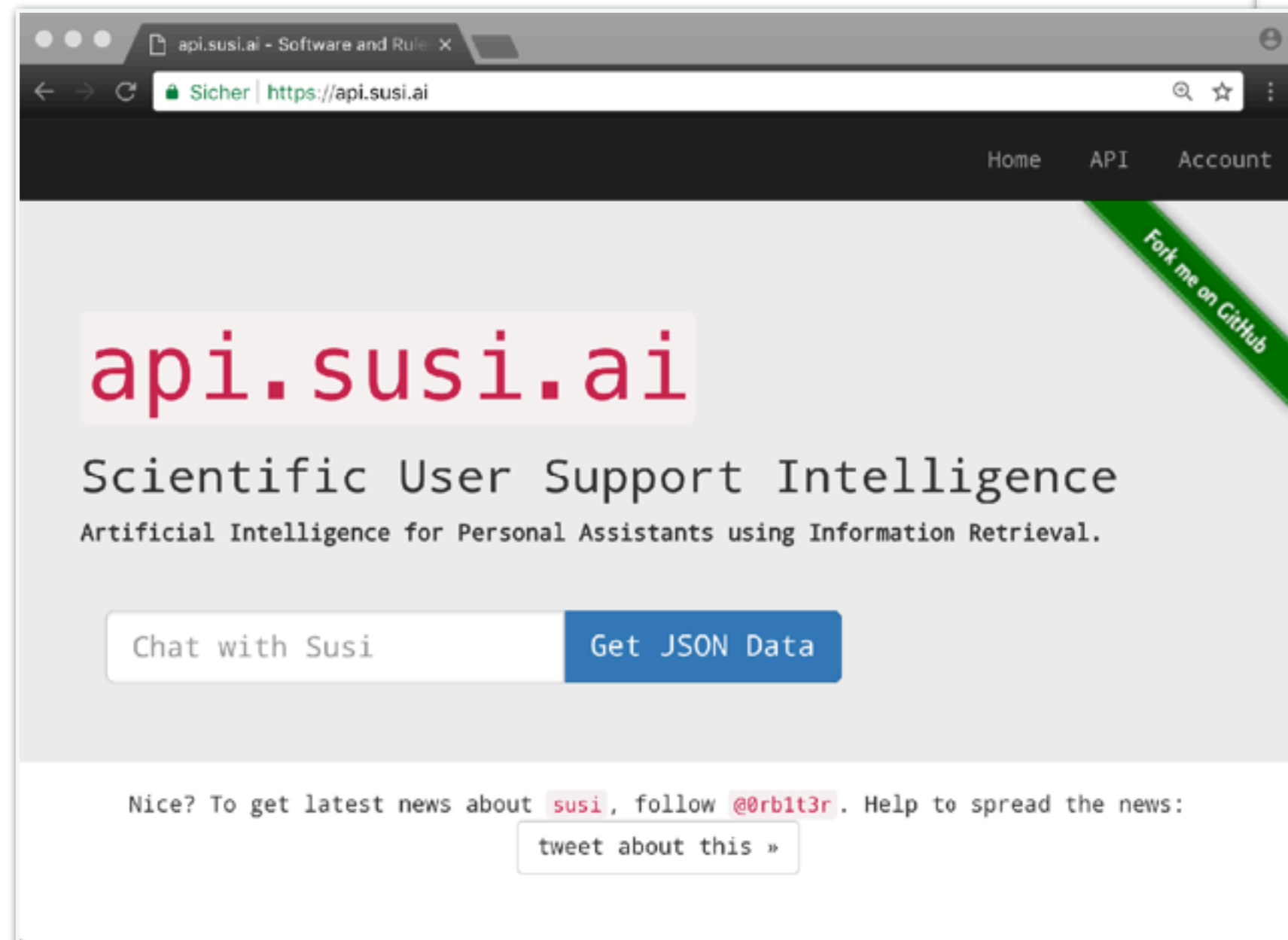
Used on these types

Offer
PriceSpecification
Reservation
Ticket

```
<div class="u-cb spcr vi-bbox-spcr15 "></div>
  <div class="u-cb">
    <div class="vi-bbox-dspn u-flL lable binLabel" id="prcIsum-lbl">Now:</div>
    <div id="vi-mskumap-none" style="" class="u-flL w29 vi-price" itemprop="offers" itemscope="itemscope"
      itemType="http://schema.org/Offer">
      <span class="notranslate" id="prcIsum" itemprop="price" style="">US $4.02</span>
      <div id="isum-shipCostDiv" class="sh-CostBB"></div>
      <span itemprop="availability" content="http://schema.org/InStock"></span>
      <span itemprop="priceCurrency" content="USD"></span>
    </div>
  </div>
```

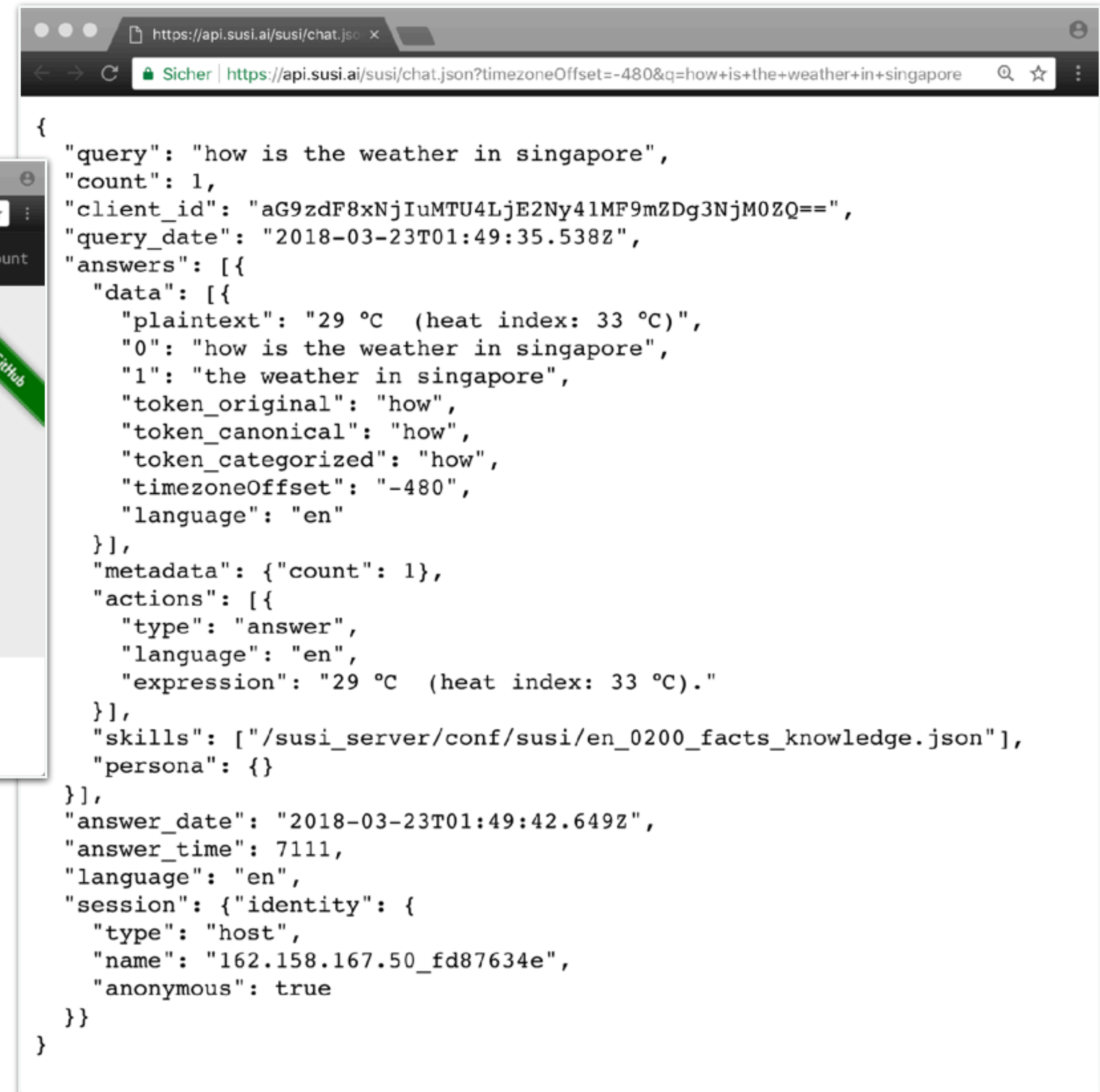
THE SUSI SERVER: HOST OF THE SUSI MIND

https://github.com/fossasia/susi_server



The screenshot shows the homepage of the Susi AI API. The header includes the URL `api.susi.ai` and navigation links for Home, API, and Account. The main content features the logo `api.susi.ai` in red, the text "Scientific User Support Intelligence" and "Artificial Intelligence for Personal Assistants using Information Retrieval." Below this is a search bar with the text "Chat with Susi" and a blue button labeled "Get JSON Data". At the bottom, there is a social media promotion: "Nice? To get latest news about susi, follow @0rb1t3r. Help to spread the news: tweet about this »". A green banner on the right side says "Fork me on GitHub".

<https://api.susi.ai/>



The screenshot shows a browser window displaying a JSON response from the API. The URL in the address bar is `https://api.susi.ai/susi/chat.json?timezoneOffset=-480&q=how+is+the+weather+in+singapore`. The JSON response is as follows:

```
{
  "query": "how is the weather in singapore",
  "count": 1,
  "client_id": "aG9zdF8xNjIuMTU4LjE2Ny41MF9mZDg3NjM0ZQ==",
  "query_date": "2018-03-23T01:49:35.538Z",
  "answers": [{
    "data": [{
      "plaintext": "29 °C (heat index: 33 °C)",
      "0": "how is the weather in singapore",
      "1": "the weather in singapore",
      "token_original": "how",
      "token_canonical": "how",
      "token_categorized": "how",
      "timezoneOffset": "-480",
      "language": "en"
    }],
    "metadata": {"count": 1},
    "actions": [{
      "type": "answer",
      "language": "en",
      "expression": "29 °C (heat index: 33 °C).",
    }],
    "skills": ["/susi_server/conf/susi/en_0200_facts_knowledge.json"],
    "persona": {}
  }],
  "answer_date": "2018-03-23T01:49:42.649Z",
  "answer_time": 7111,
  "language": "en",
  "session": {"identity": {
    "type": "host",
    "name": "162.158.167.50_fd87634e",
    "anonymous": true
  }}
}
```


