



파이썬으로 만들어보는 챗봇

김영욱 / Hello AI
유튜브 채널: 영욱 스튜디오
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The Microsoft AI platform: Azure & AI

Services



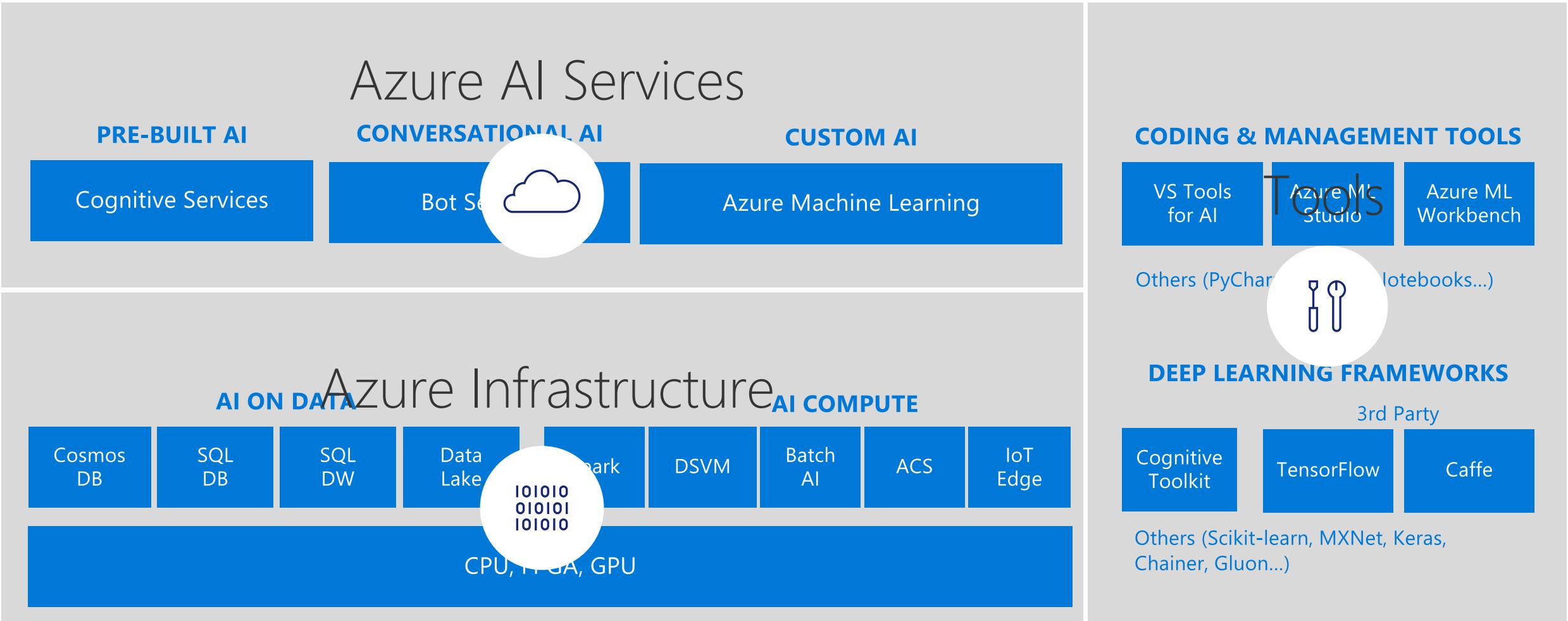
Infrastructure

A white circle containing a grid of blue binary digits (0s and 1s).

