Mycroft AI - The Open Source Privacy- Focused Voice Assistant

Development of an Event Finder Skill

by Christian Binkert, February 2022

Agenda

1. Problem
2. Solution
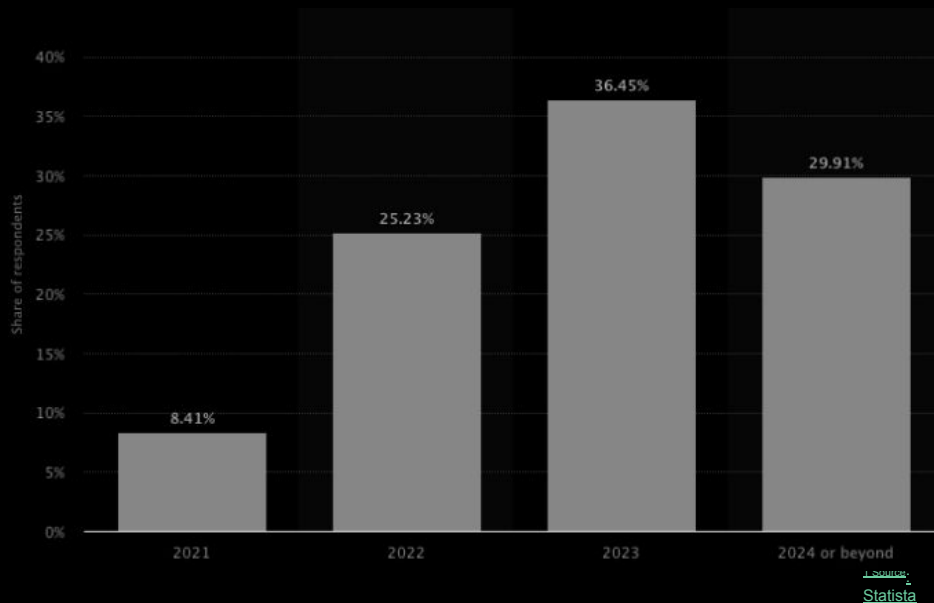3. Technical Implementation

Massive, industry-wide cuts across the events industry with the Corona outbreak:

- Sport events
- Live concerts
- Trade fairs
- Private events like weddings, graduation ceremonies

Expected return to 100% pre-covid revenue

Tough comeback after absolute ground zero, as one third expects business to recover in 2025.

Source: Statista

Solution

Introduction of the Event Finder Skill to:

- Provide an easy, state of the art possibility to find the current / upcoming / closest events that suit you by using the Mycroft voice-assistant.
- Thereby fostering the actual return and re-adoption of the society to well, just go out again.
- And eventually, helping the event industry to return faster to pre-covid revenue!

Potential "upside":

- *"Popular Skills are popular because people use them frequently"*[1] → The Event Finder Skill could be used weekly.
- Neither Mycroft nor Alexa provide that skill yet.
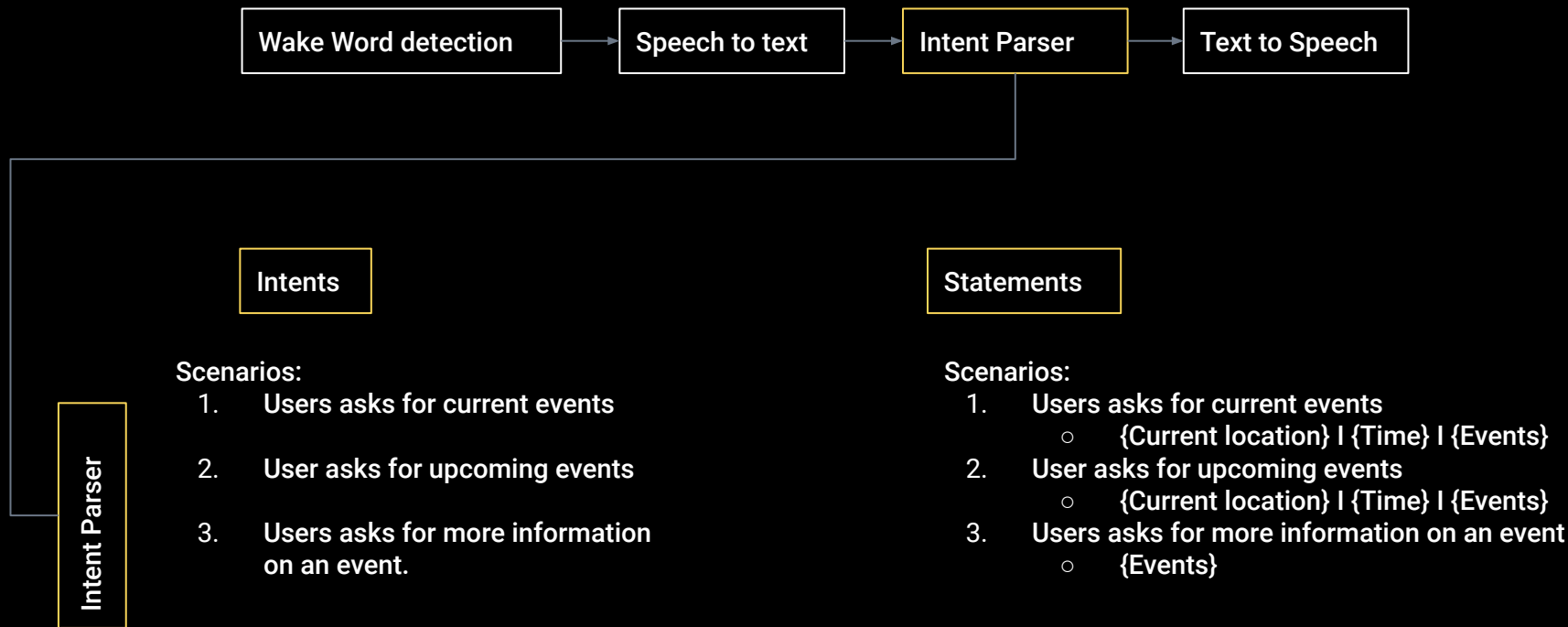
User:
"What events are taking place soon in stuttgart?"
😏