SUSI SMART SPEAKER

THE **SUSI** ECOSPHERE FOR DIGITAL ASSISTANTS

SMART SPEAKER

ANDROID APP

IOS APP

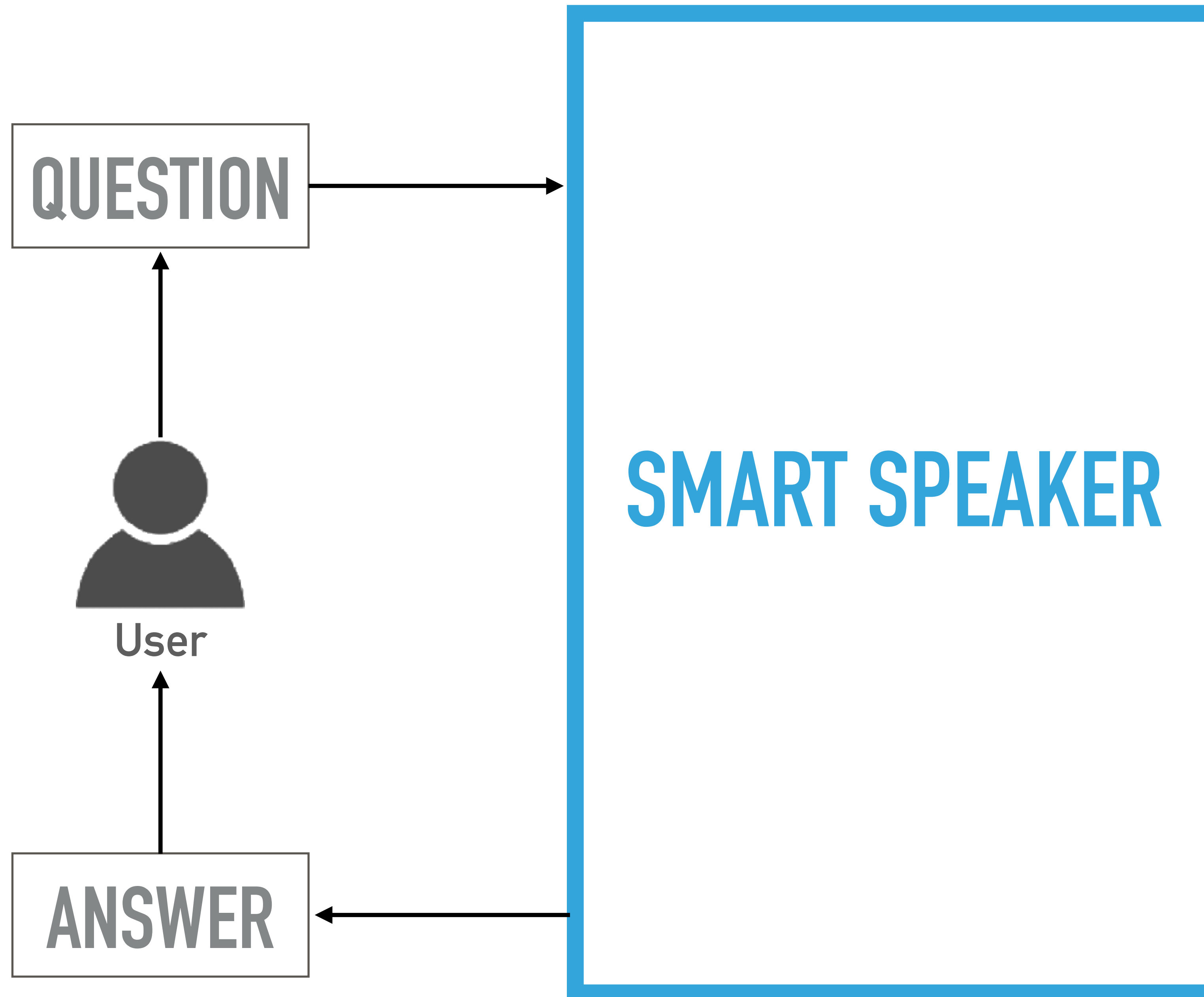
DESKTOP APP

WEB APP

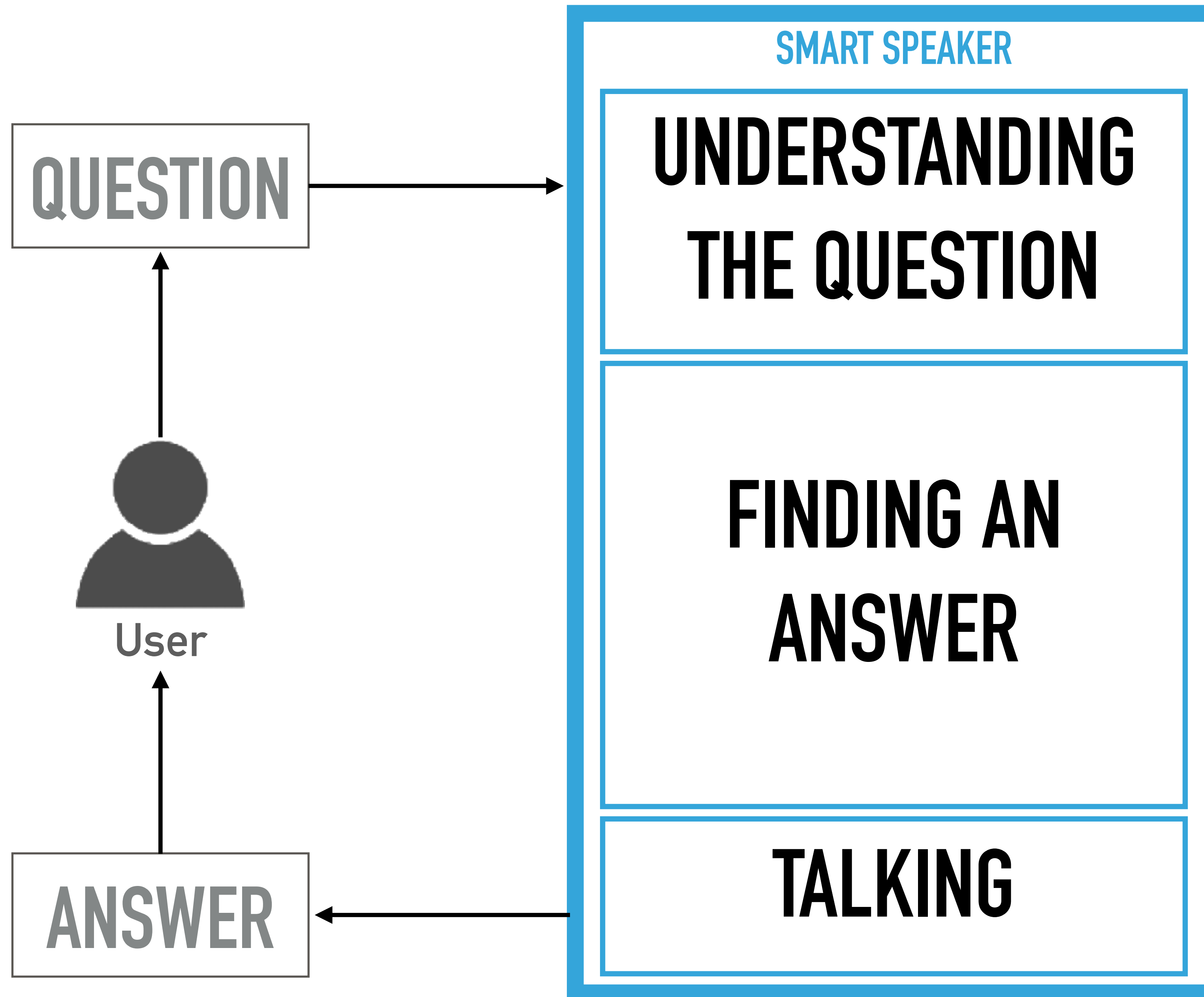
SOFTWARE & HARDWARE



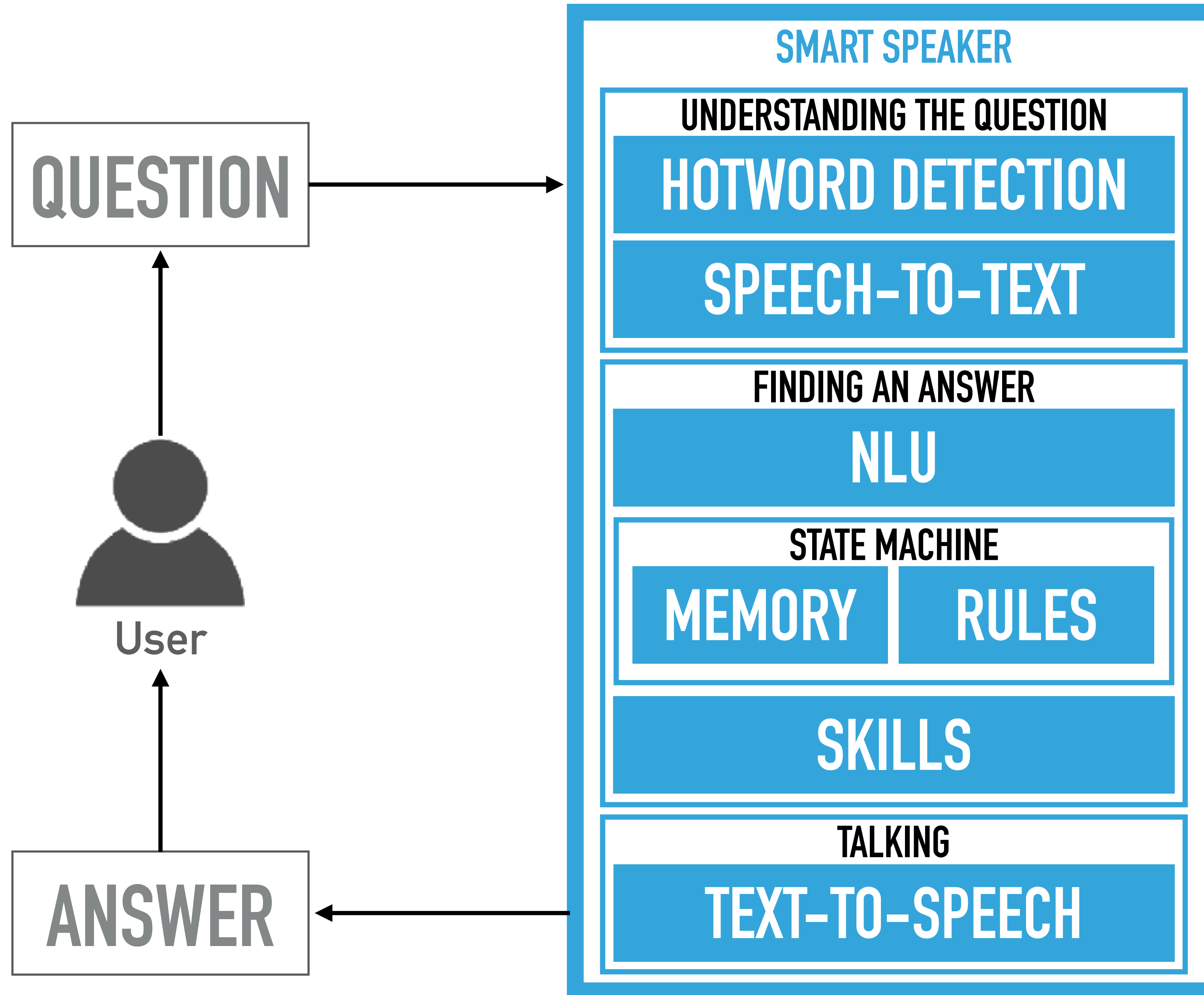
HOW A SMART SPEAKER WORKS



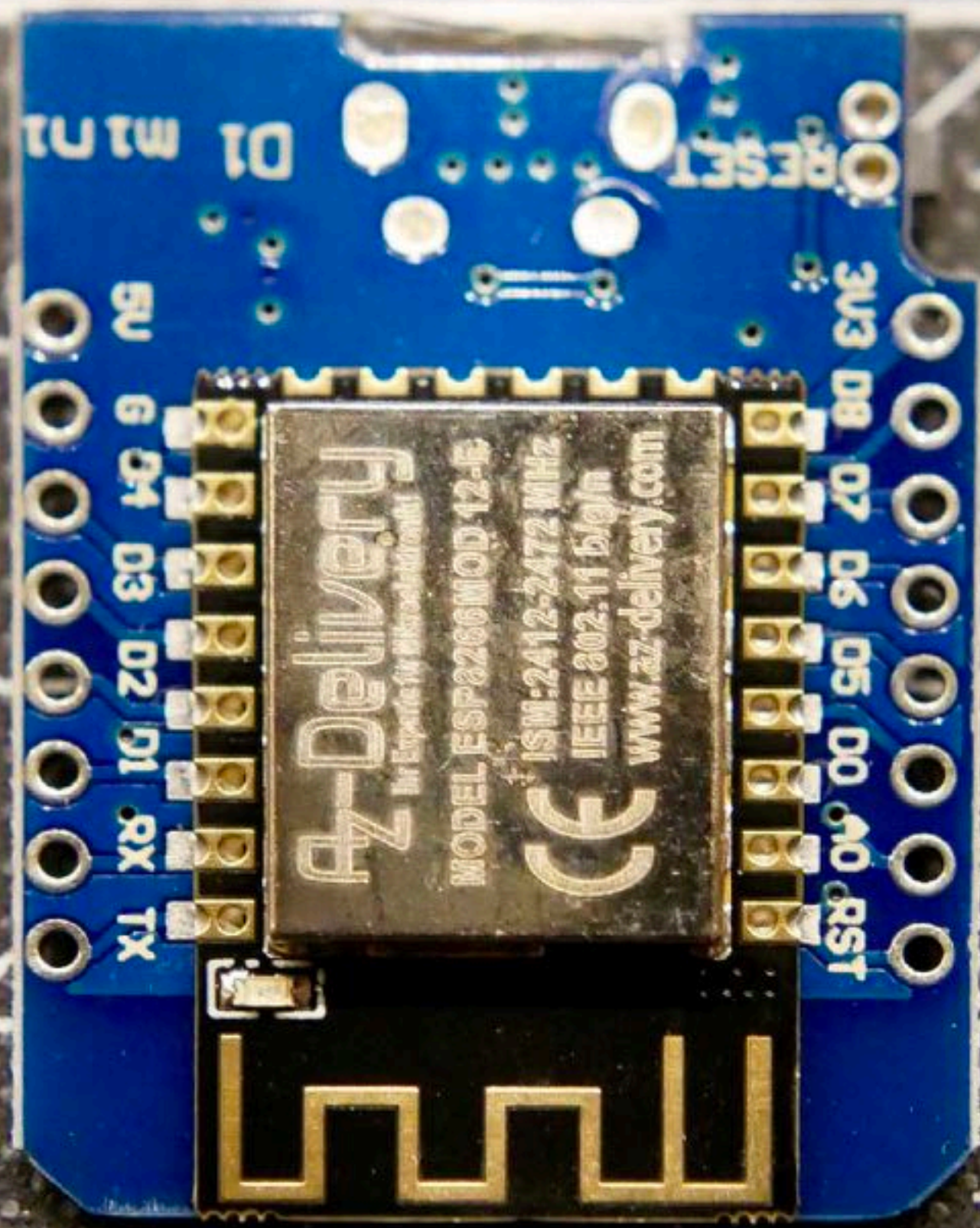
HOW A SMART SPEAKER WORKS



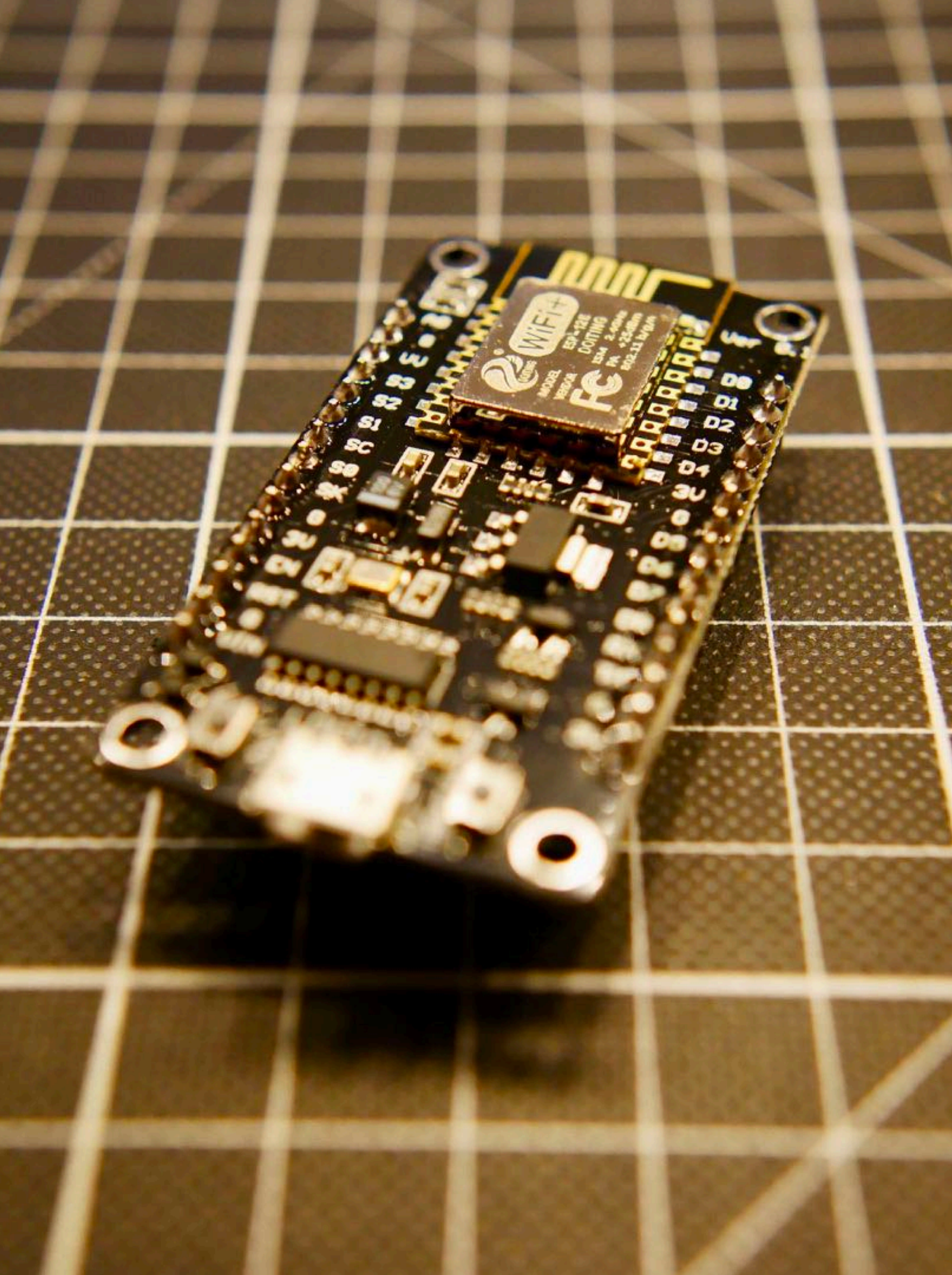
HOW A SMART SPEAKER WORKS



MICROCONTROLLER OS



D1 MINI ESP8266 + CH340 USB



NODEMCU ESP8266 + CP2102 USB

ESP8266: GENERIC WEB SERVER SERVING ONE JSON SERVICE

SET UP IO PORTS

```
23 const char* ssid = "xxxxxx";
24 const char* password = "xxxxxxxx";
25 server(80);
26 int ports[] = {D0, D1, D2, D3, D4, D5, D6, D7, D8};
27 int pmode[] = {0, -1, -1, 0, 0, 1, 1, 1, 0}; // 1 = in, 0 = out, -1 = undefined
28
29 // D1 Mini Exceptions:
30 // D3 + D8 cannot be use for input, no connection possible during flashing
31 // D4 is blue LED (on when D4 is LOW) and cannot be GND during flashing
32
33 // Test URLs
34 // http://192.168.1.51/
35 // http://192.168.1.51/d0=0,d1=0,d2=0,d3=0,d4=0,d5=0,d6=0,d7=0,d8=0
36 // http://192.168.1.51/d0=1,d1=1,d2=1,d3=1,d4=1,d5=1,d6=1,d7=1,d8=1
37
38 void setup() {
```

INITIALIZING IO PORTS

```
39   pinMode(A0, ANALOG_IN);
40   pinMode(A1, ANALOG_IN);
41   pinMode(A2, ANALOG_IN);
42   pinMode(A3, ANALOG_IN);
43   pinMode(A4, ANALOG_IN);
44   pinMode(A5, ANALOG_IN);
45   pinMode(A6, ANALOG_IN);
46   pinMode(A7, ANALOG_IN);
47   pinMode(A8, ANALOG_IN);
48   pinMode(A9, ANALOG_IN);
49   pinMode(A10, ANALOG_IN);
50   pinMode(A11, ANALOG_IN);
51   pinMode(A12, ANALOG_IN);
52   pinMode(A13, ANALOG_IN);
53   pinMode(A14, ANALOG_IN);
54   pinMode(A15, ANALOG_IN);
55   pinMode(A16, ANALOG_IN);
56   pinMode(A17, ANALOG_IN);
57   pinMode(A18, ANALOG_IN);
58   pinMode(A19, ANALOG_IN);
59   pinMode(A20, ANALOG_IN);
60   // initialize mode and set output pins to LOW
61   pinMode(A0, INPUT);
62   for (int i = 0; i <= 8; i++) {
63     if (pmode[i] == 0) {
64       pinMode(ports[i], OUTPUT); digitalWrite(ports[i], LOW);
65     } else if (pmode[i] == 1) {
66       pinMode(ports[i], INPUT);
67     }
68   }
69 }
```

INITIALIZING WIFI

```
70 WiFi.begin(ssid, password);
71 while (WiFi.status() != WL_CONNECTED) {
72   delay(500);
73   Serial.print(".");
74 }
75 Serial.println("WiFi connected");
76 server.begin();
77 Serial.print("Server started, connect url: http://");
78 Serial.println(WiFi.localIP());
79 }
```

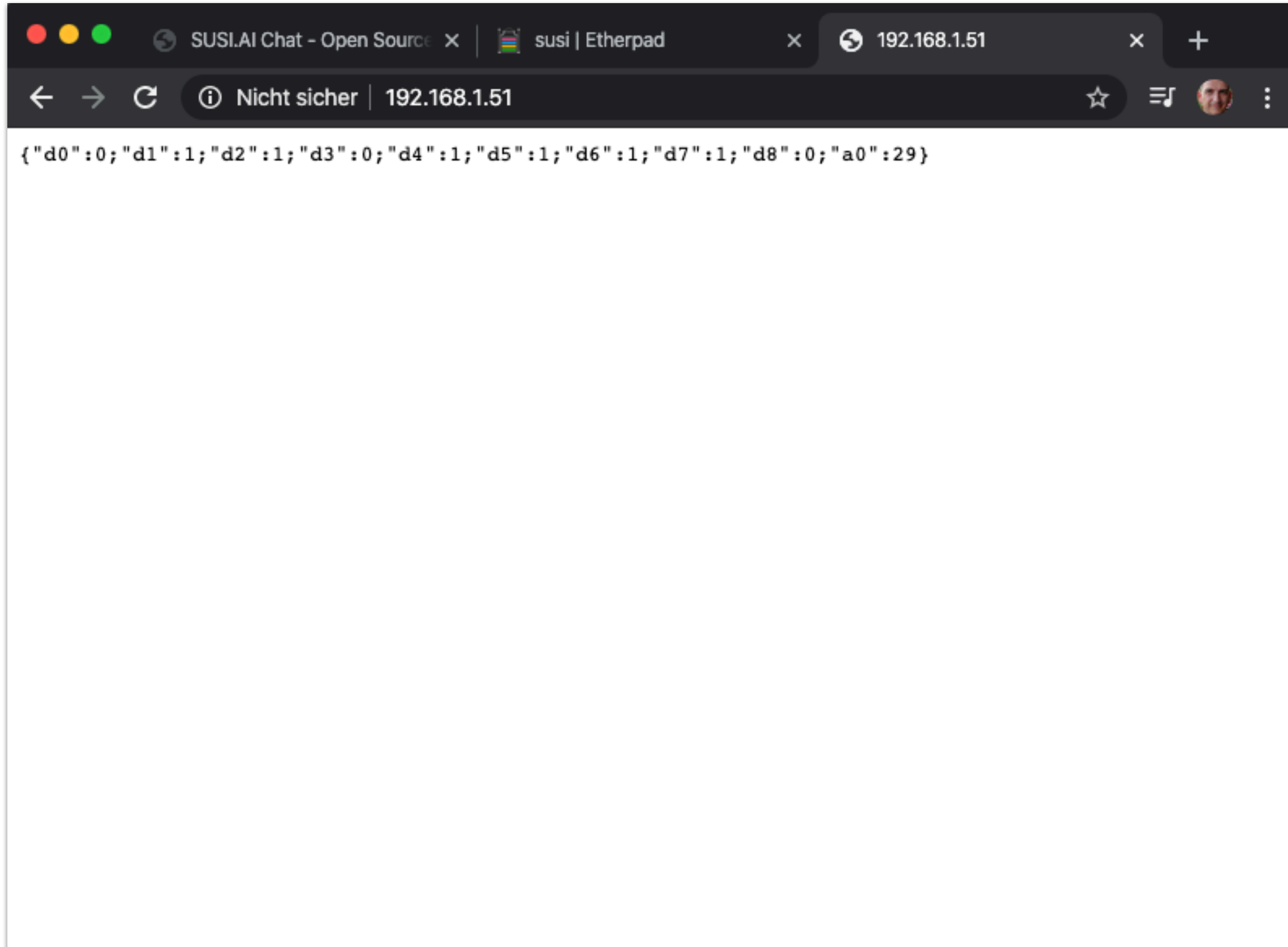
HTTP SERVER

```
86 void loop() {
87   // get connection
88   WiFiClient client = server.available();
89   if (!client) { return; }
90   while (!client.available()) { delay(1); }
91
92   // read request
93   String request = client.readStringUntil('\r');
94   Serial.println(request);
95   client.flush();
96
97   if (request.indexOf("favicon") != -1) {
98     client.print("HTTP/1.1 410 Gone\r\n\r\n"); // browser request
99   } else {
100    // very lazy parameter parsing
101    for (int i = 0; i <= 8; i++) {
102      String off = "d"; off = off + i + "=0";
103      String onn = "d"; onn = onn + i + "=1";
104      if (pmode[i] == 0 && request.indexOf(off) != -1) digitalWrite(ports[i], LOW);
105      if (pmode[i] == 1 && request.indexOf(onn) != -1) digitalWrite(ports[i], HIGH);
106    }
107  }
```

JSON SERVICE FOR IO

```
108 // create JSON response
109 // must be done before response header writing to determine body length
110 String r = "{";
111 for (int i = 0; i <= 8; i++) {
112   r = r + "\"d" + i + "\": " + digitalRead(ports[i]) + ",";
113 }
114 r = r + "\"a0\":" + analogRead(A0) + "}" + "\r\n";
115 Serial.print("OUT "); Serial.print(r); // no println here because r ends with CRLF
116
117 // write response head
118 client.print("HTTP/1.1 200 OK\r\n");
119 client.print("Content-Type: application/json\r\n");
120 client.print("Connection: close\r\n"); // clients should not try to keep-alive connections
121 client.print("Content-Length: "); client.print(r.length());
122 client.print("\r\n\r\n"); // End Of Header
123
124 // write response body
125 client.print(r);
126 }
127 client.flush();
128 client.stop();
129 }
```

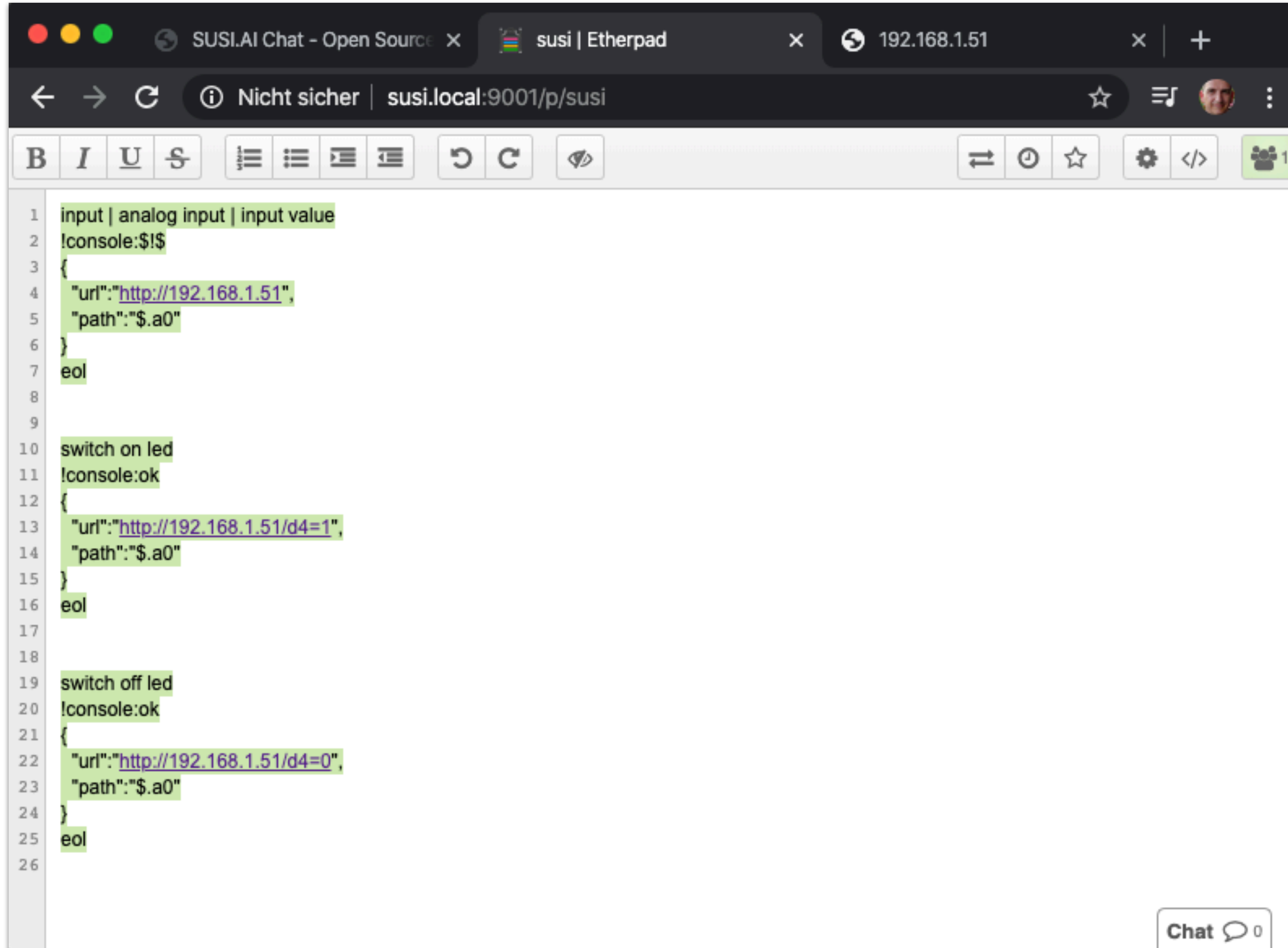
ESP8266: JSON OUTPUT



The image shows a web browser window with three tabs. The active tab is titled "192.168.1.51". The address bar shows "Nicht sicher | 192.168.1.51". The main content area displays a JSON object: {"d0":0;"d1":1;"d2":1;"d3":0;"d4":1;"d5":1;"d6":1;"d7":1;"d8":0;"a0":29}

```
{"d0":0;"d1":1;"d2":1;"d3":0;"d4":1;"d5":1;"d6":1;"d7":1;"d8":0;"a0":29}
```


SKILL FOR ESP8266 COMMUNICATION



The screenshot shows a web browser window with three tabs: 'SUSI.AI Chat - Open Source', 'susi | Etherpad', and '192.168.1.51'. The address bar shows 'Nicht sicher | susi.local:9001/p/susi'. The Etherpad editor interface includes a toolbar with text formatting (B, I, U, S), list creation, undo/redo, and other tools. The code in the editor is as follows:

```
1 input | analog input | input value
2 !console:$$
3 {
4   "url":"http://192.168.1.51",
5   "path": "$.a0"
6 }
7 eol
8
9
10 switch on led
11 !console:ok
12 {
13   "url":"http://192.168.1.51/d4=1",
14   "path": "$.a0"
15 }
16 eol
17
18
19 switch off led
20 !console:ok
21 {
22   "url":"http://192.168.1.51/d4=0",
23   "path": "$.a0"
24 }
25 eol
26
```

A 'Chat 0' button is visible in the bottom right corner of the editor.