Tools

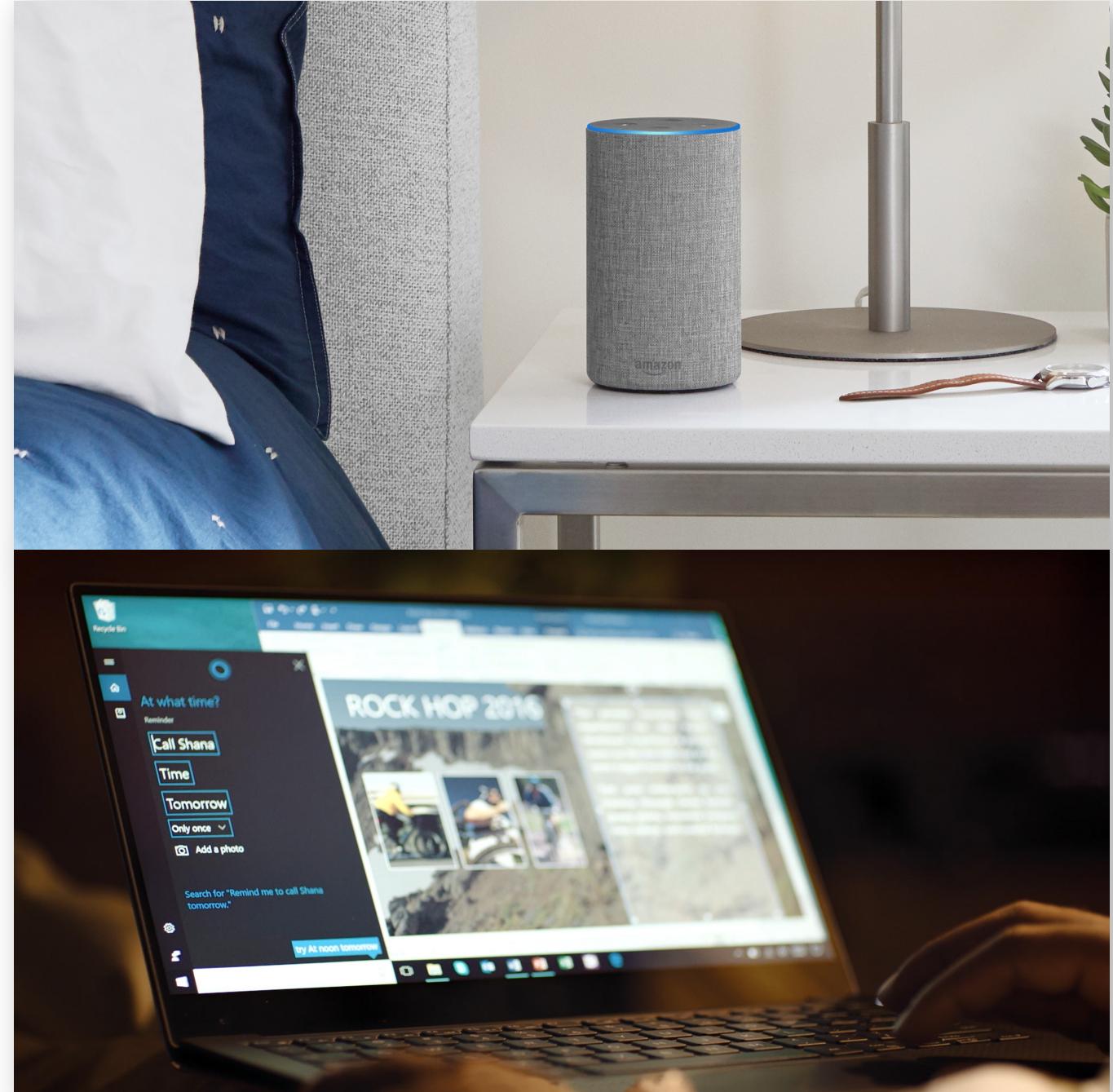


Microsoft AI Platform



Cortana & Alexa

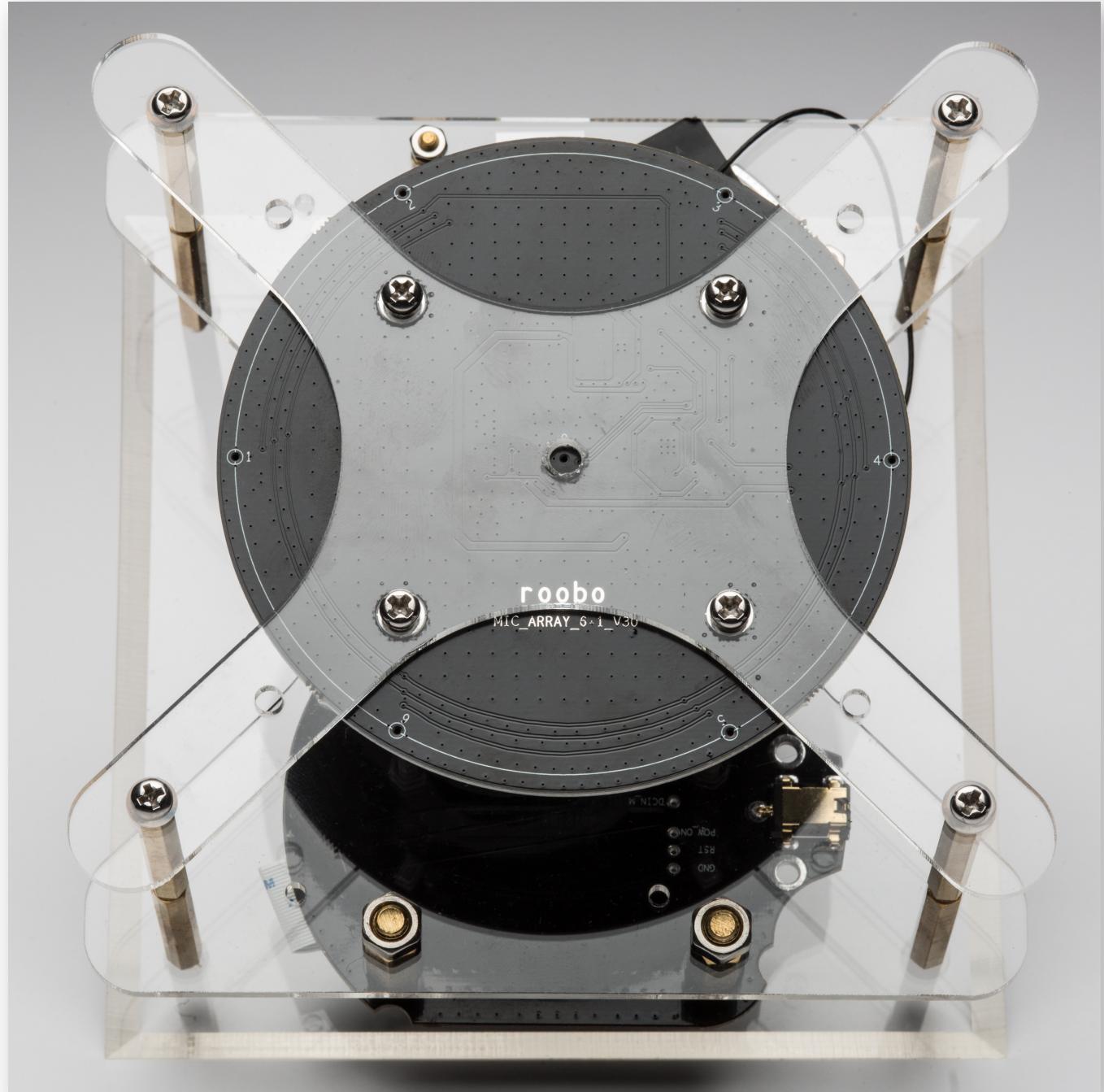
https://aka.ms/cortana_alexa





Azure AI-enabled edge devices

Announcing
Speech Devices SDK
& Reference Kits



Microsoft Azure is the leading hyperscale cloud

62

Azure regions
around the world

● AZURE REGIONS

More than AWS and Google Cloud combined



자세한 내용은 Github

<http://github.com/KoreaEva/Bot>

The screenshot shows the GitHub repository page for 'KoreaEva / Bot'. The top navigation bar includes links for 'This repository', 'Search', 'Pull requests', 'Issues', 'Marketplace', and 'Explore'. Below the header, the repository name 'KoreaEva / Bot' is displayed, along with 'Unwatch' and 'Star' buttons. A navigation bar below shows tabs for 'Code' (selected), 'Issues 0', 'Pull requests 0', 'Projects 0', 'Wiki', 'Insights', and 'Settings'. The main content area contains a message in Korean: '봇과 관련된 정보를 정리합니다.' (I will整理与机器人相关的信息). There is also a 'Add topics' link. At the bottom, summary statistics are shown: '50 commits', '1 branch', '0 releases', and a user icon.