Mycroft:
"Helene Fischer will soon be in Stuttgart." 💃

Technical Implementation

Skill Type: Information

Wake Word detection	→	Speech to text	→	Intent Parser	→	Text to Speech

Intent Parser

Intents

Scenarios:
1. Users asks for current events

2. User asks for upcoming events

3. Users asks for more information on an event.

Statements

Scenarios:
1. Users asks for current events
   ○ {Current location} I {Time} I {Events}
2. User asks for upcoming events
   ○ {Current location} I {Time} I {Events}
3. Users asks for more information on an event
   ○ {Events}

Technical Implementation

Skill Type: Information

Intents
- .voc
- .intent

Statements
- .dialog

Scenarios:
1. Users asks for current events
   - event.voc: "events I activities"
   - date-time.voc: "today I later"
2. User asks for upcoming events
   - location.voc
   - date-time.voc "in the next days I weeks I months"
   - event.voc
   - forecast.voc
3. Users asks for more information on an event.
   - event.voc

Scenarios:
1. Users asks for current events
   - daily-events-local.dialog: "Awesome {event-type} are held at {location} at {time}."
2. User asks for upcoming events
   - weekly-events-local.dialog
3. Users asks for more information on an event
   - extend-event-info.dialog

Intent Parser

en-en

.
.
.
.
.

de-de

Technical Implementation

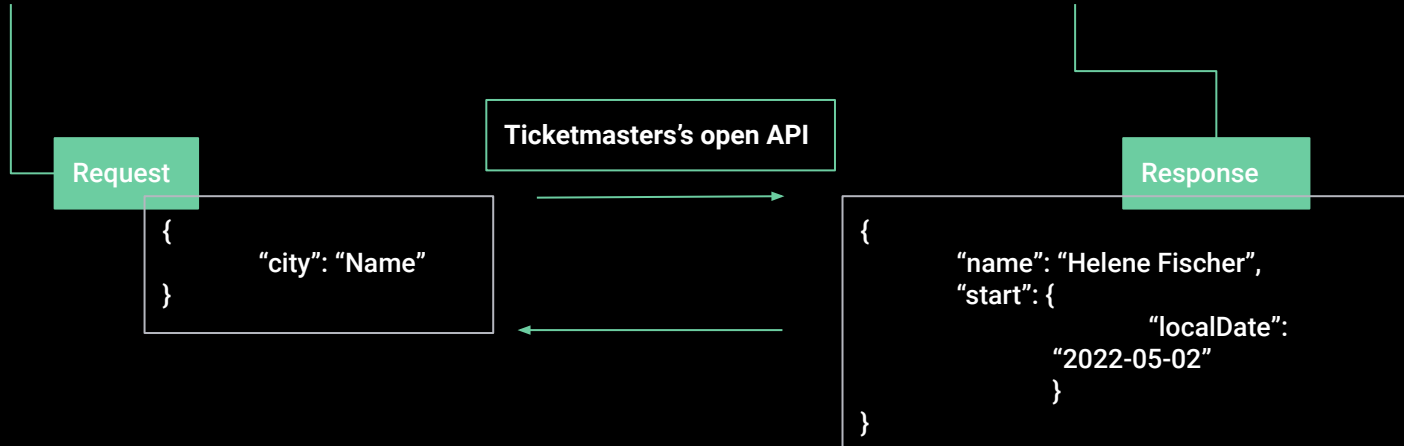Skill Type: Information

Intents

Statements

Intent Parser

Scenarios:
1.   Users asks for current events
        - location.voc
        - date-time.voc
        - event.voc

Scenarios:
1.   Users asks for current events
        ○ daily-events-local.dialog

Ticketmasters's open API

Request

```
{
    "city": "Name"
}
```

Response

```
{
    "name": "Helene Fischer",
    "start": {
            "localDate":
    "2022-05-02"
            }
}
```

Ticketmasters's open API

Skill Type: Information

Query parameters:

Parameter	Description	Type	Default Valu
id	Filter entities by its id	String	
keyword	Keyword to search on	String	
attractionId	Filter by attraction id	String	
venueId	Filter by venue id	String	
postalCode	Filter by postal code / zipcode	String	
latlong	Filter events by latitude and longitude, this filter is deprecated and maybe removed in a future release, please use geoPoint instead	String	
radius	Radius of the area in which we want to search for events.	String	
unit	Unit of the radius	String enum: ["miles", "km"]	miles
source	Filter entities by its primary source name OR publishing source	String enum: ["ticketmaster", " universe", " frontgate", "	

city	Filter by city	Array
countryCode	Filter by country code	String
stateCode	Filter by state code	String
classificationName	Filter by classification name: name of any segment, genre, sub-genre, type, sub-type. Negative filtering is supported by using the following format '-'. Be aware that negative filters may cause decreased performance.	Array
classificationId	Filter by classification id: id of any segment, genre, sub-genre, type, sub-type. Negative filtering is supported by using the following format '-'. Be aware that negative filters may cause decreased performance.	Array
dmaId	Filter by dma id	String

Thank you!