ANSWER FROM SUSI AFTER COMMUNICATION WITH ESP8266

SUSI.AI Chat - Open Source x susi | Etherpad x 192.168.1.51 x +

Nicht sicher | susi.local:7070

Chat with SUSI.AI

3/8/2020

input value
9:08 PM

21
9:08 PM

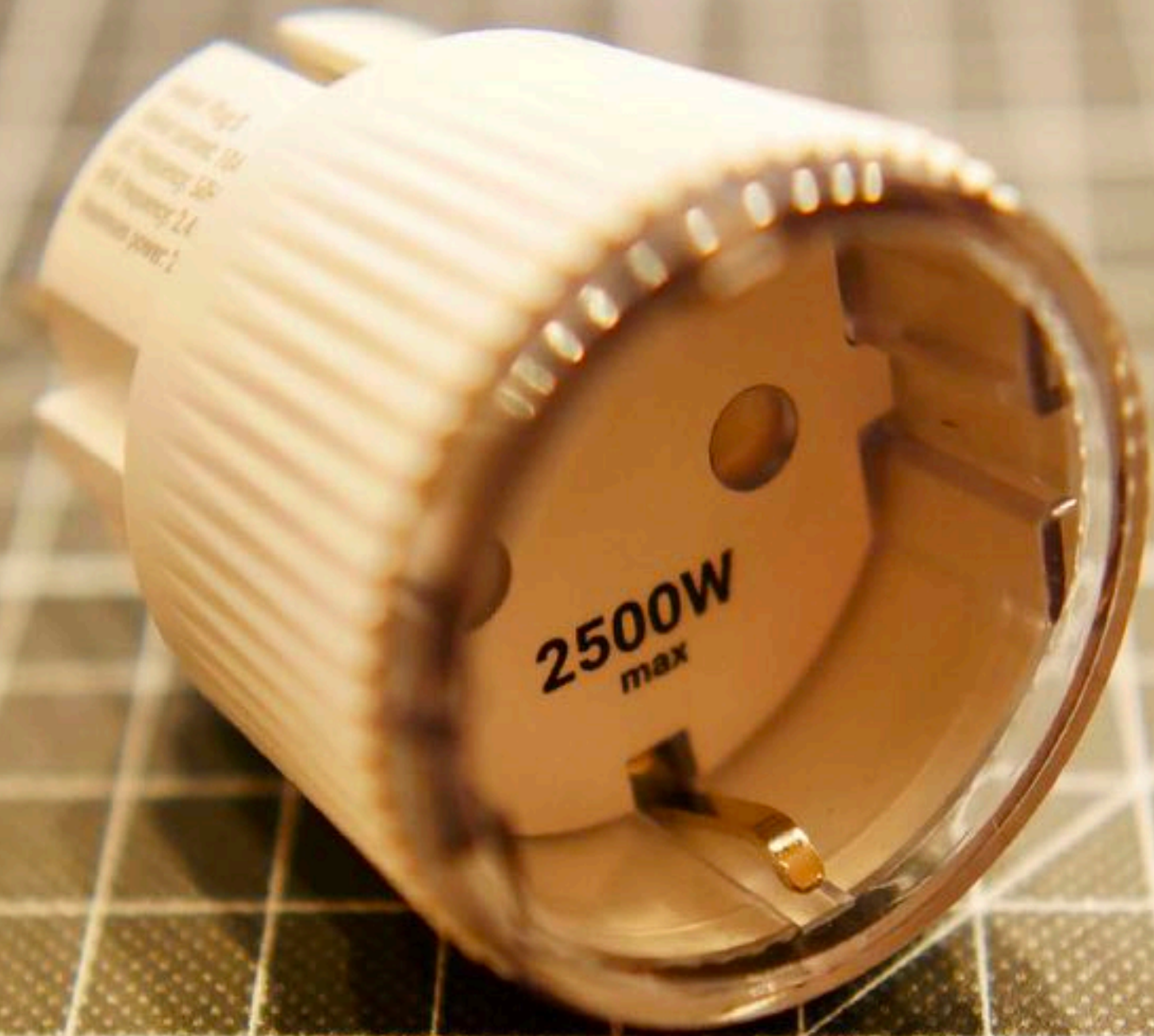
ok
9:08 PM

switch on led
9:08 PM

Type a message...