KoreaEva / Bot

Unwatch ▾ 9

Star

Code Issues 0 Pull requests 0 Projects 0 Wiki Insights Settings

봇과 관련된 정보를 정리합니다.

Add topics

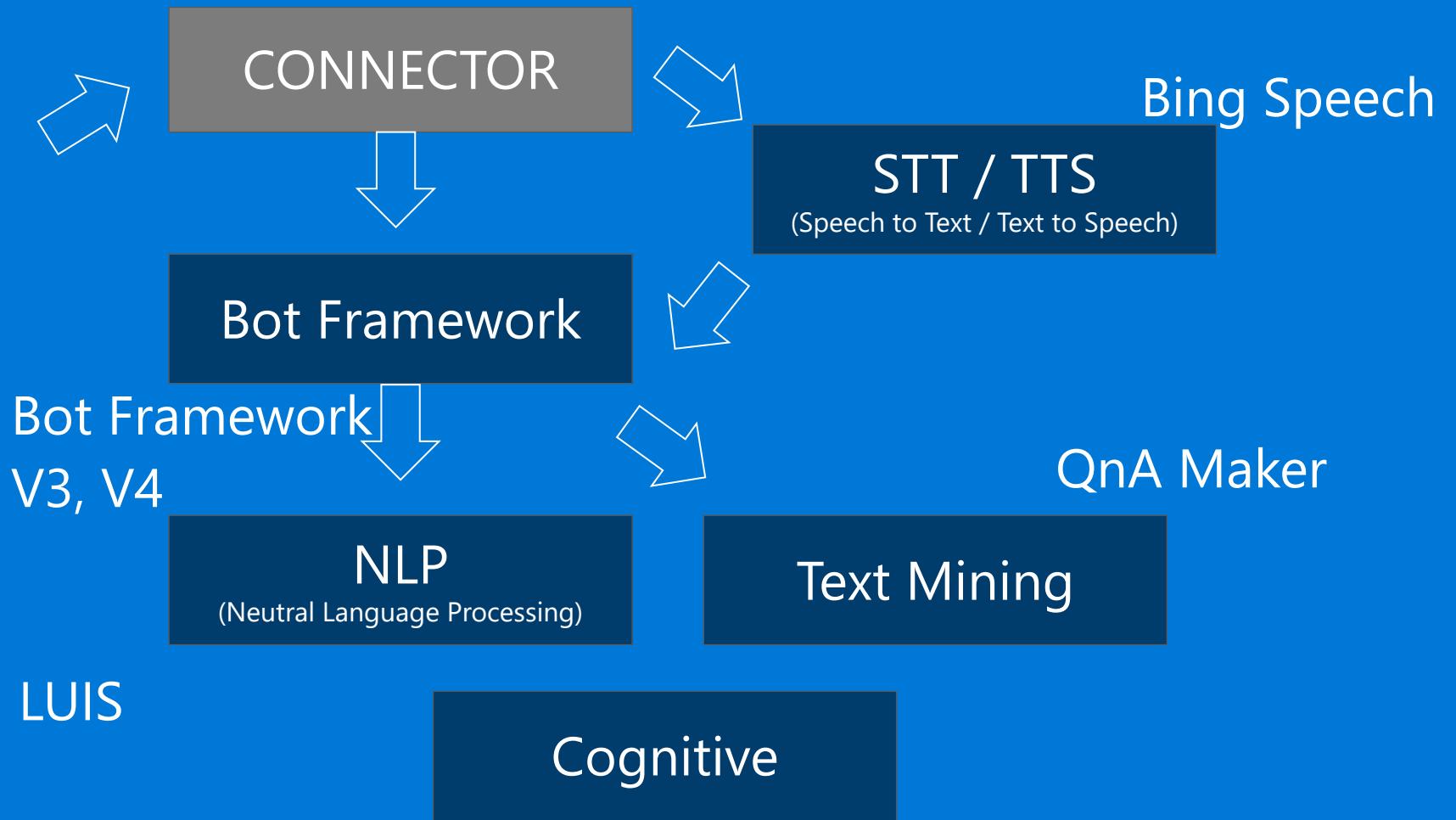
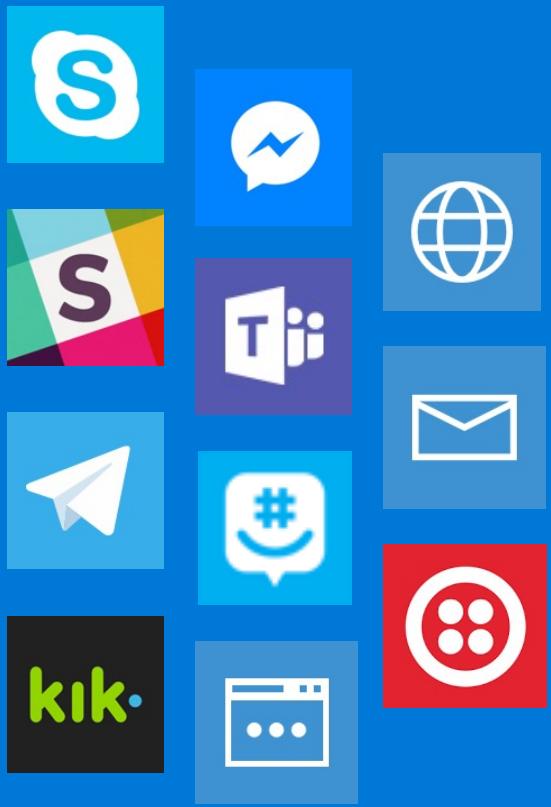
50 commits 1 branch 0 releases

