

Welcoming our Bots and AI Overlord

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Quick Summary

<https://qnamaker.ai>

- We used this to take FAQ (LHDN) and feed this as our Knowledge Base

<https://azure.microsoft.com/en-us/services/bot-service/>

- We then use this service to host a bot, and connect to QnA Maker to power the knowledge
- Test the bot here: <https://aka.ms/lhdndemobot>

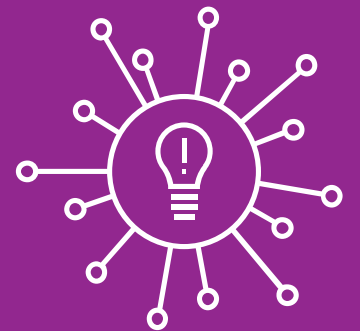
<https://lu.ai>

- We used LUIS to take user texts and translate that into “intents” and “entities”; which we then used to feed into our backend service

<https://azure.microsoft.com/en-us/services/cognitive-services/>

- Cognitive Services is basically adding a “brain-power” to our bot so they can recognize faces, emotions, sentiments, speech-to-text etc!

Making Machine Learning accessible
to every enterprise, data scientist,
developer, information worker, consumer,
and device anywhere in the world.



QnA Maker

Challenges in creating simple FAQ bots

Requires developers

Developers typically aren't SMEs on the knowledge domain

The knowledge base often already exists

I've got better things to do with my time than recreate this

Need to empower knowledge workers

They're, of course, not developers

Enter QnA Maker

Cognitive Service

Creates a queryable endpoint

Simple JSON request & response

Can be used anywhere

Features

Automatically create knowledge base from FAQ page or document

Editable by users

Ragnar

[Download Knowledge Base](#) | [Replace Knowledge Base](#) Save and retrain

Retrained 13 minutes ago

 Publish

Knowledge Base

TEST

Test

Settings

Choose the most appropriate answer from these alternatives.

Like any runners on cours...

Safety gear needs to be w...

None of the above

Chat



Yes, Van 2 is welcome at that start line.

Ragnar · 5 mins ago

can we have only one vehicle?

You · 5 mins ago



Absolutely. Teams often like to use one vehicle to save on costs, fuel consumption, emissions, etc. If you choose to use only one van, remember to place both van numbers in your vehicle so that you are allowed at every exchange.

Ragnar · 5 mins ago

when do we have to wear vests?

You · Now



Safety gear needs to be worn when your leg begins during nighttime hours. If you start at 7:25 pm, you don't need to wear safety gear. If you start at 5:25 am, you need to wear safety gear.


[Download chat logs](#) | [Upload chat logs](#)

Type your message...



Provide multiple alternative phrasings to the question, to broaden the knowledge base.

Add alternative here

when do we have to wear v... 

Use cases

Proof of concept

Quickly add search to a webpage

Enable knowledge workers to update database

Incorporate into an existing bot

Demo

QnA Maker
<https://qnamaker.ai>

Text intents with LUIS

Send a message to Larry
saying I'm doing a great
job.

Intent

Entities

SendMessage(**contact**, **message**)



Tell **Larry** that I'm doing
a great job.

```
SendMessage("Larry", "I'm doing a great job")
```

Training LUIS

Tell Larry that I'm doing a great job

Shoot a message to Mike saying Let's do happy hour

Send a text to my wife saying sorry I forgot our date

Say I'm running late to Bill

New API Features

Versioning

Versioning

- Take a snapshot and create a new version

- Call specific versions

Two endpoints

- Testing & Production

Closed list

White list of entities

Guaranteed match

- Machine learning for generalized entities

New and upcoming features

80 intents

In production

Korean

(Target: Feb 5)

New portal

Early-mid February

Demo

LUIS

<https://luis.ai>

Design guidelines

Easy to get caught up in how cool LUIS is

LUIS is not a replacement for your bot

LUIS is not a replacement for logic

LUIS is not a requirement

LUIS is great at determining the user's intent

Key word: intent

Text Analytics

How does the user feel?

Frustrated with the bot?

Happy with the service?

In need of help?

Text Analytics

Language

Sentiment

Key phrases

The run across Golden Gate was gorgeous!

Key phrases:

```
{ "documents":  
  [  
    {  
      "keyPhrases":  
        [ "run", "Golden Gate" ],  
      "id": "0"  
    }  
  ],  
  "errors": []  
}
```

Sentiment:

```
{ "documents":  
  [  
    {  
      "score": 0.9304294,  
      "id": "0"  
    }  
  ],  
  "errors": []  
}
```

Demo

Text Analytics

Getting Started with Azure Bot

<https://github.com/Microsoft/BotBuilder>

My Org Bot – Vacation Reporting

Carrier 9:15 AM 45%

< Chat Me@Work

Report expenses

Report time off

HSA Benefits

Ask me about this

Carrier 9:15 AM 45%

< Chat Me@Work

Report time off

Great! What kind of time off are you reporting?

Vacation

Sick time

Other

Ask me about this

Carrier 9:15 AM 45%

< Chat Me@Work

Report time off

Great! What kind of time off are you reporting?