OTHER DEVICES WITH JSON API

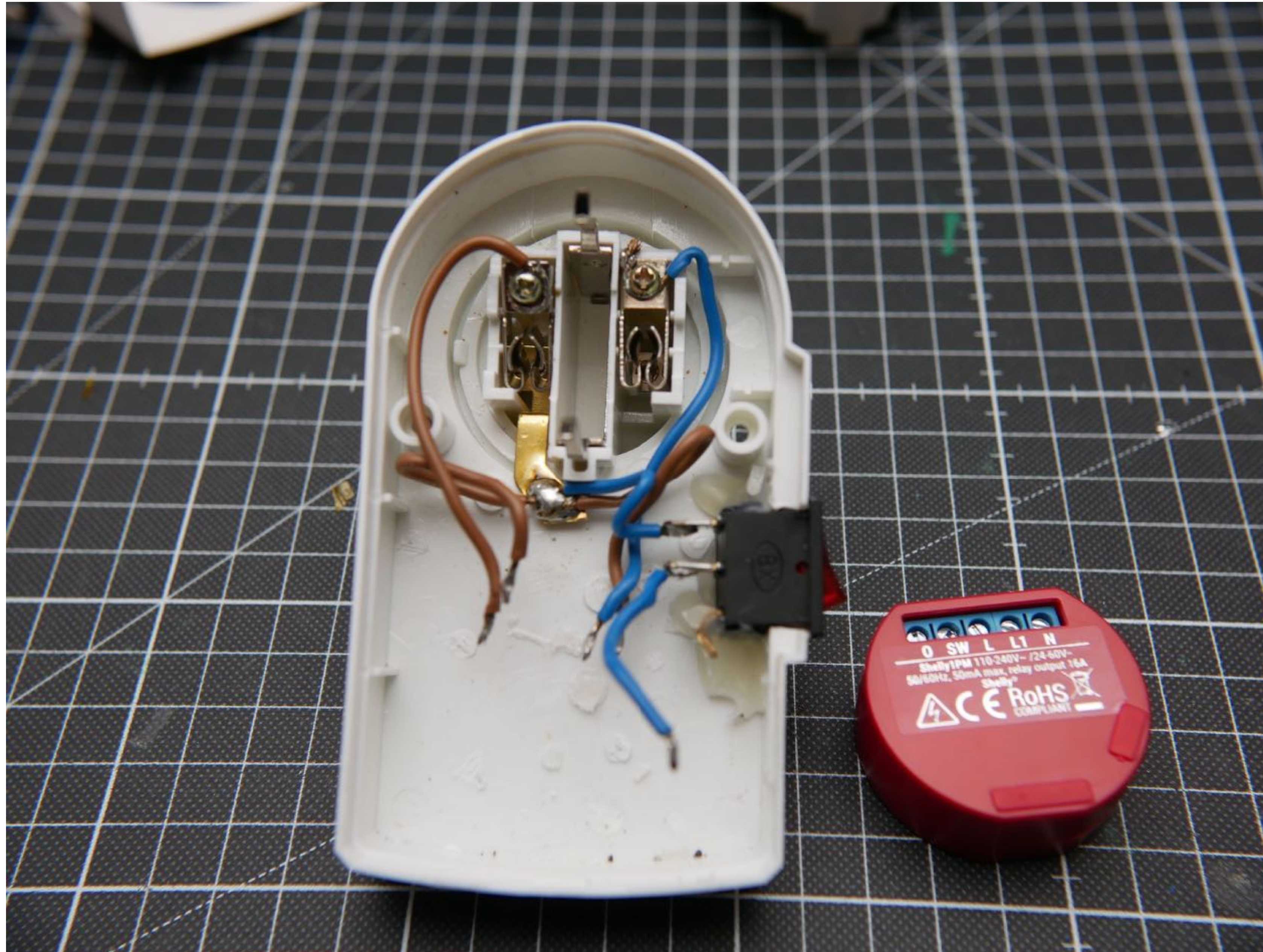
SHELLY PLUG S



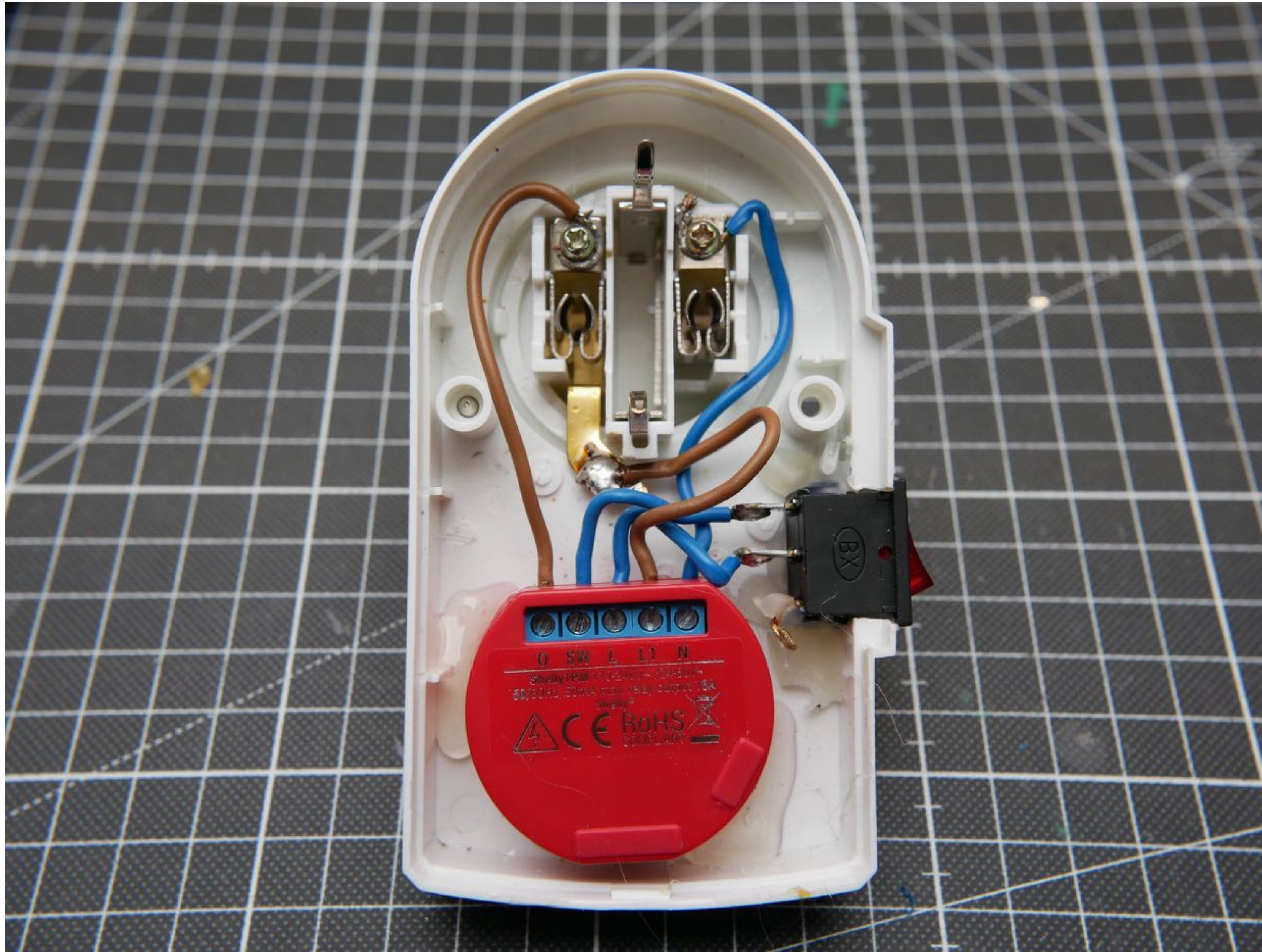


SHELLY1 PM SWITCH WITH POWER METER

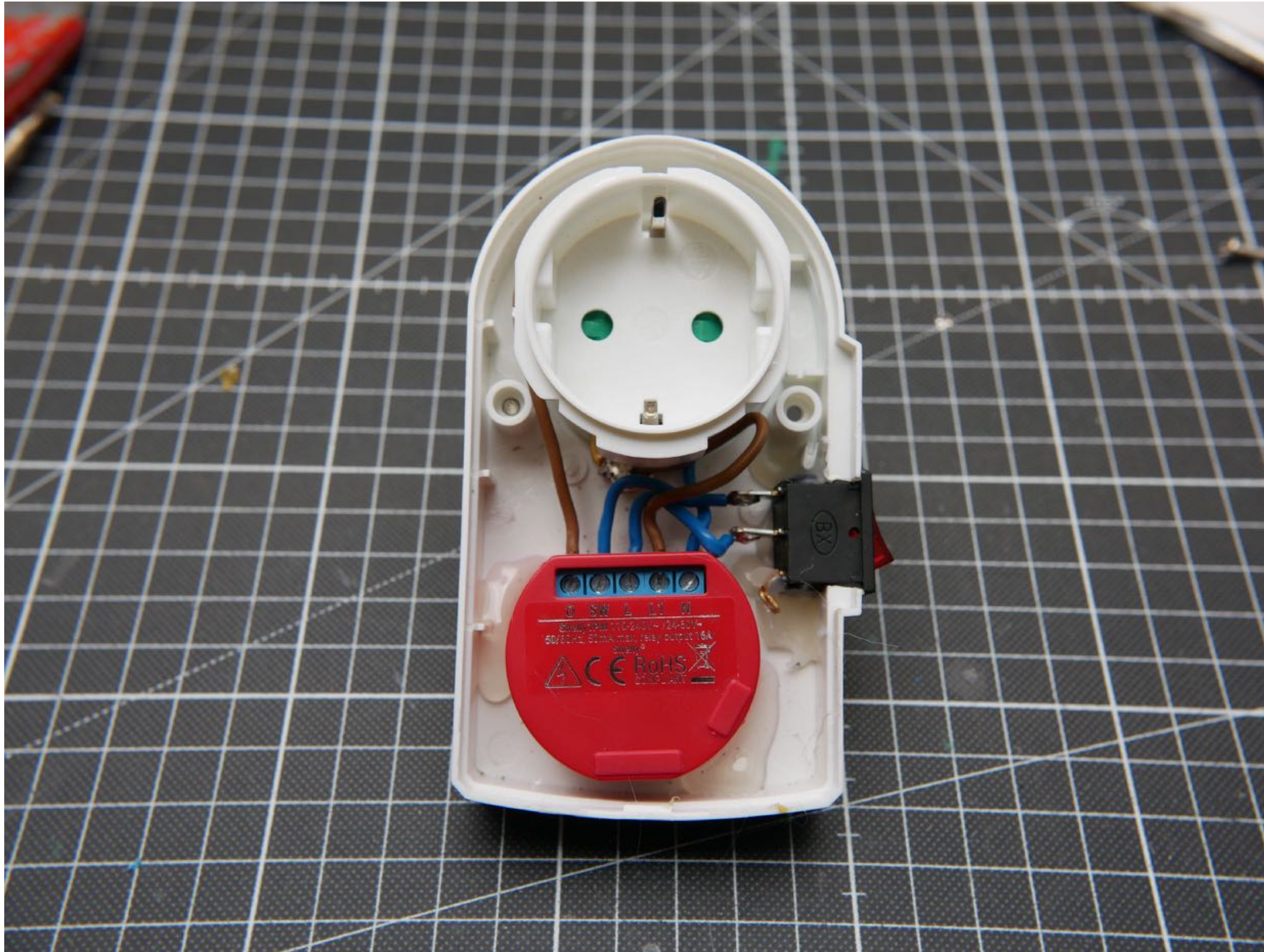
ASSEMBLY OF SHELLY SWITCH



ASSEMBLY OF SHELLY SWITCH



ASSEMBLY OF SHELLY SWITCH



SUSI ECOSYSTEM

THE **SUSI** ECOSPHERE FOR DIGITAL ASSISTANTS

SMART SPEAKER

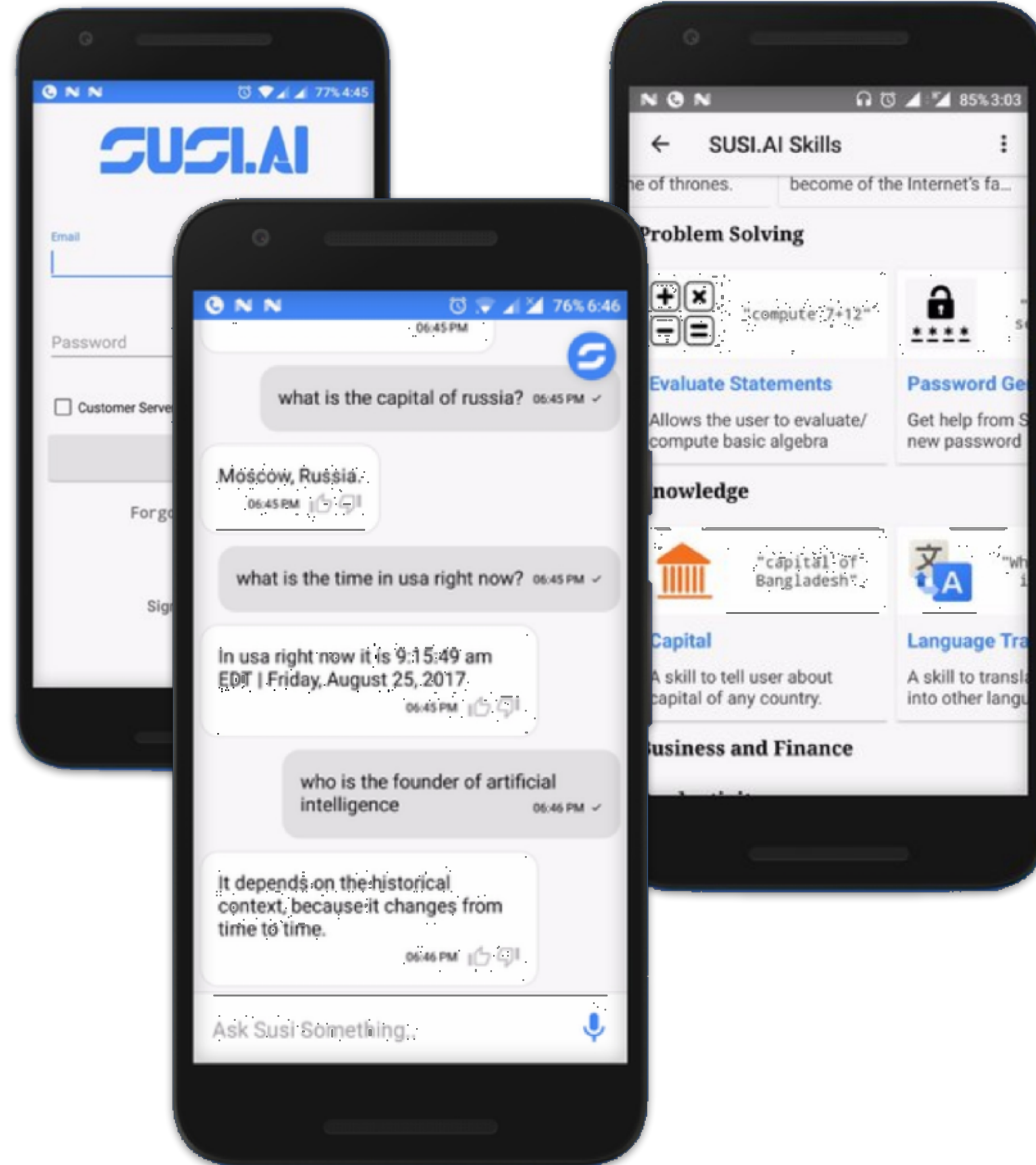
ANDROID APP

IOS APP

DESKTOP APP

WEB APP

SOFTWARE & HARDWARE



THE **SUSI** ECOSPHERE FOR DIGITAL ASSISTANTS

SMART SPEAKER

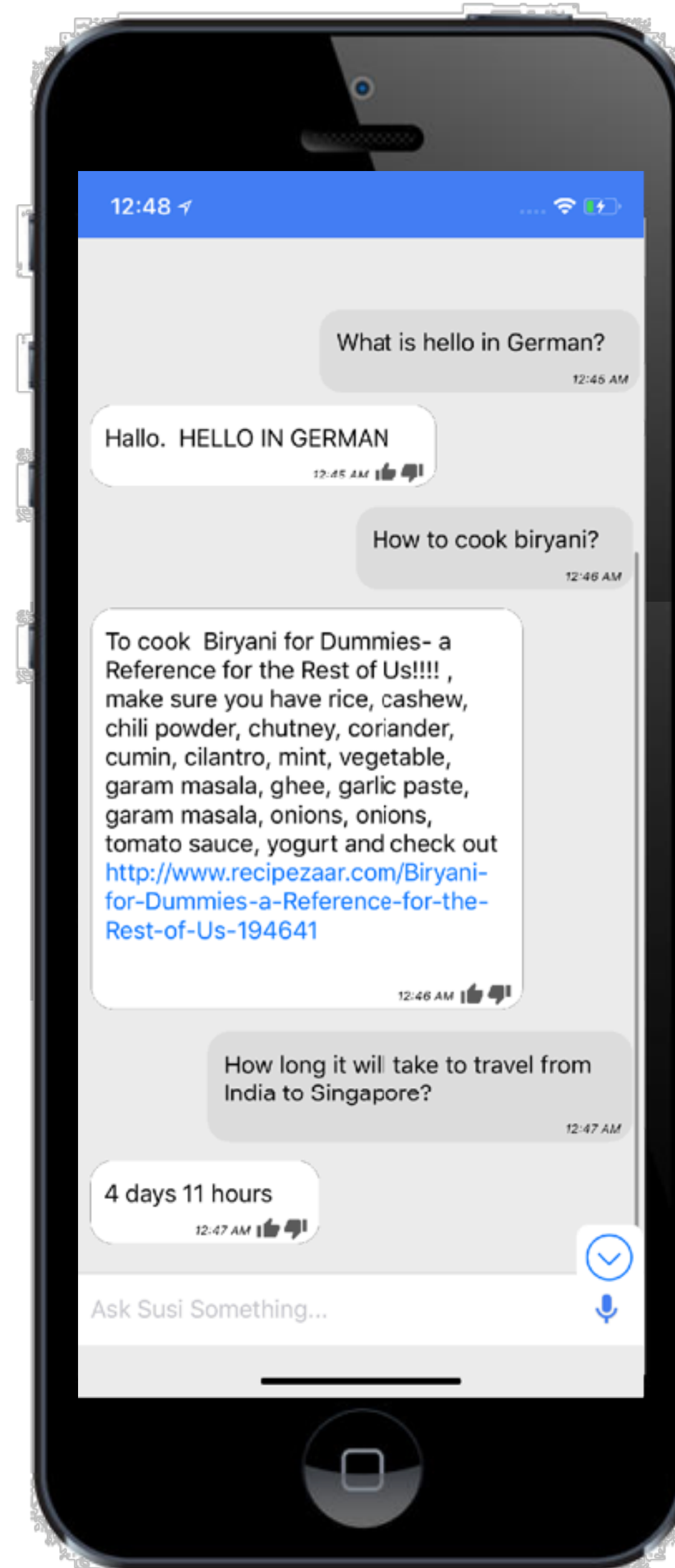
ANDROID APP

IOS APP

DESKTOP APP

WEB APP

SOFTWARE & HARDWARE



THE **SUSI** ECOSPHERE FOR DIGITAL ASSISTANTS

SMART SPEAKER

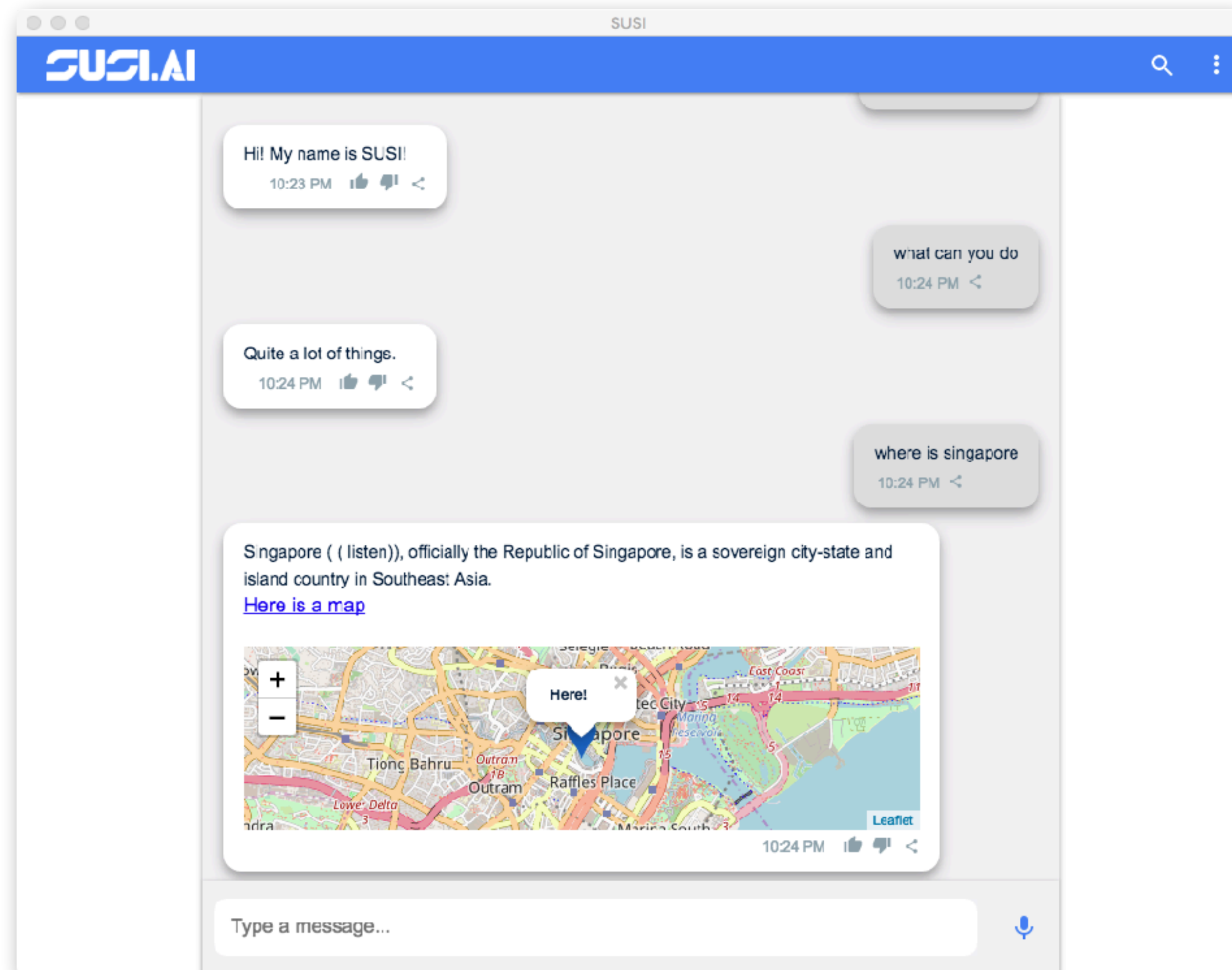
ANDROID APP

IOS APP

DESKTOP APP

WEB APP

SOFTWARE & HARDWARE



THE **SUSI** ECOSPHERE FOR DIGITAL ASSISTANTS

SMART SPEAKER

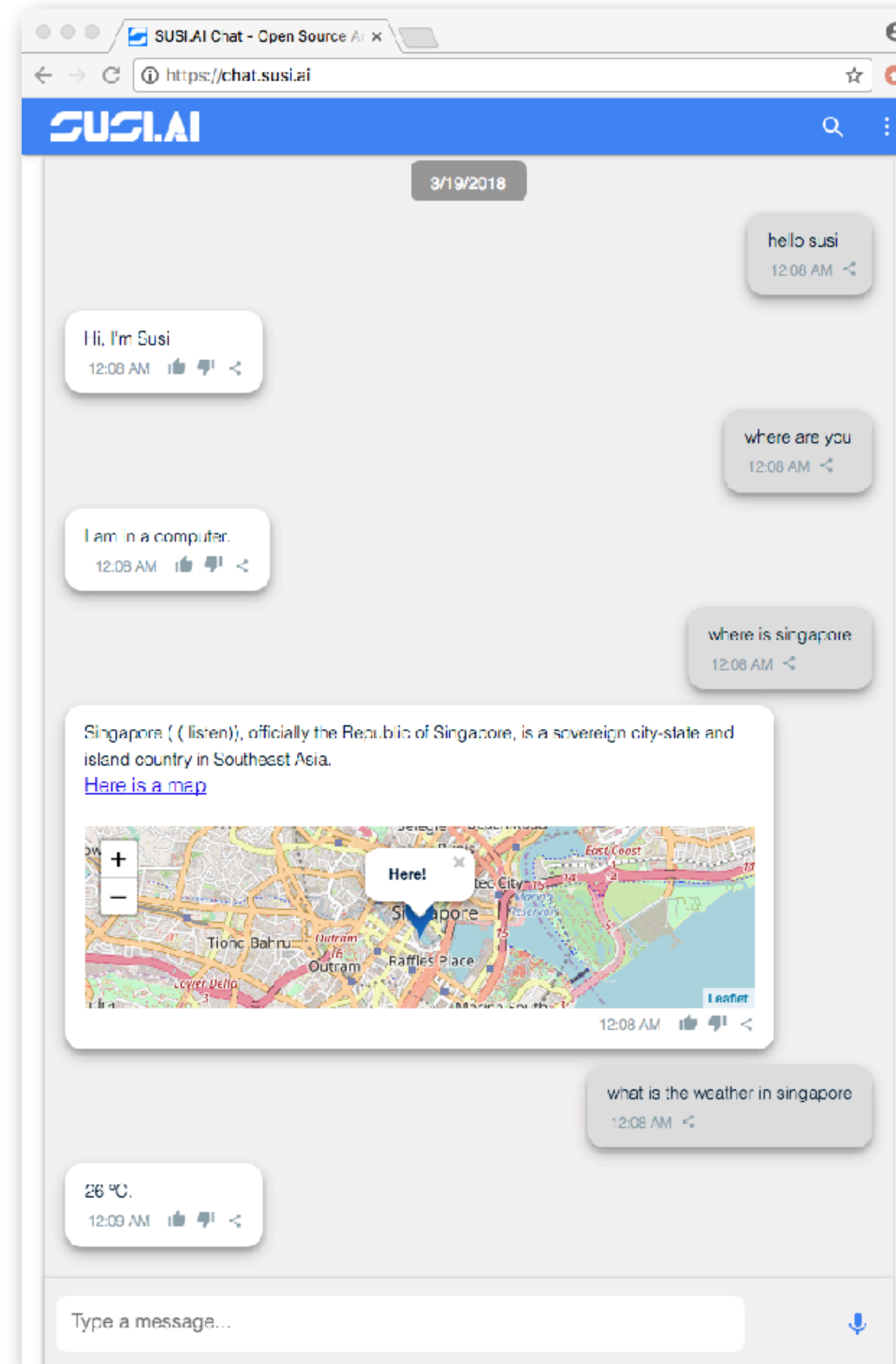
ANDROID APP

IOS APP

DESKTOP APP

WEB APP

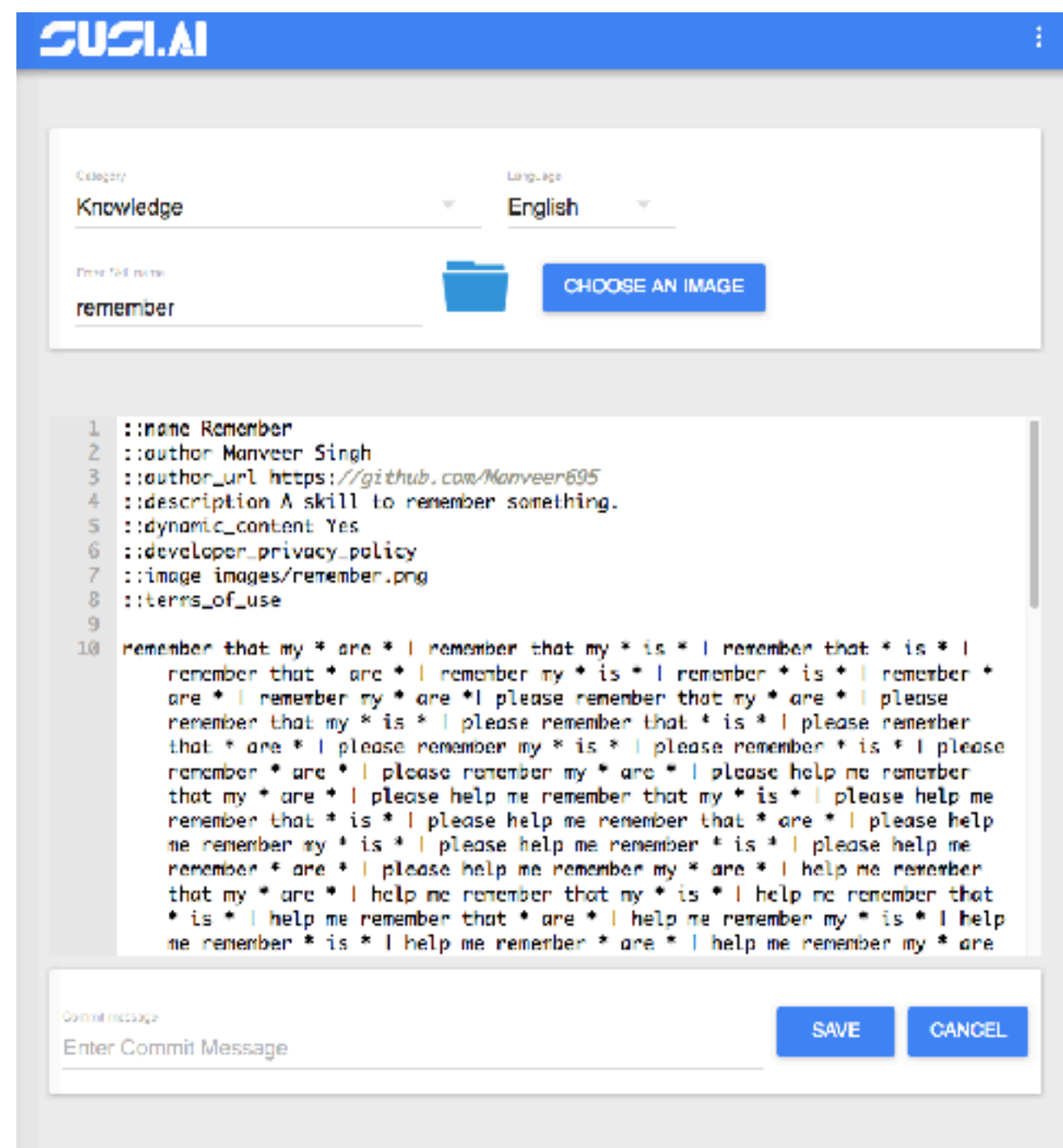
SOFTWARE & HARDWARE



THE **SUSI** ECOSPHERE FOR DIGITAL ASSISTANTS

WIKI-LIKE CONTENT
MANAGEMENT SYSTEM

EASY SKILL LANGUAGE



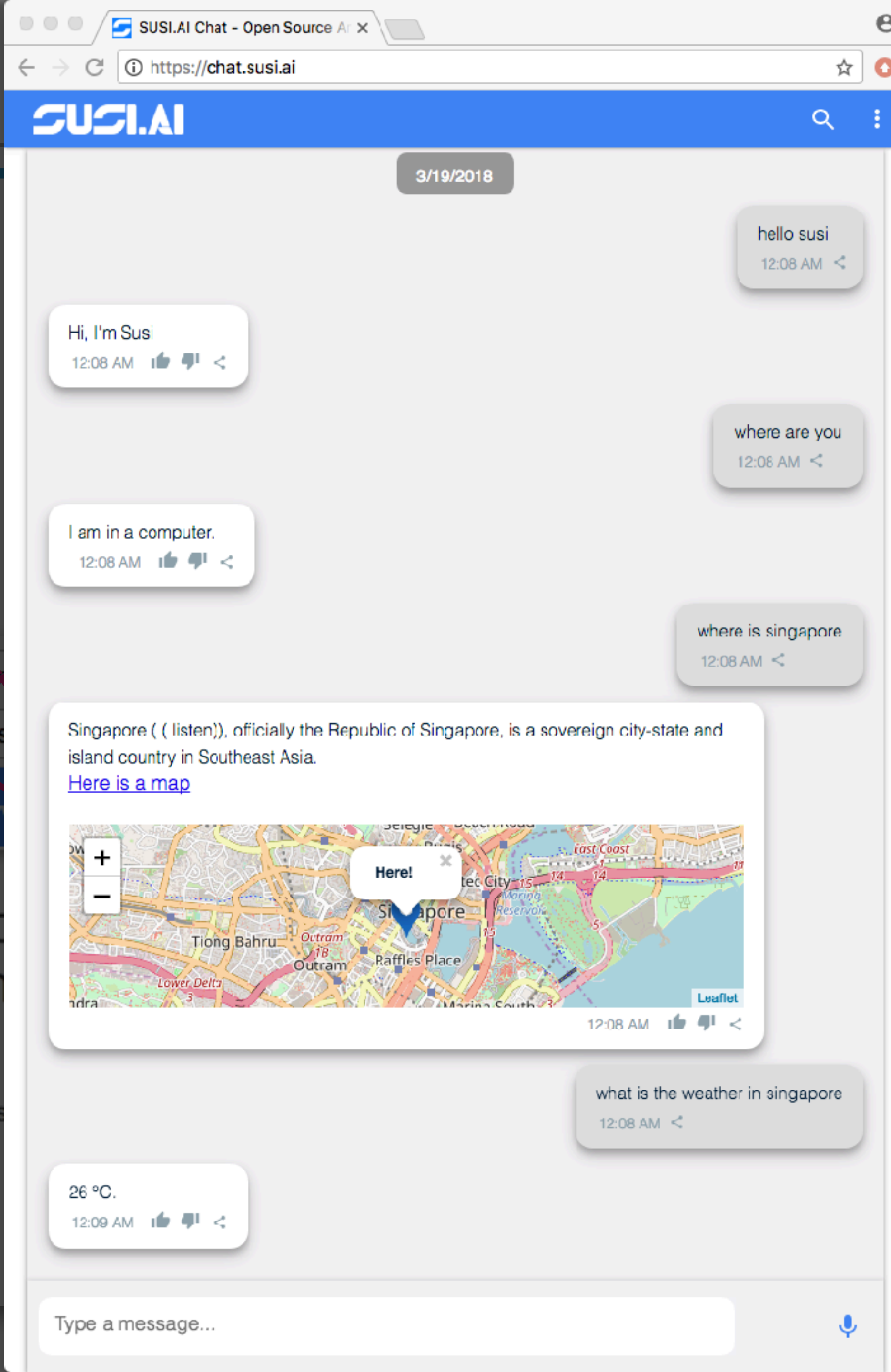
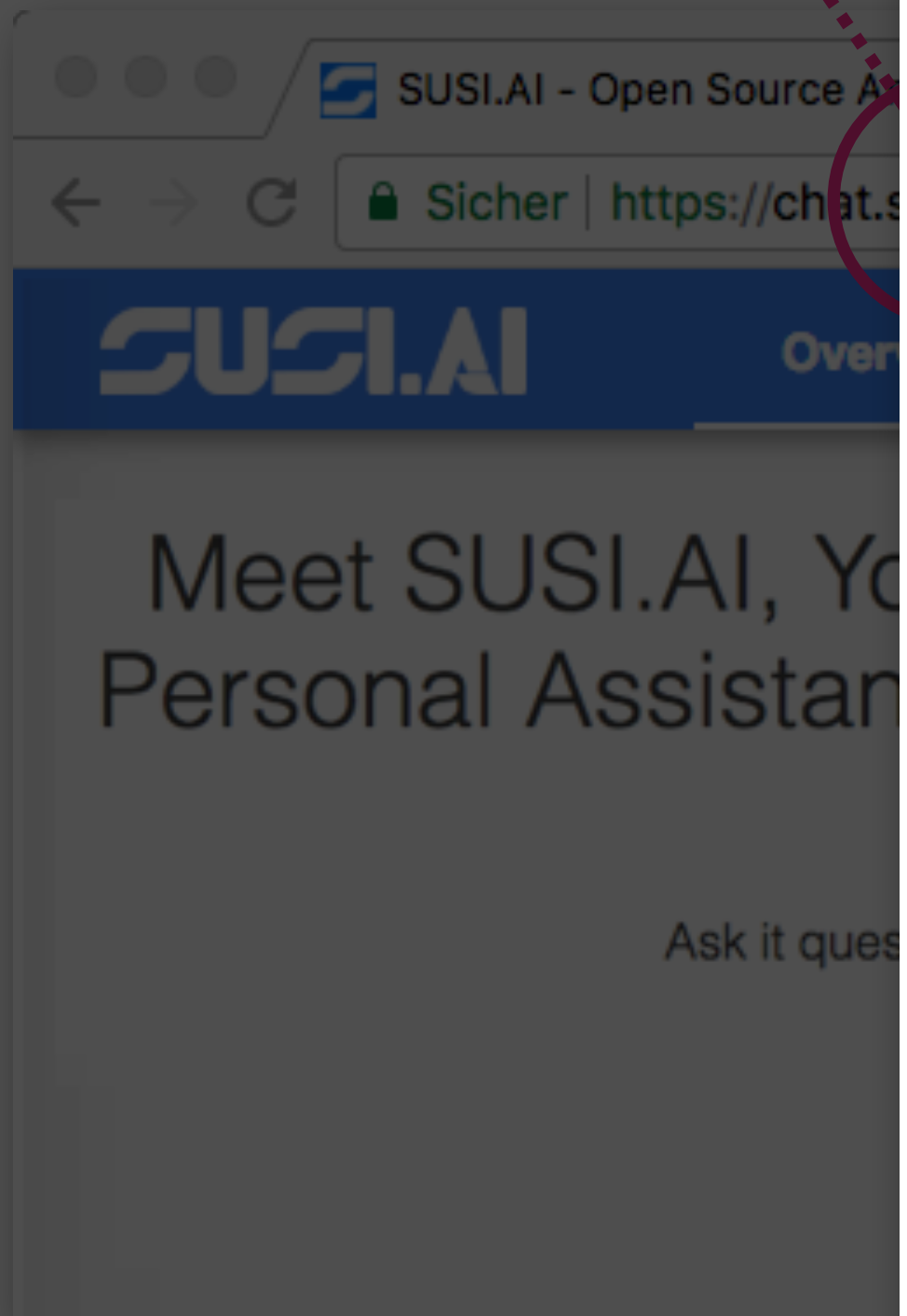
SKILLS

CONVERSATIONAL SEARCH
CONVERSATIONAL ENTERTAINMENT
CONVERSATIONAL NEWS
CONVERSATIONAL PRODUCTIVITY
CONVERSATIONAL TELEPHONY
CONVERSATIONAL MESSAGING
CONVERSATIONAL COLLABORATIVE WORK
CONVERSATIONAL SHOPPING
CONVERSATIONAL BANKING
CONVERSATIONAL TRAVEL BOOKING
HOME APPLIANCES CONTROL
HOME ENTERTAINMENT CONTROL
HOME SECURITY CONTROL
HOME METERING CONTROL

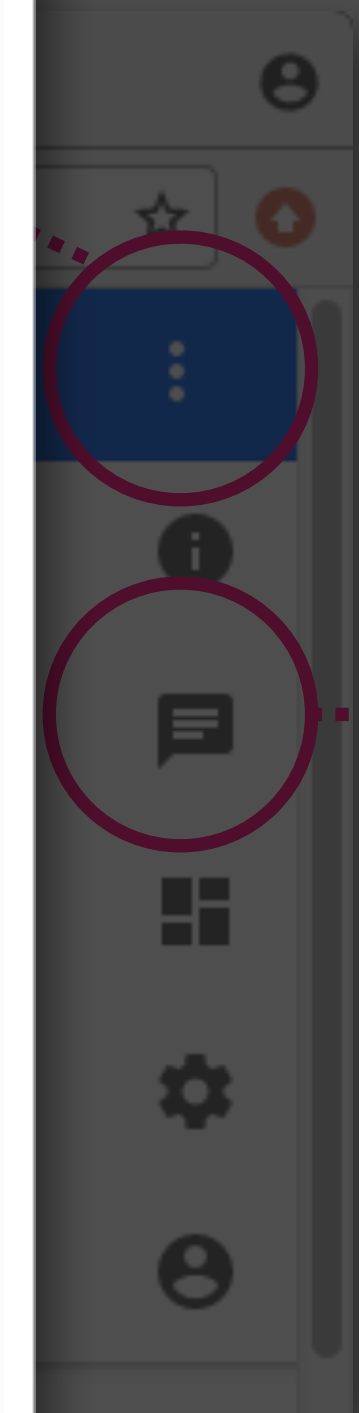
HOW TO CONTRIBUTE WEB CHAT WITH

OPEN SUSI.AI

1



N CHAT















SUSI Skill CMS

Sicher | https://skills.susi.ai

SUSI.AI

Category: Knowledge Language: English Sort by: Name

CLICK ON SKILL **4**

| | | | |
|--|---|--|--|