Branch: master New pull request Create new file Upload file Find file

텍스트 기반 챗봇 주요 핵심 기술

관련 기술	주요내용
패턴인식 (Pattern Recognition)	기계에 의하여 도형, 문자, 음성 등을 식별하는 것
자연어처리 (natural Language Processing)	인간이 보통 쓰는 언어를 컴퓨터에 인식시켜 처리하는 일 정보검색 질의 응답, 시스템 자동 번역, 통역 등이 포함됨
시멘틱 웹 (Symantic Web)	컴퓨터가 정보 자원의 뜻을 이해하고 논리적 추론까지 할 수 있는 차세대 지능형 웹
텍스트 마이닝 (Text Mining)	비정형 텍스트 데이터에서 새롭고 유용한 정보를 찾아내 는 과정 또는 기술
상황인식 컴퓨팅 (Context Aware Computing)	가상공간에서 현실의 상황을 정보화하고 이를 활용하여 사용자 중심의 지능화된 서비스를 제공하는 기술.

출처 : 한국정보화진흥원, '모바일시대를 넘어 AI시대로'



The Bot Framework SDK v4 is an [Open Source SDK](#) that enable developers to model and build sophisticated conversations using their favorite programming language.

This article summarizes key new features and improvements in Bot Framework and Azure Bot Service.

Item	C#	JS	Python	Java
Release	4.12 (GA)	4.12 (GA)	4.12 (GA)	4.6 (Preview 8)
Samples	.NET Core , WebAPI	Node.js , TypeScript , es6	Python	