Vacation

Ok, Vacation time. Tell me what days you will report

Select dates

Ask me about this

Carrier 9:15 AM 45%

< Chat Me@Work

Vacation

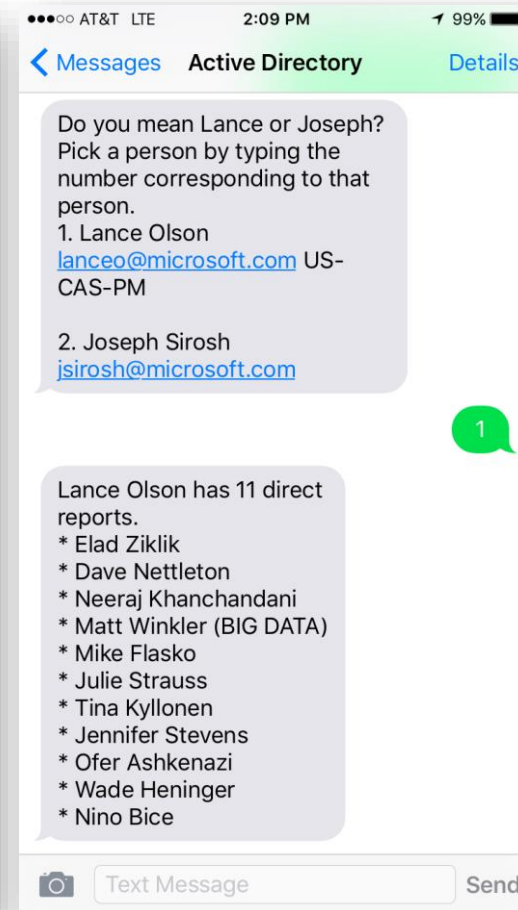
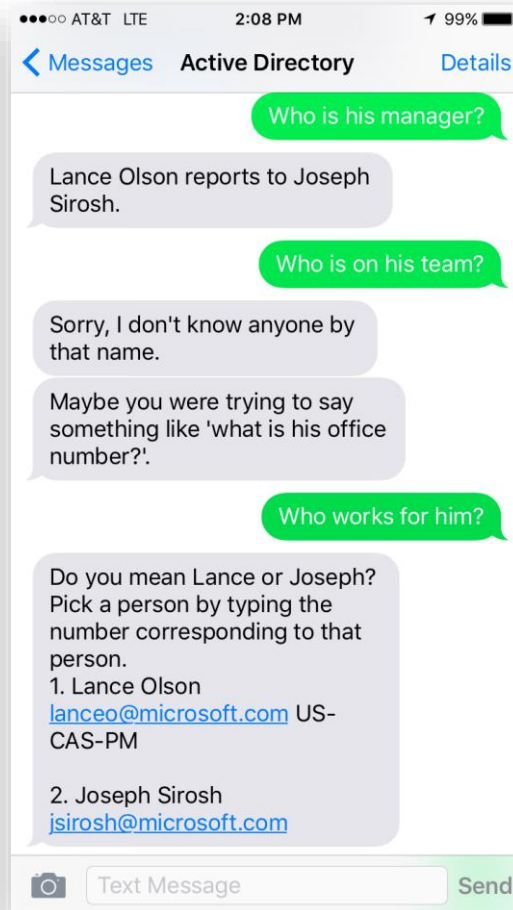
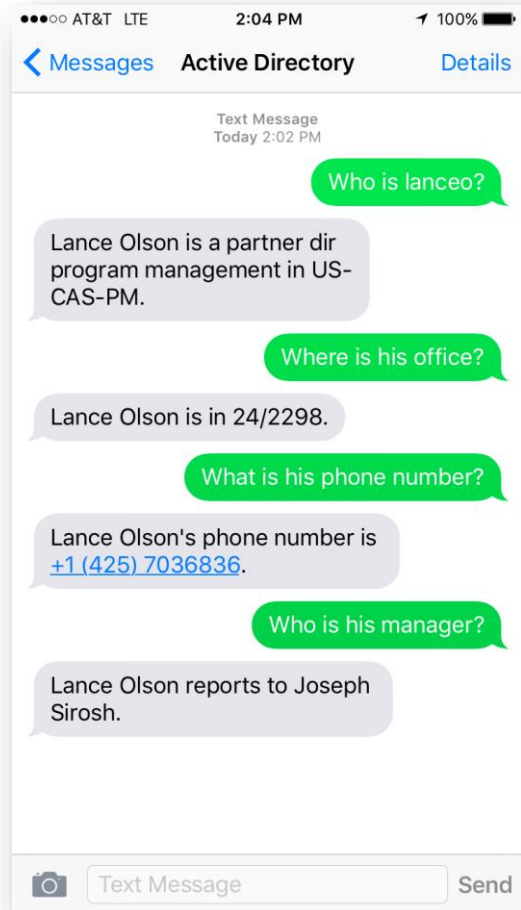
Ok, Vacation time. Tell me what days you will report

Enter dates

September 2016				
M	T	W	T	F
30	31	1	2	3
6	7	8	9	10
13	14	15	16	17
20	21	22	23	24
27	28	29	30	31

Ask me about this

MS Internal AD Bot



Useful Links

Appendix

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