|  <i>Do you have a name</i> SUSI Aboutsusi Information about SUSI.AI 👍 22 👎 13 |  <i>Acronym of NASA</i> Acronyms Tells us about acronyms. An abbreviation formed from the initial letters of other words and pronounced as a word 👍 0 👎 0 |  <i>Anagram for best</i> Anagrams A skill that returns the anagrams for a word 👍 0 👎 1 |  <i>search for atomic mass of radium</i> Atomic A skill to tell atomic mass and elements of periodic table 👍 0 👎 0 |
|  <i>Tell me about the book Harry Potter</i> Books A skill to give user the name of the book and link to read more. 👍 0 👎 0 |  <i>borders with germany?</i> Borders A skill to tell us about neighbouring countries of a country. 👍 0 👎 0 |  <i>What is the capital of India?</i> Capital A skill to tell user about capital of any country. 👍 3 👎 0 |  <i>Know any car models manufactured by ford</i> Cars A skill to tell user about cars made by a car manufacturer 👍 0 👎 0 |
|  <i>Tell me something interesting about cats!</i> Cat Hello 👍 0 👎 0 |  <i>who is the ceo of google</i> Ceo A skill to tell answers for the name of the CEO of a company. 👍 0 👎 0 |  <i>Who created you?</i> Creator Info Want to know about fossasia, just ask susi to tell that, Susi tells about the SUSI.AI creators 👍 1 👎 0 |  <i>What happened on 2/14.</i> Day in History A skill to give answers related history. 👍 0 👎 0 |

Category

Knowledge

Language

English

Enter Skill name

day_in_history



CHOOSE AN IMAGE

```
1 ::name Day in History
2 ::author Saurabh Jain
3 ::author_url https://github.com/saurabhjn76
4 ::description A skill to give answers related history.
5 ::dynamic_content Yes
6 ::developer_privacy_policy
7 ::image images/calender.jpg
8 ::terms_of_use
9
10 What happened on *
11 !example:What happened on 2/14.
12 !expect:February 14th is the day in 1876 that Alexander Graham Bell applies for a patent for the telephone, as does
    Elisha Gray.
13 !console:Year-$year$ - $text$
14 {
15   "url":"http://history.muffinlabs.com/date/$1$",
16   "path":"$.data.Events"
17 }
18 eol
19
```