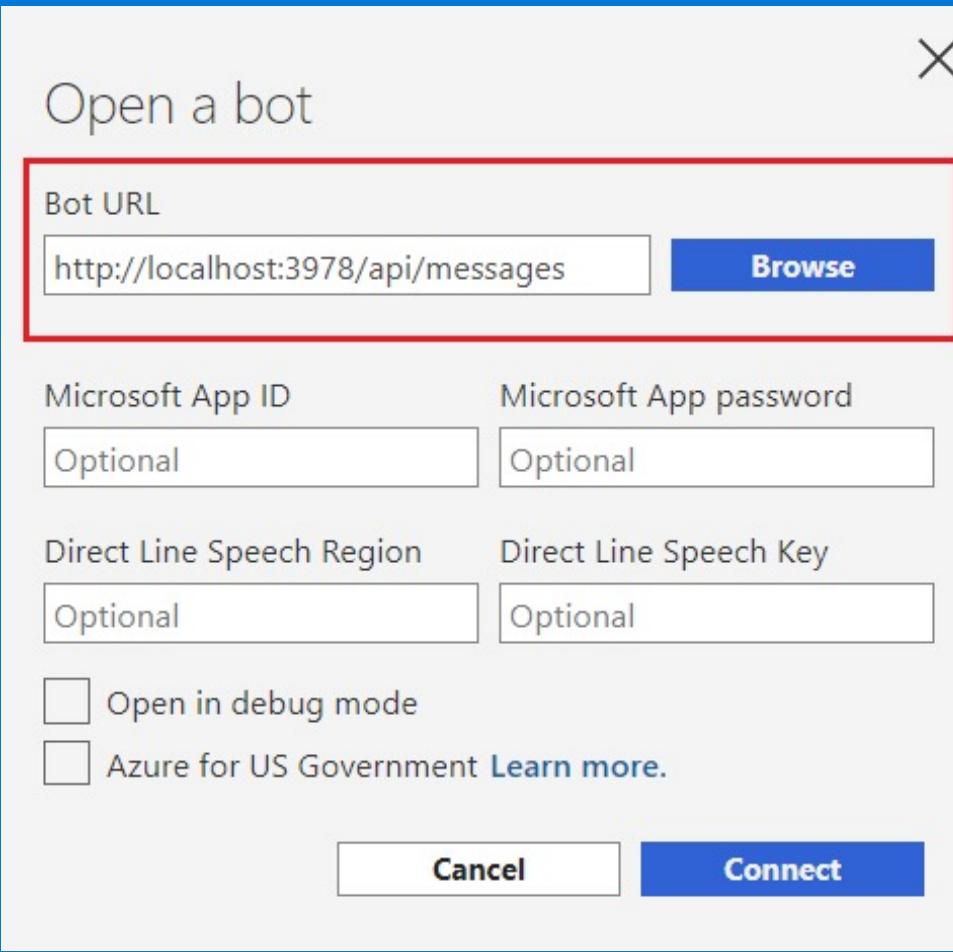
- The Telephony channel is now available with samples in early preview.
- Microsoft Teams - new and improved samples, Adaptive Card tabs, Action.Execute (preview, C#) and Composer support (preview).
- The cloud adapter (preview 2, C#) has improved platform support with increased functionality.
- Orchestrator (preview 3) now supports more languages, and documentation has been improved.
- Bot Framework CLI Tools - LUIS applications neural training technology support, and more!
- Azure Health Bot - Microsoft Healthcare Bot service is moving to Azure, further empowering organizations to benefit from Azure's enhanced tooling, security, and compliance offerings.
- Power Virtual Agents - Bot creation, editing and publishing made easy!

```
pip install botbuilder-core  
pip install asyncio  
pip install aiohttp  
pip install cookiecutter==1.7.0
```

```
cookiecutter https://github.com/microsoft/BotBuilder-Samples/releases/download/Templates/echo.zip
```

```
bot_name [my_chat_bot]: echo-bot
bot_description [Demonstrate the core capabilities of the Microsoft Bot Framework]:
    A bot that echoes back user response.
```

```
D:\MyEchoBot>python app.py
===== Running on http://localhost:3978 =====
(Press CTRL+C to quit)
```



<https://github.com/Microsoft/BotBuilder-Samples/blob/main/README.md>

The screenshot shows the GitHub page for the 'Bot Framework Samples' repository. At the top left is a blue circular icon containing a white double-headed arrow symbol. To its right, the repository name 'Bot Framework Samples' is displayed in blue text. A large, abstract blue graphic consisting of overlapping triangles is positioned to the right of the title. Below the title, a blue link reads 'Click here to find out what's new with Bot Framework'. The page is divided into sections by horizontal lines: 'Overview', 'Getting the samples', and 'Sample lists'. Under 'Overview', there is a paragraph of text and a code block for cloning the repository. Under 'Getting the samples', there is a brief instruction. Under 'Sample lists', there is a bulleted list of sample categories.

Bot Framework Samples

[Click here to find out what's new with Bot Framework](#)

Overview

This branch contains samples for the released version of the **Microsoft Bot Framework V4 SDK** for [.NET](#), [JS](#) and [Python](#). If you need samples for the Bot Framework V3 SDK, go [here](#).

Getting the samples

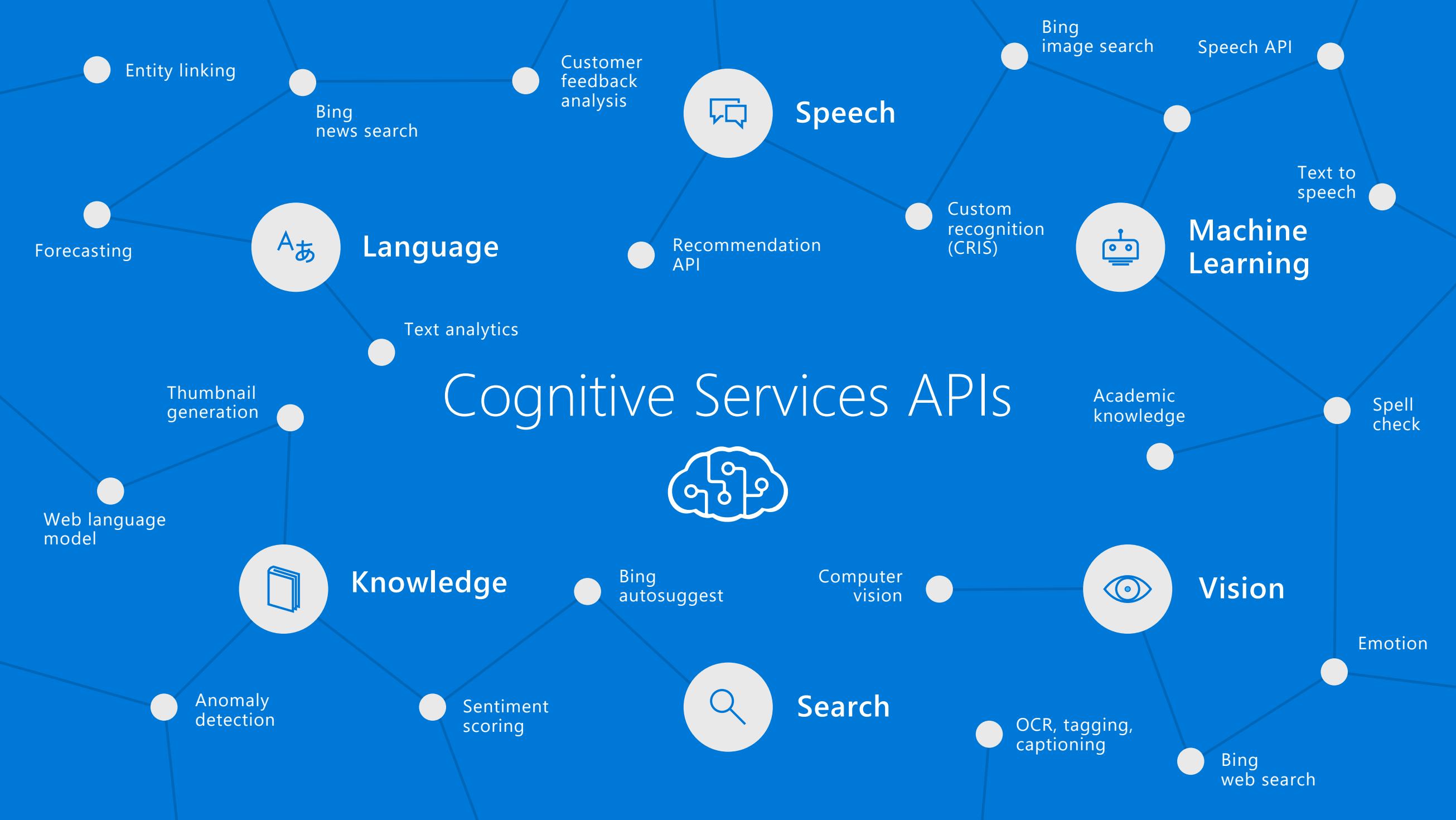
To use the samples, clone this GitHub repository using Git.

```
git clone https://github.com/Microsoft/BotBuilder-Samples.git  
cd BotBuilder-Samples
```

Sample lists

Samples are designed to illustrate functionality you'll need to implement to build great bots!