Commit message

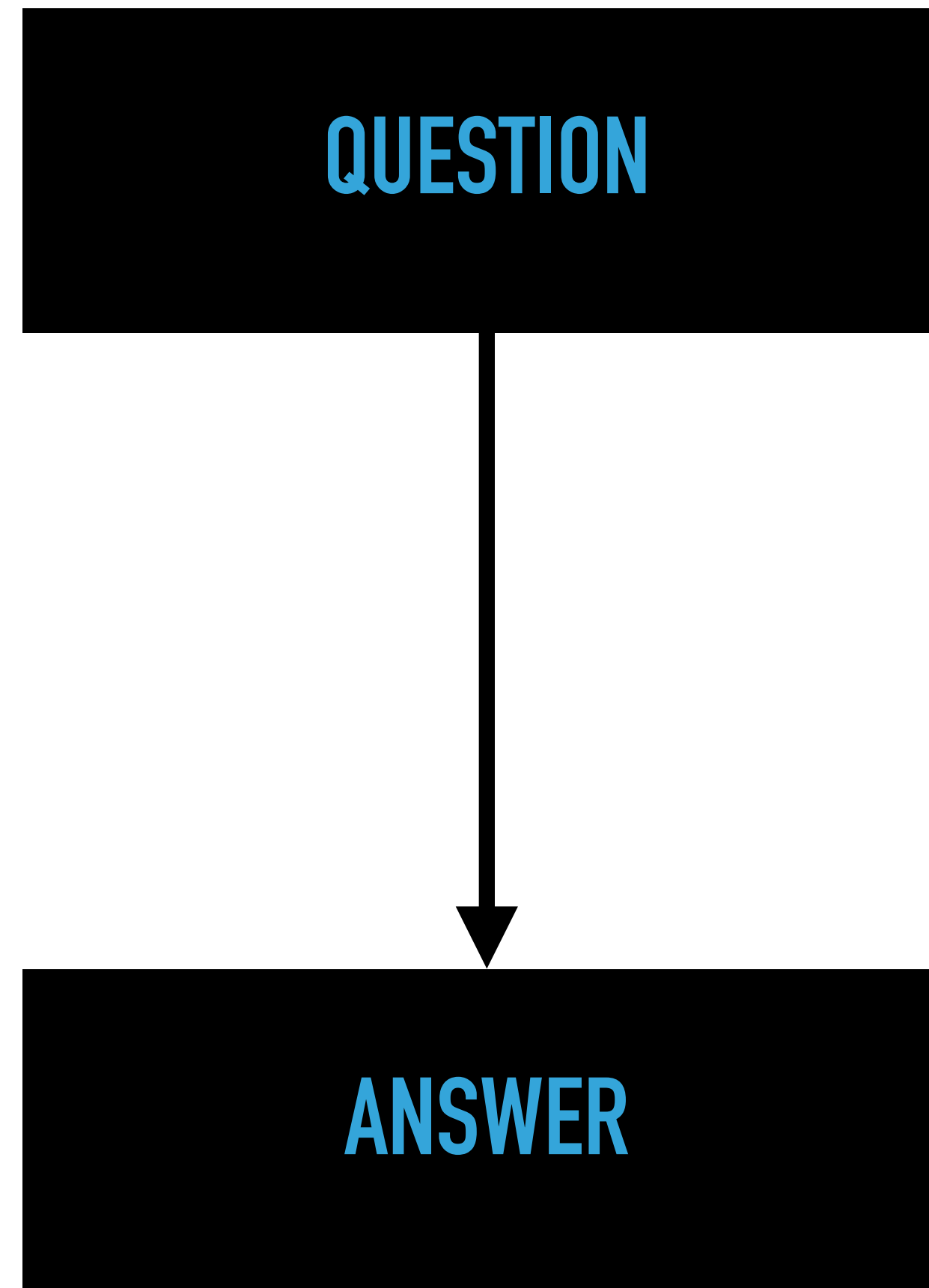
Enter Commit Message

SAVE

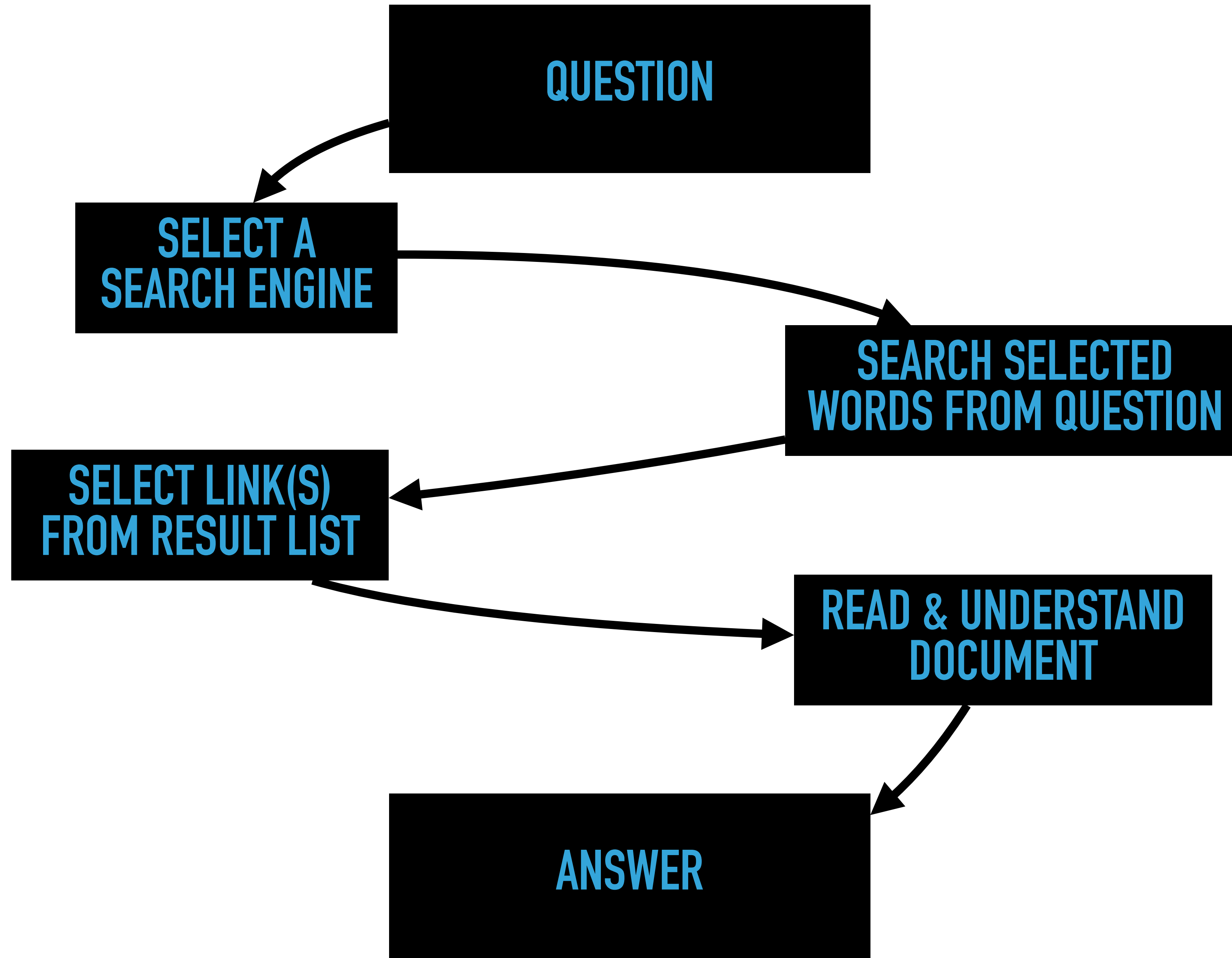
CANCEL

SEARCH AS EXPERT SYSTEM

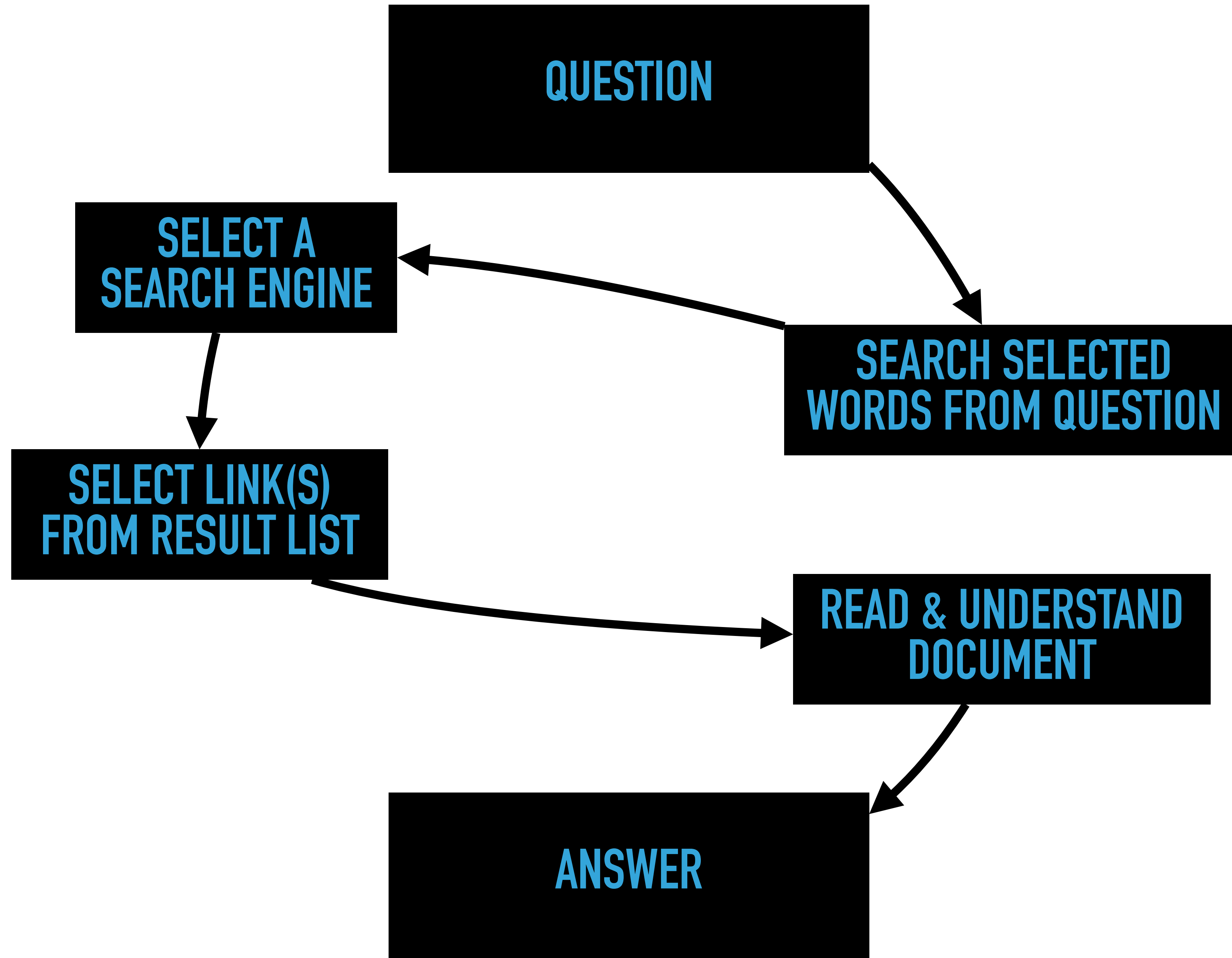
THE FUTURE OF SEARCH ENGINES



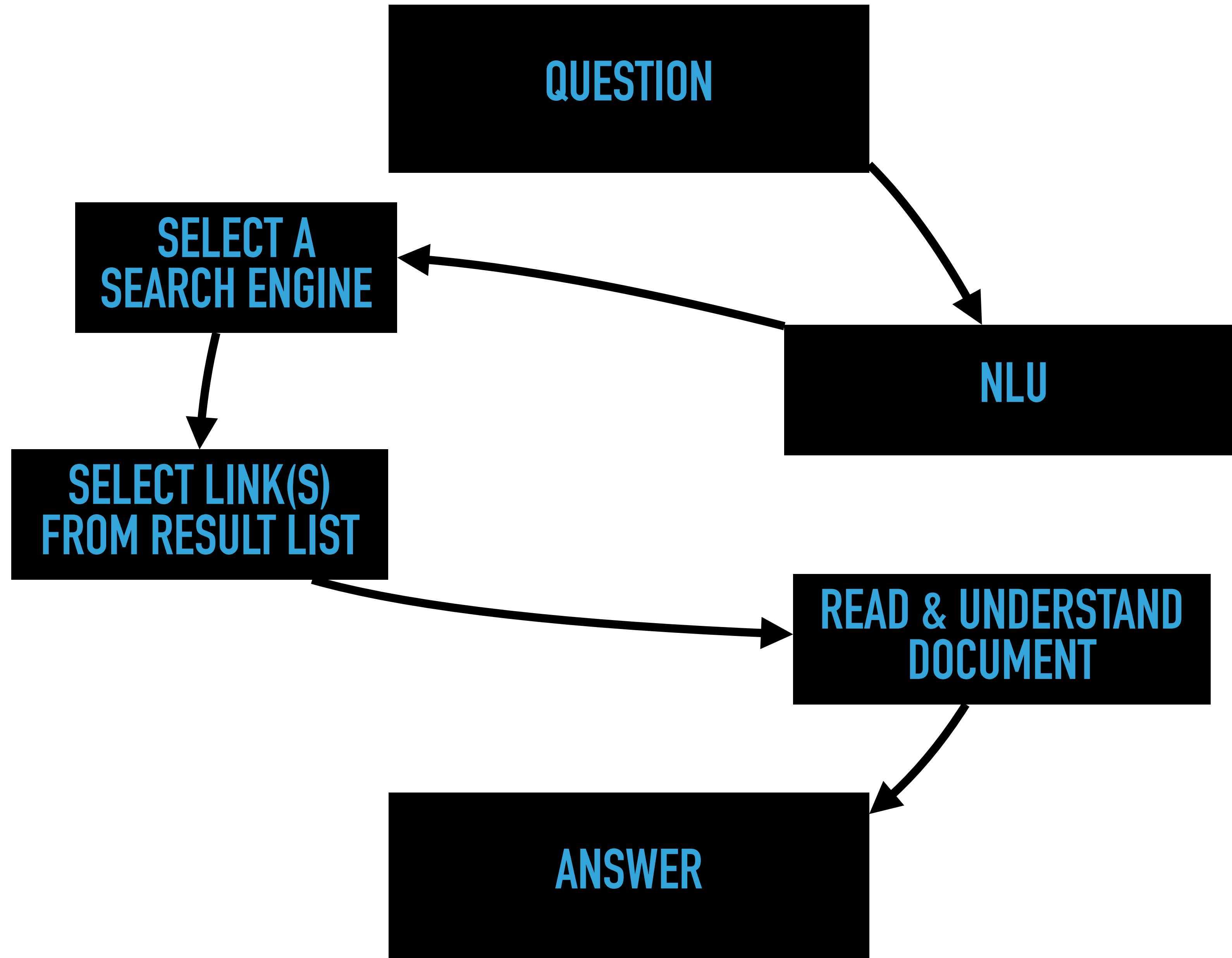
HUMAN/MANUAL PROCESS TO GET ANSWERS USING SEARCH ENGINES



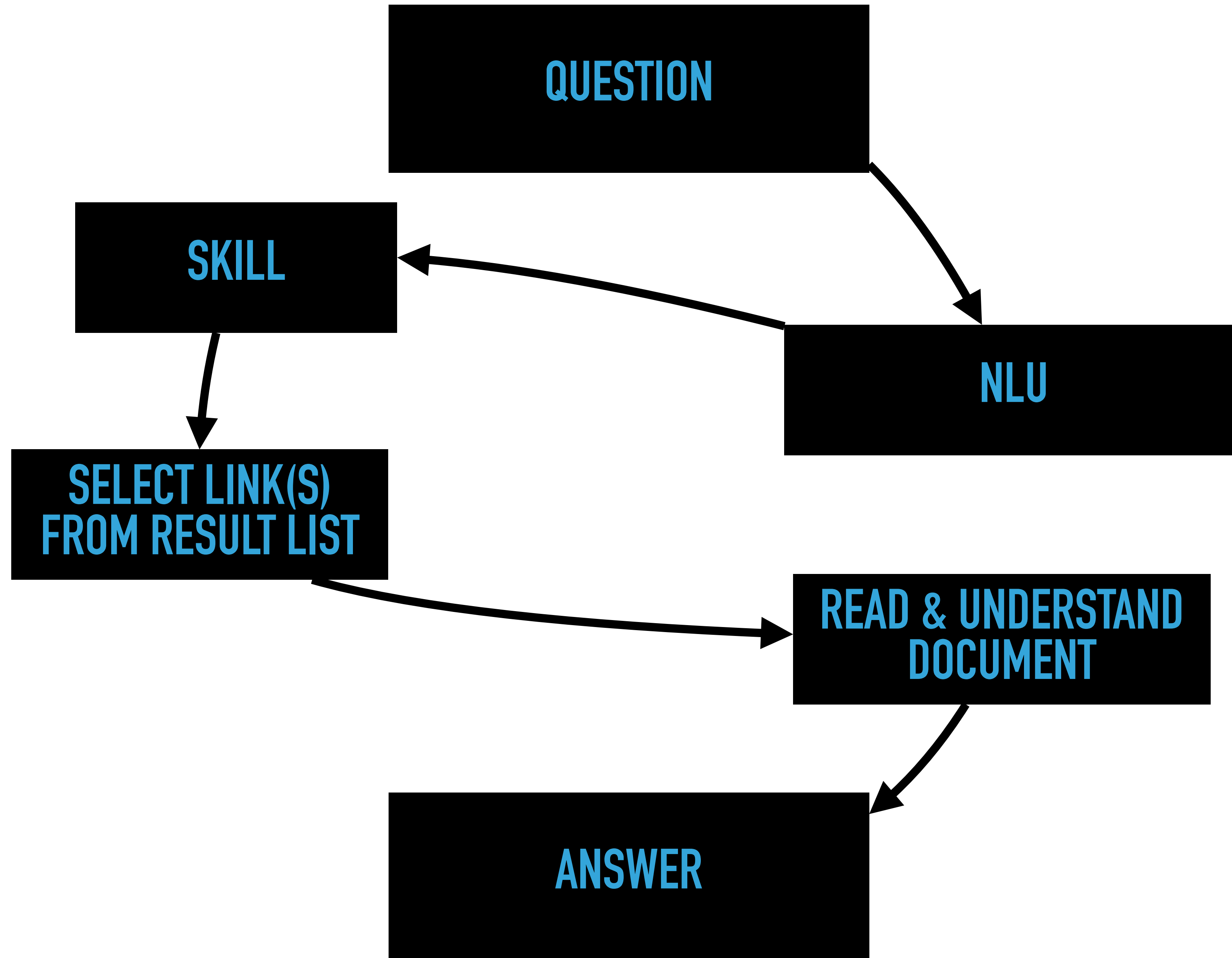
AUTOMATICALLY CREATE AN ANSWER:



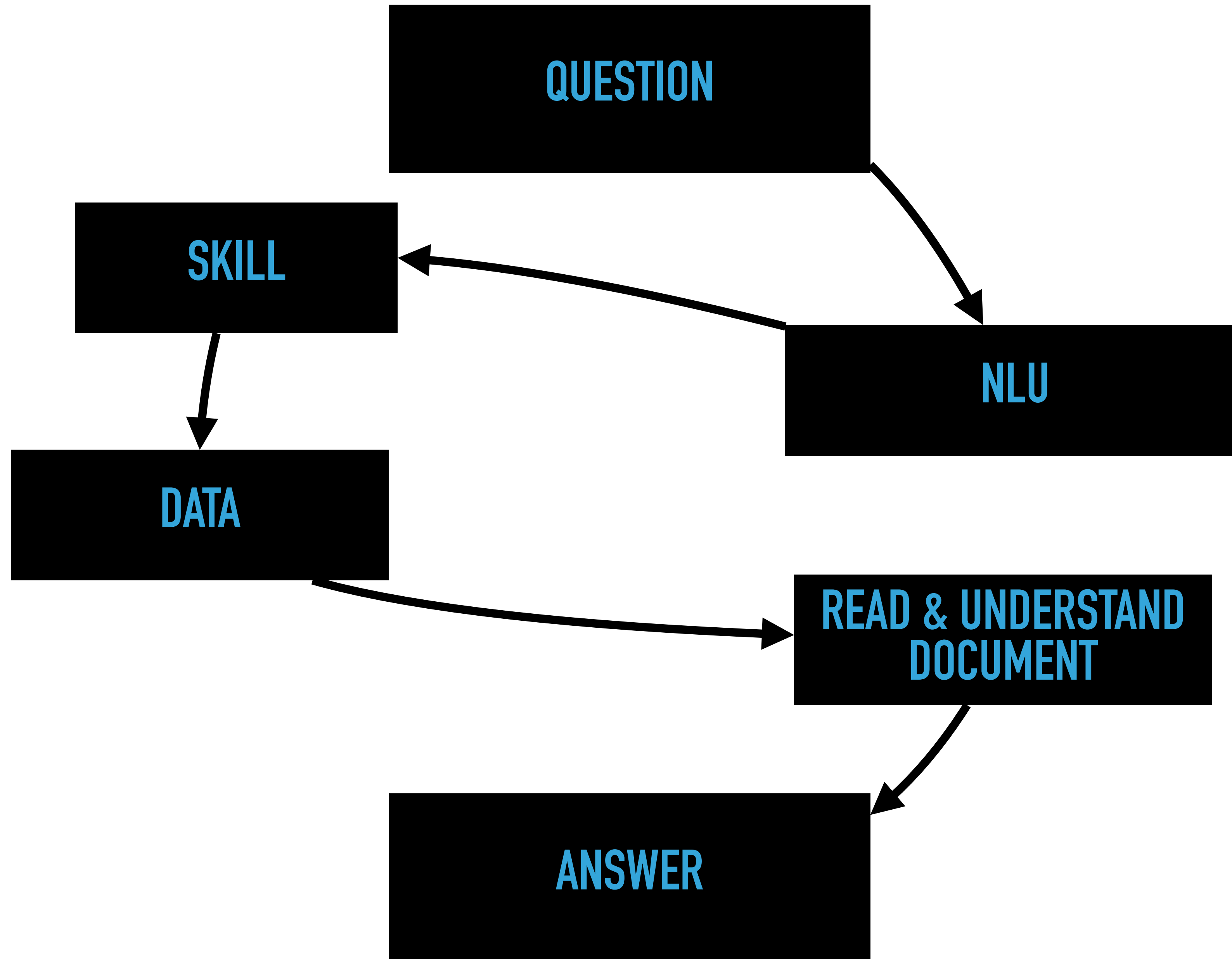
AUTOMATICALLY CREATE AN ANSWER:



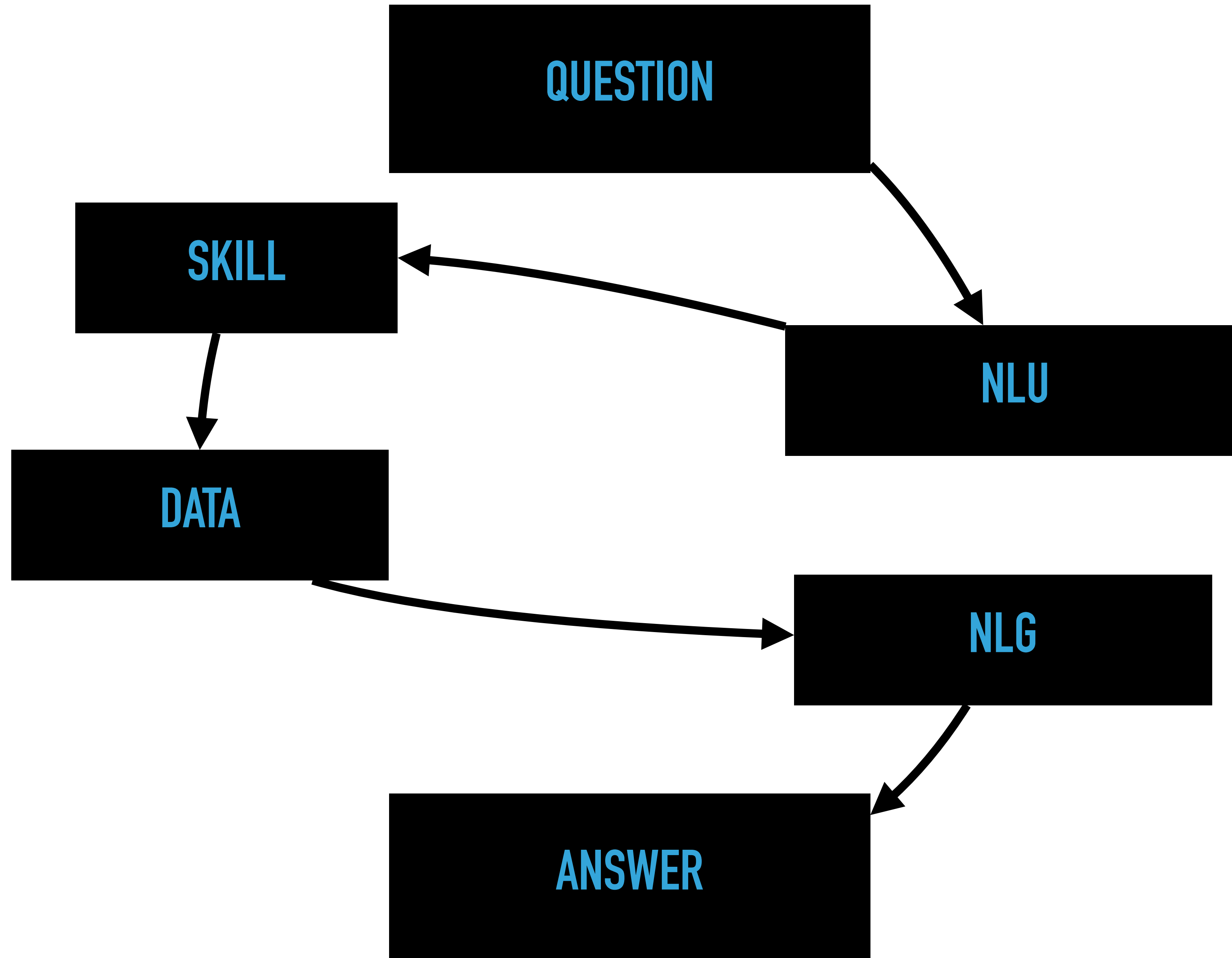
AUTOMATICALLY CREATE AN ANSWER:



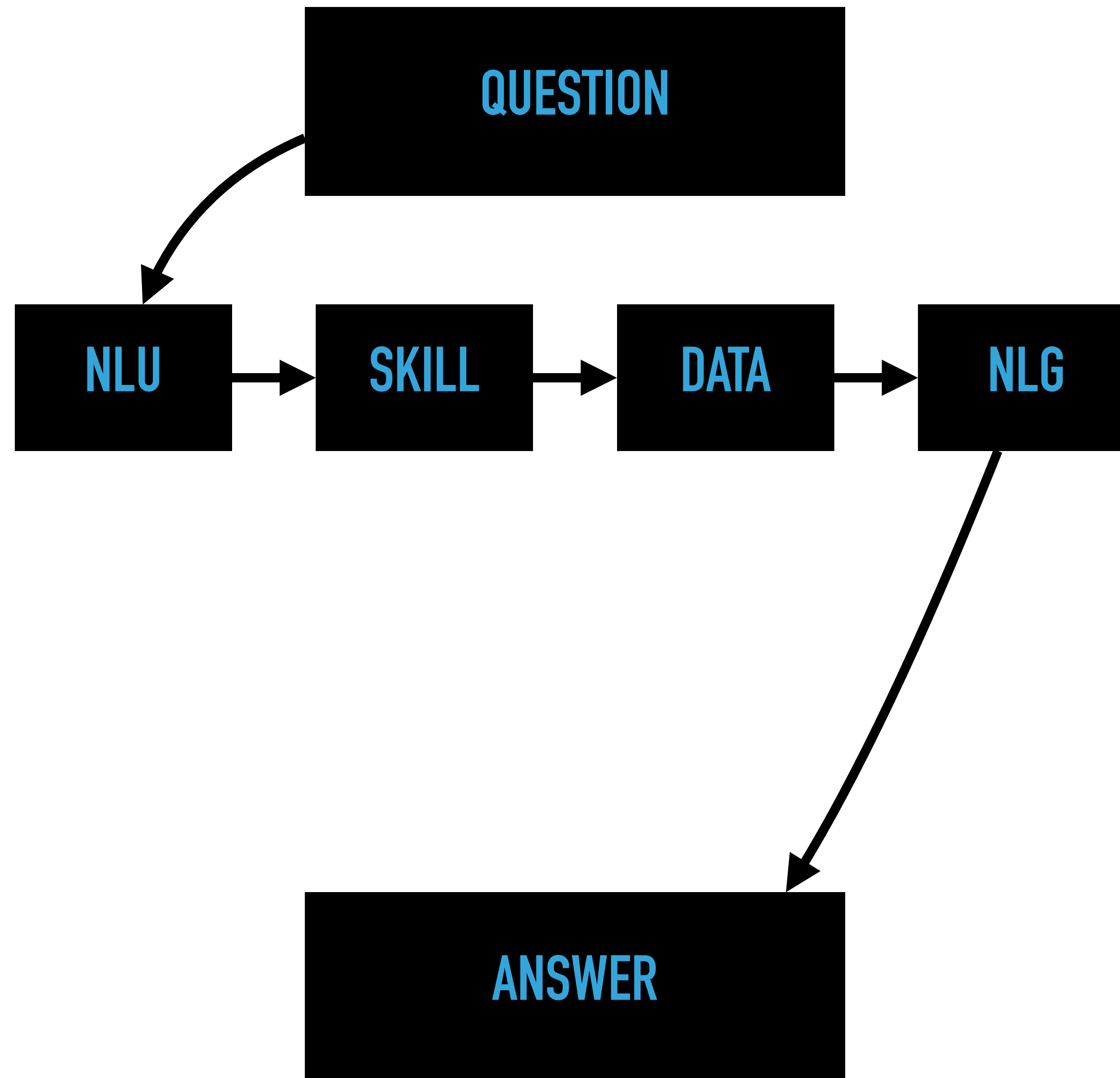
AUTOMATICALLY CREATE AN ANSWER:



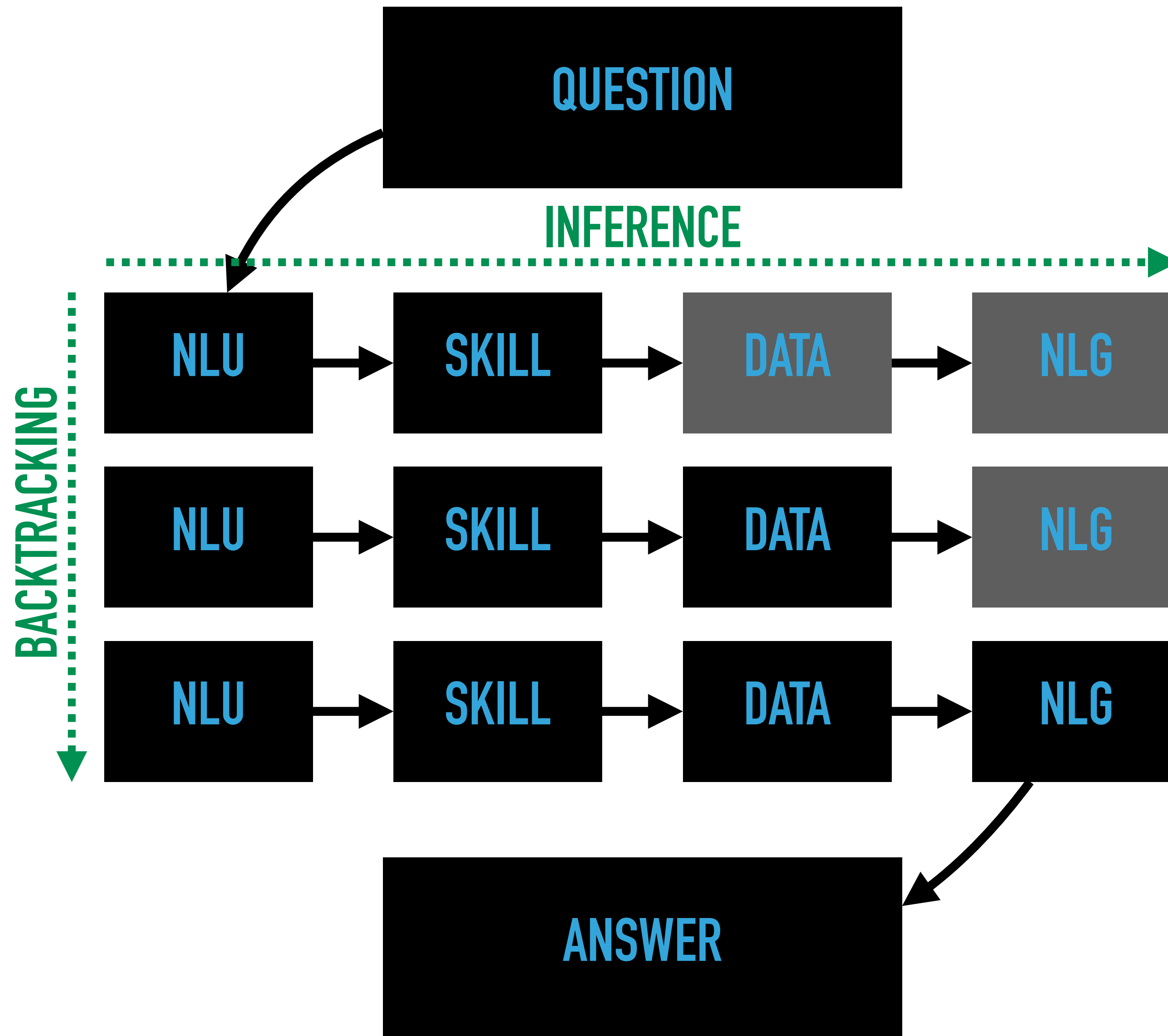
AUTOMATICALLY CREATE AN ANSWER:



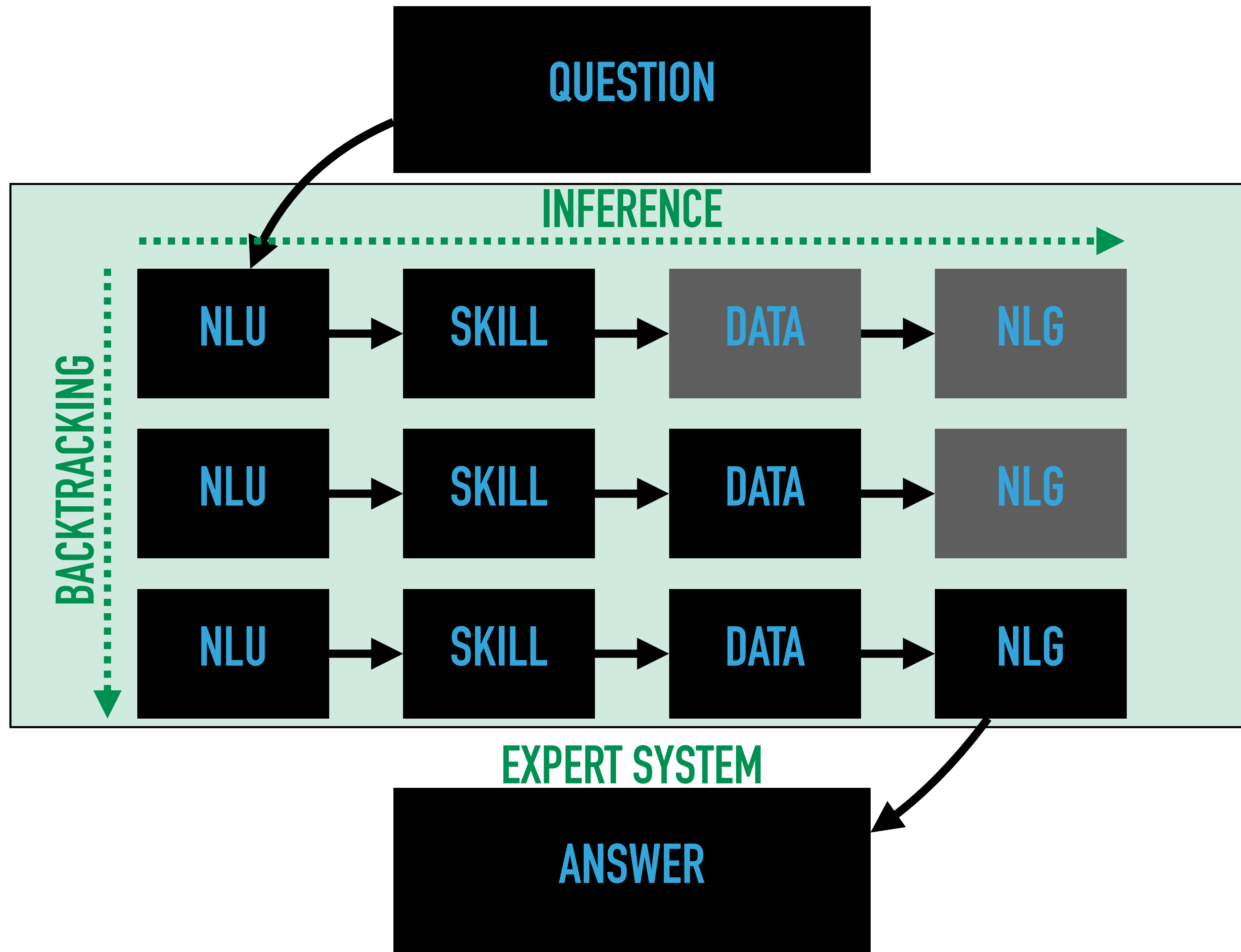
AUTOMATICALLY CREATE AN ANSWER:



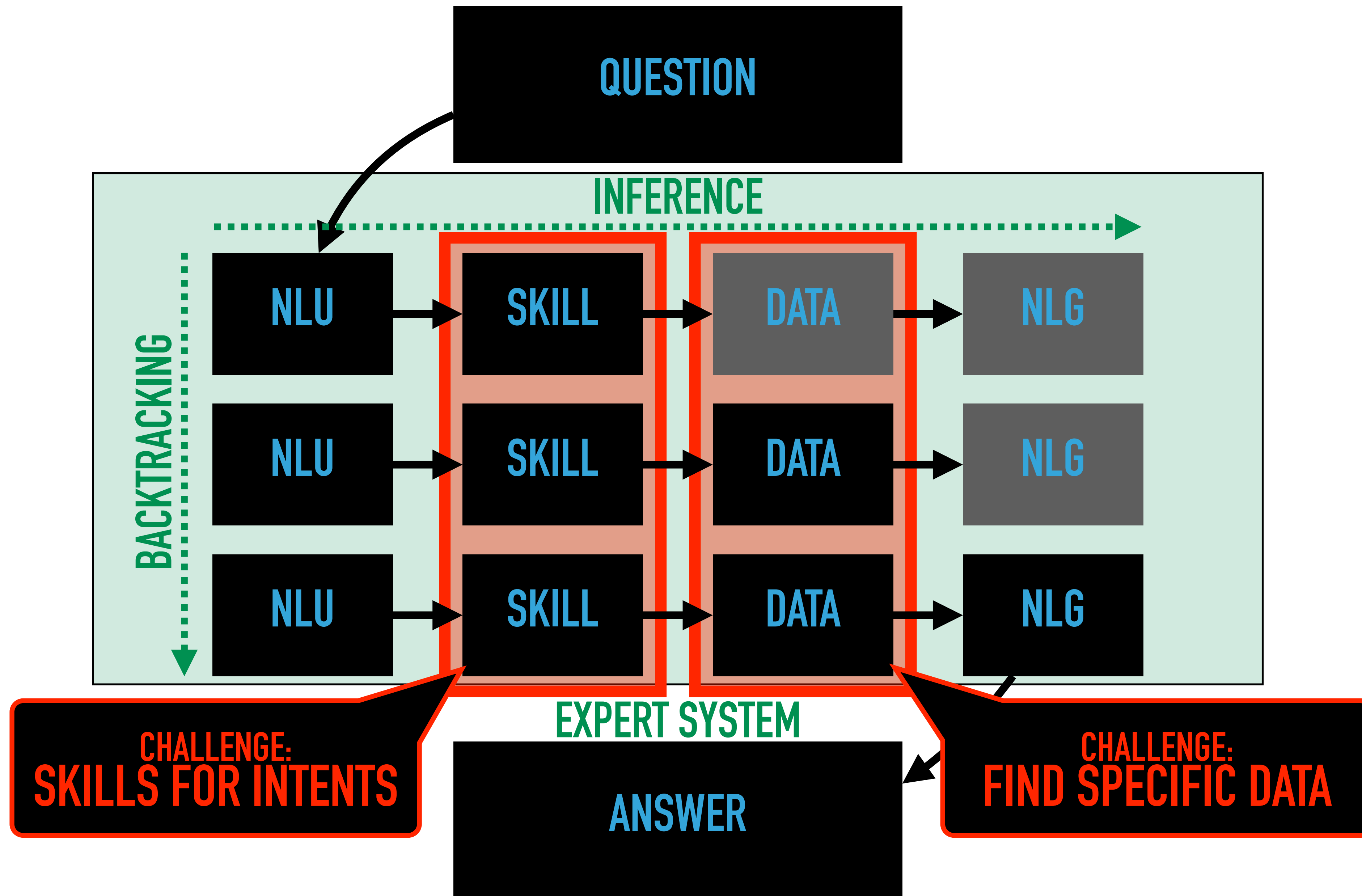
AUTOMATICALLY CREATE AN ANSWER:



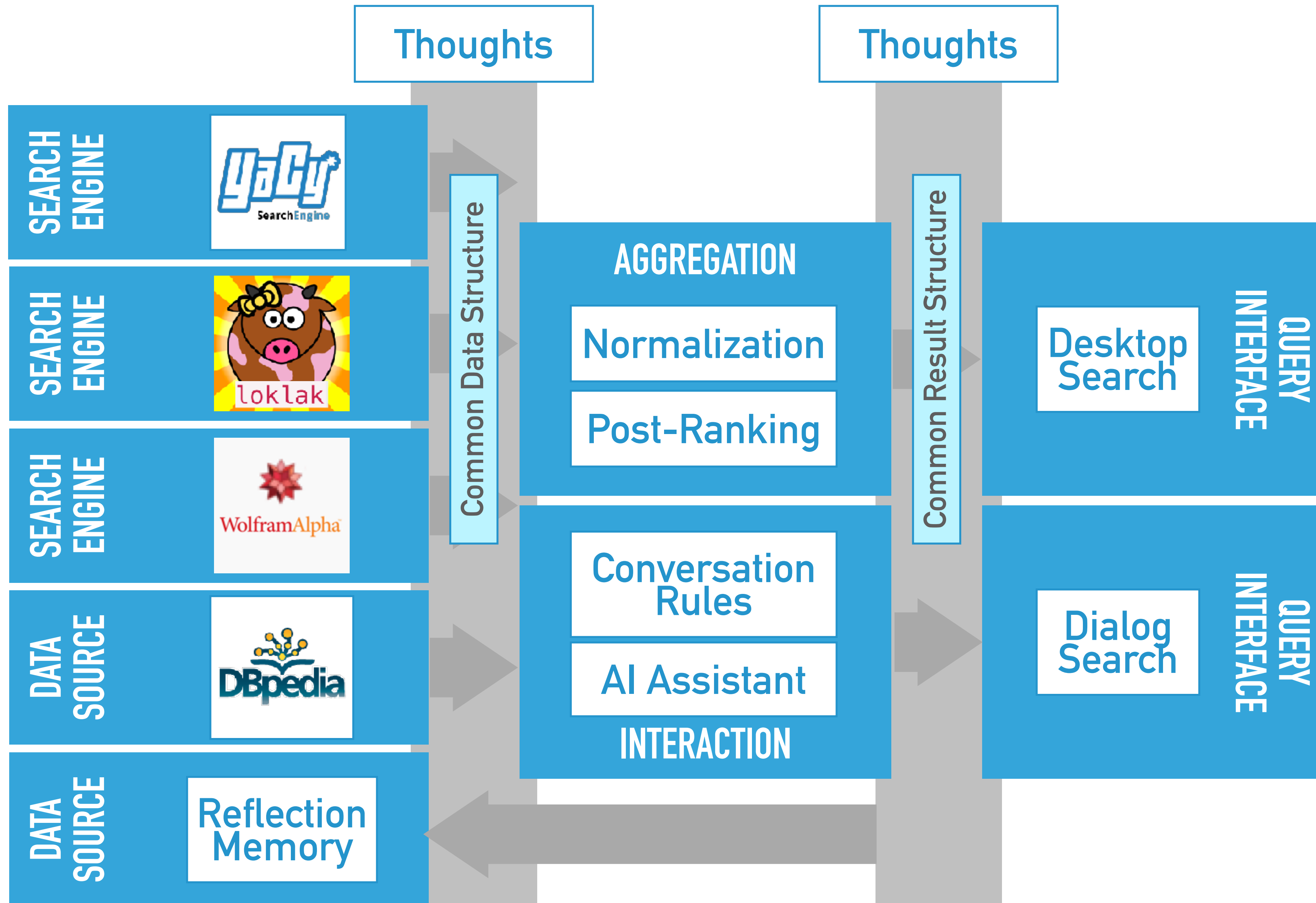
AUTOMATICALLY CREATE AN ANSWER:



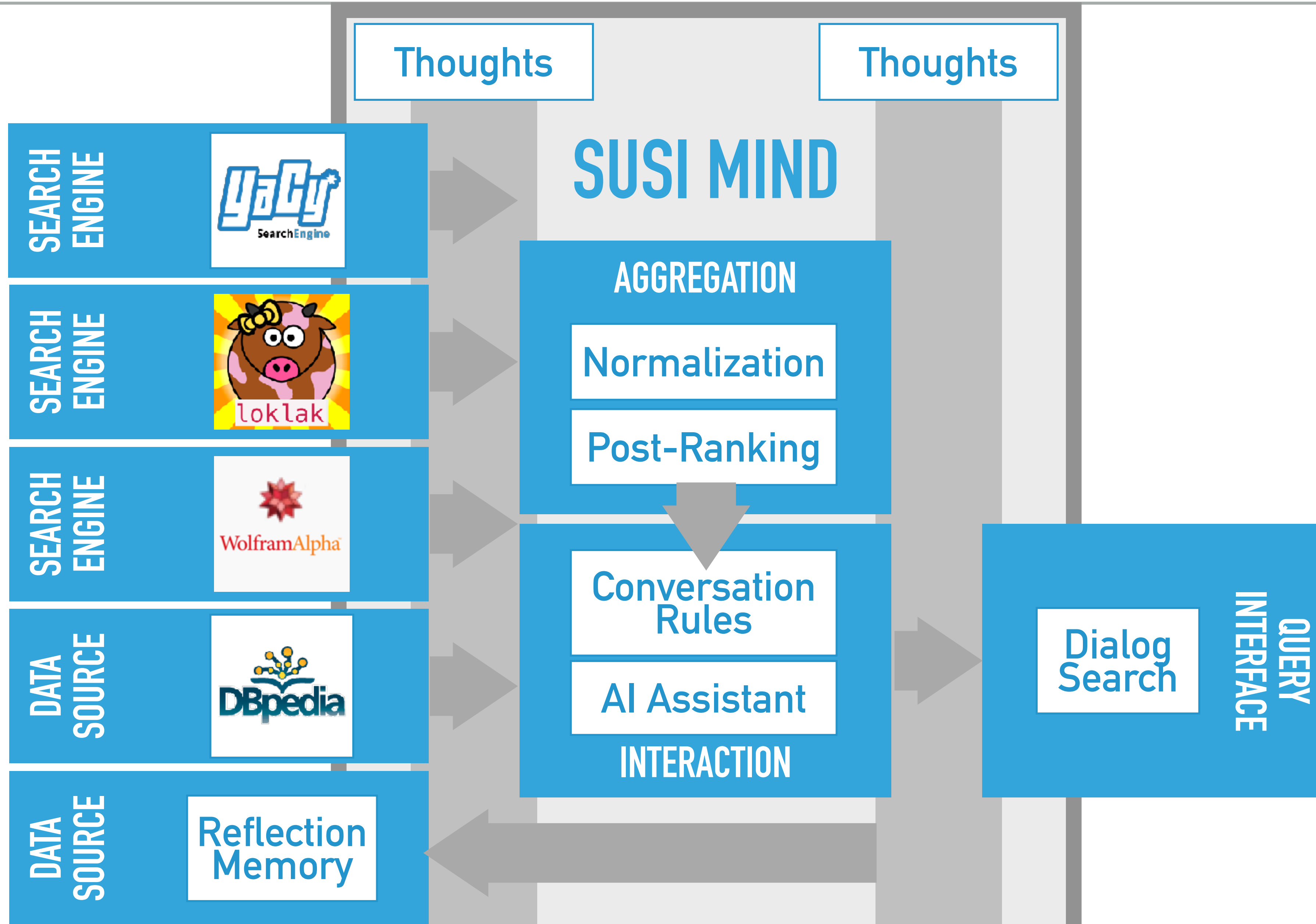
AUTOMATICALLY CREATE AN ANSWER:

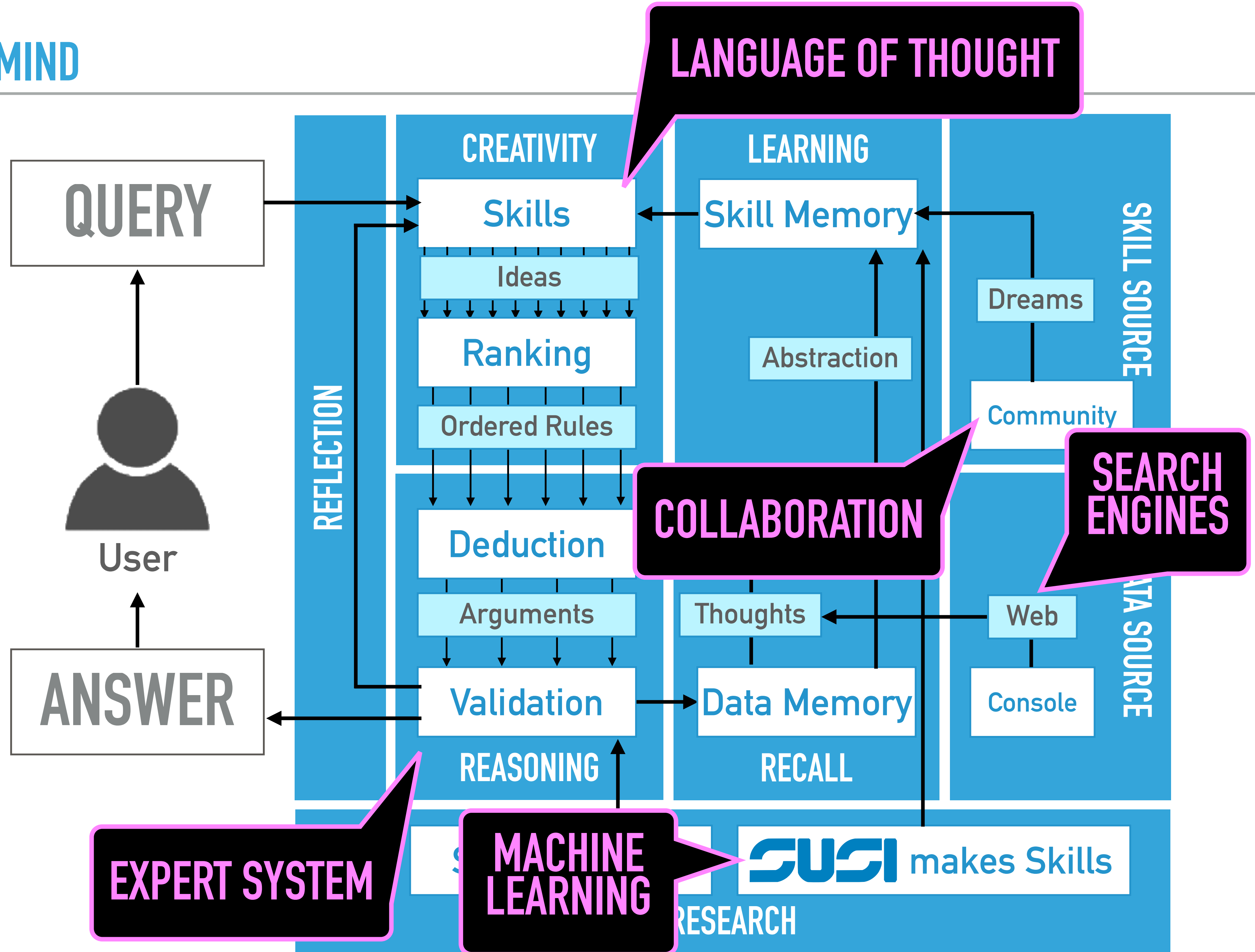


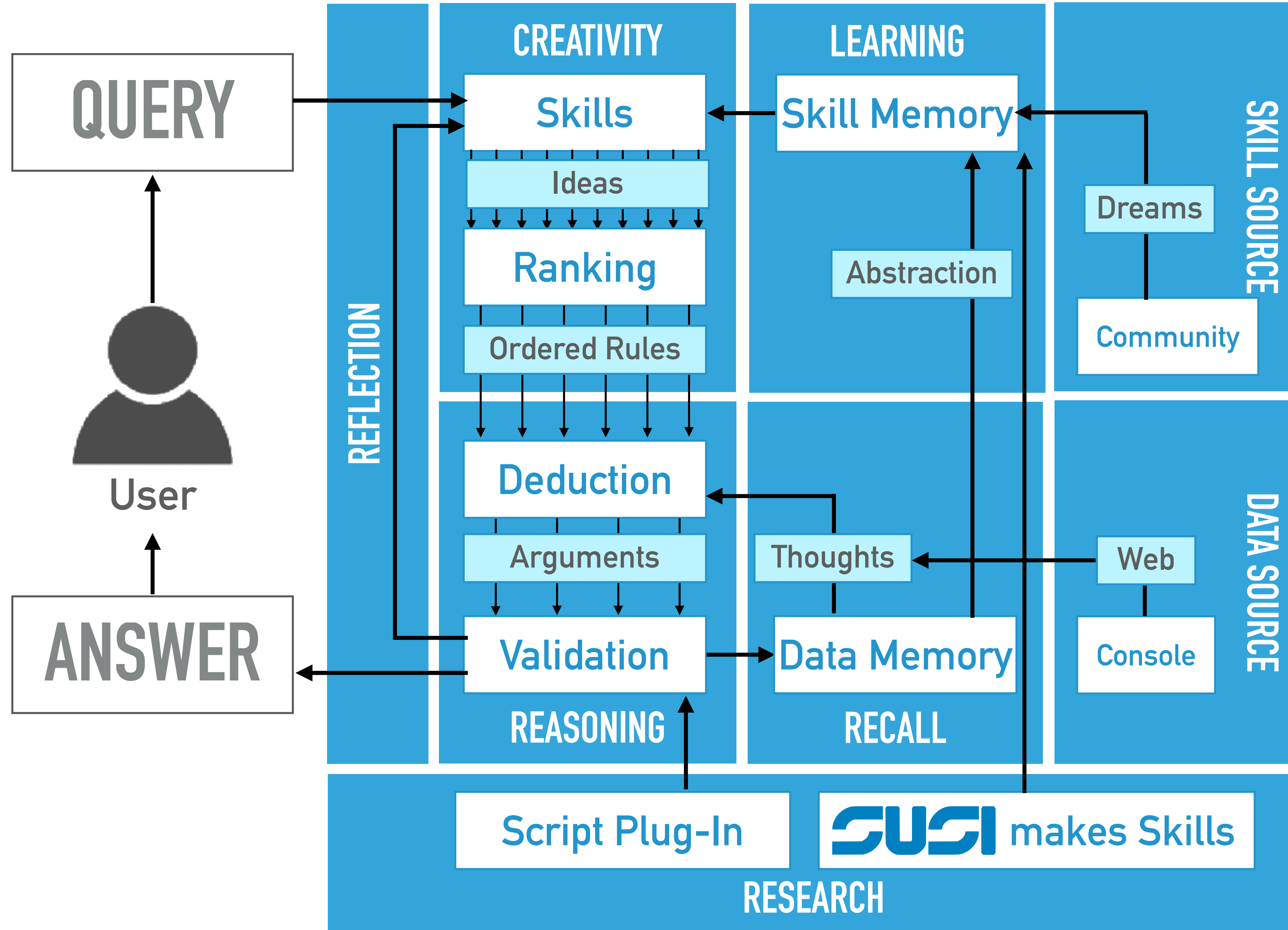
SUSI: DESIGNED AS A SEARCH AGGREGATION SERVICE



SUSI: DESIGNED AS A SEARCH AGGREGATION SERVICE







SUM-UP OF CHALLENGES

ONGOING:

LARGE LIBRARY OF SKILLS

MISSING:

DECISION TREES, BACKTRACKING

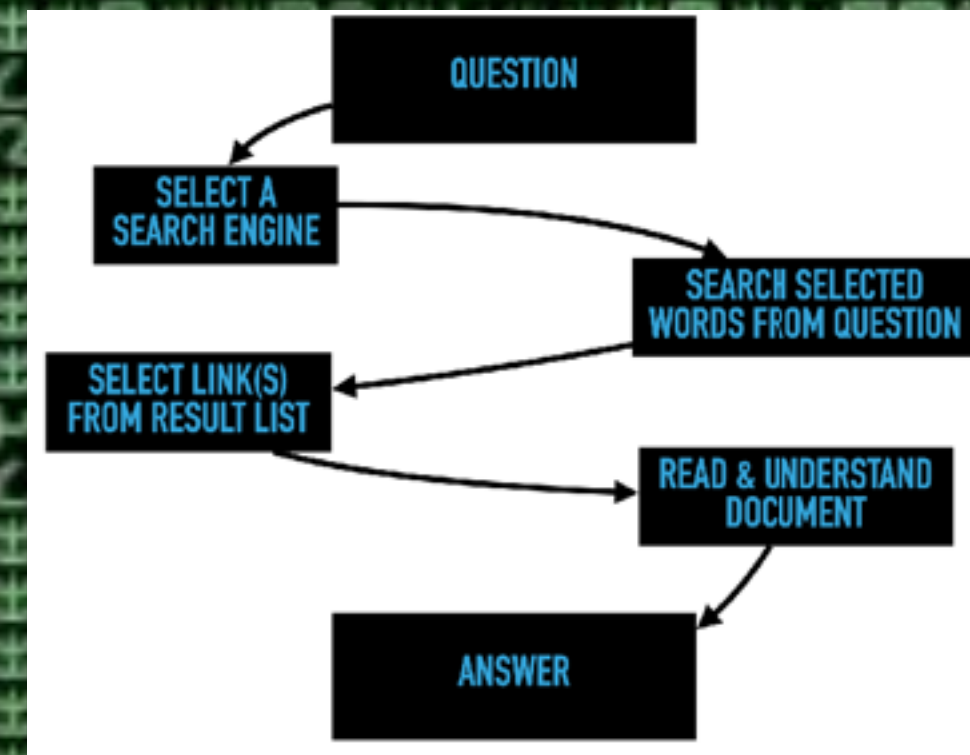
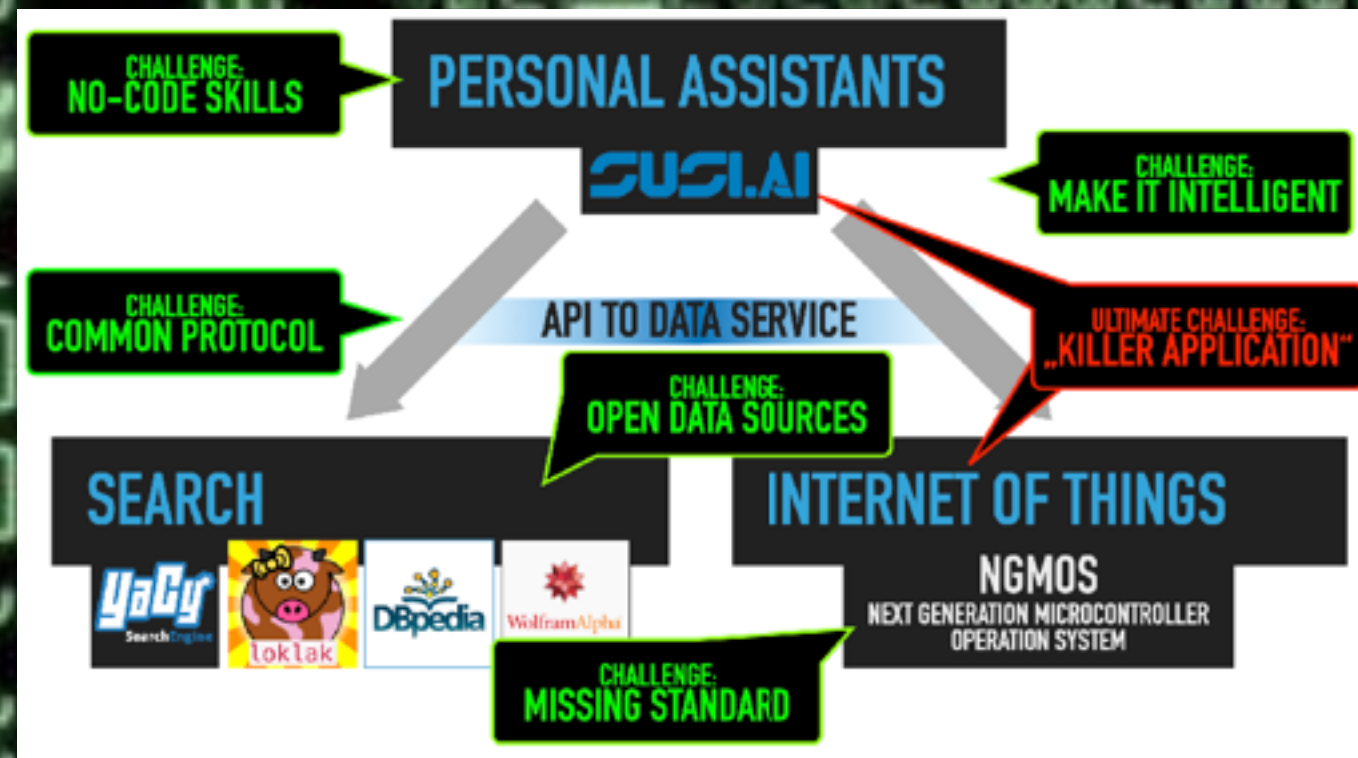
IDEA / PROPOSAL:

A STANDARD FOR ESP8266-LIKE DEV.

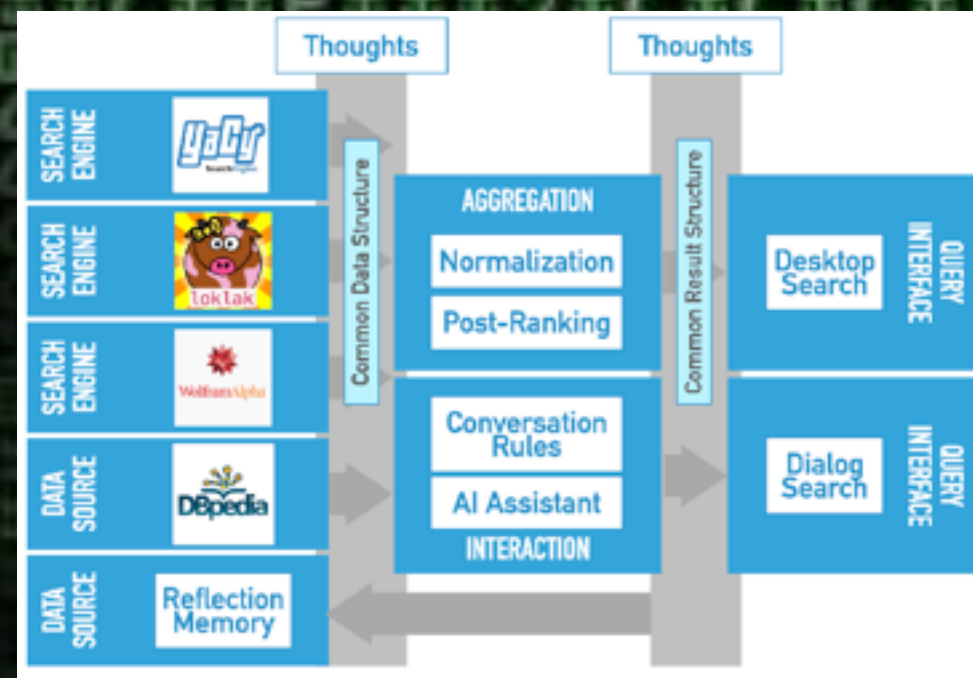
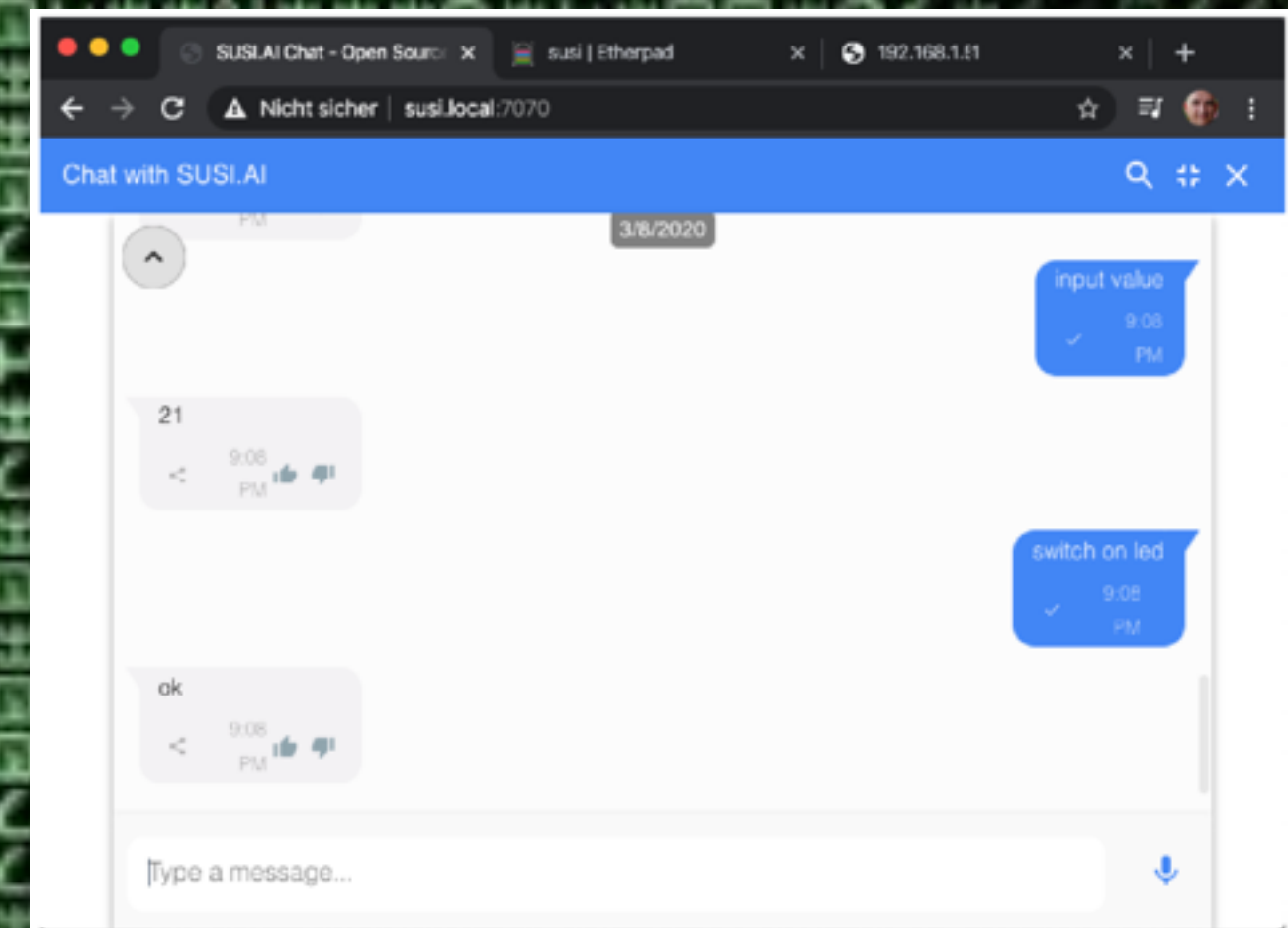
BIGGEST CHALLENGE:

ON-DEVICE TTS+STT

SEARCH AND IOT



```
curl -X POST -d '{"q": "what is the capital of Russia?"}' http://192.168.1.51
```



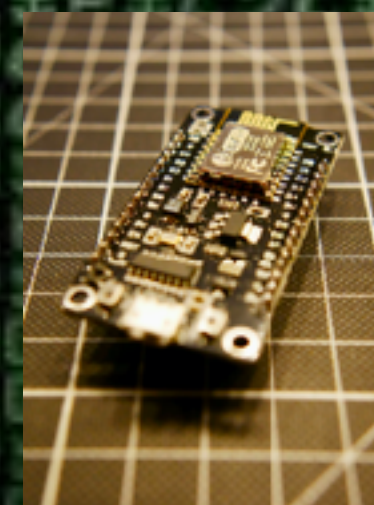
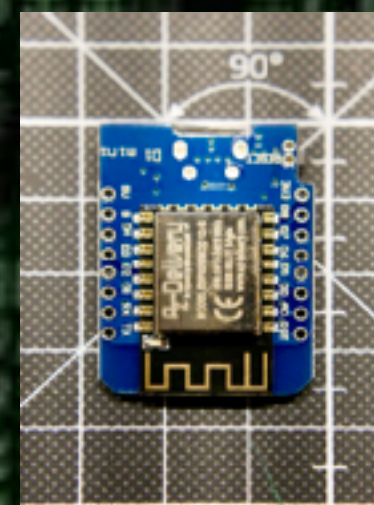
```
SET UP IO PORTS
// ...

INITIALIZING IO PORTS
// ...

INITIALIZING WIFI
// ...

HTTP SERVER
// ...

JSON SERVICE FOR IOT
// ...
```



```
input | analog input | input value
console.log($?)

switch on led
console.ok

switch off led
console.ok

// ...
```