- [Bot essentials](#)
- [Advanced bots](#)
- [Authentication samples](#)



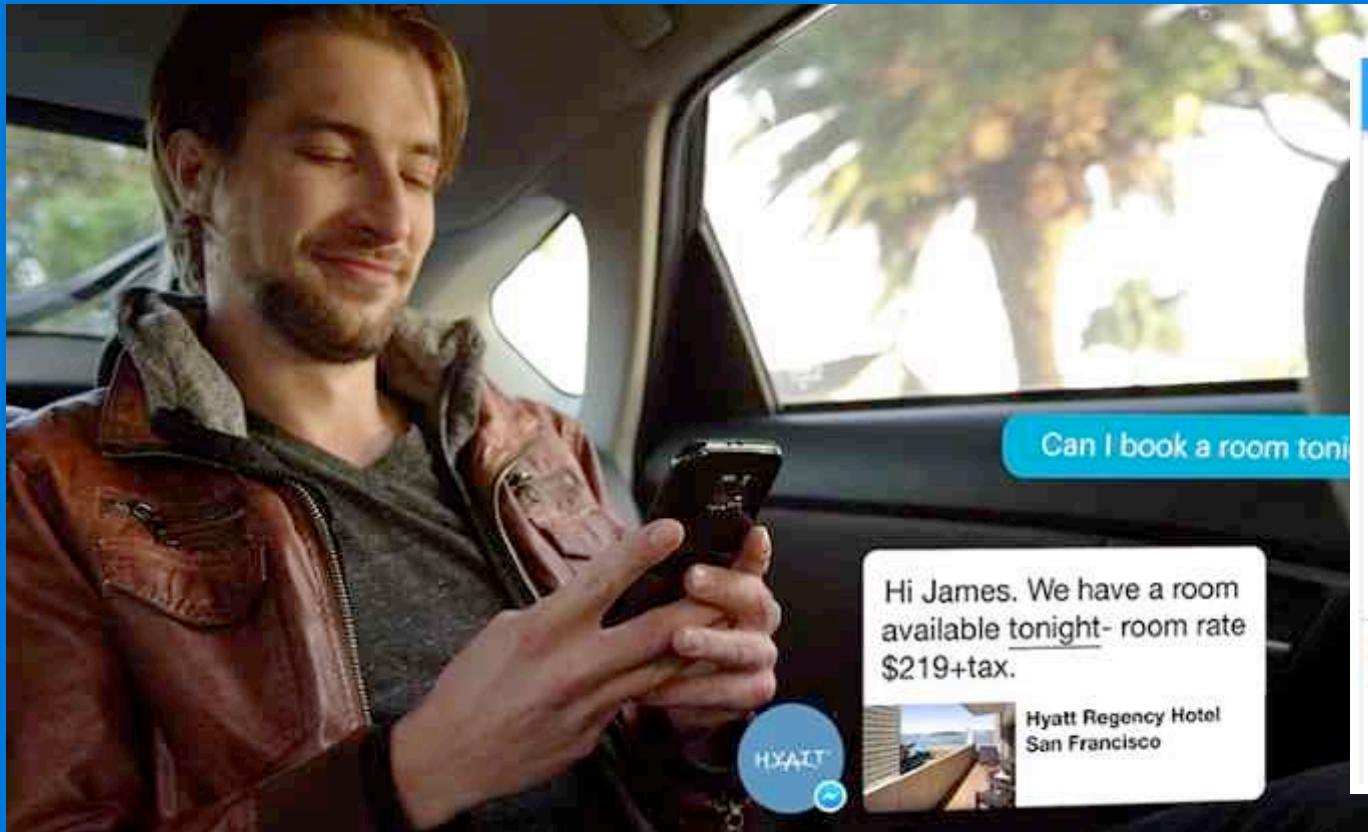
Cognitive Services

microsoft.com/cognitive

Vision	Speech	Language	Knowledge	Search
Computer Vision	Custom Recognition	Bing Spell Check	Academic Knowledge	Bing Web Search
Emotion	Speaker Recognition	Linguistic Analysis	Entity Linking	Bing Image Search
Face	Speech	Language Understanding	Knowledge Exploration	Bing Video Search
Video	Translator	Text Analytics	Recommendations	Bing News Search
		WebLM		Bing Autosuggest

<https://www.microsoft.com/cognitive-services/>

NLP



Niki

I Need three veg combo

Yo Darshil! Let me help you buy a burger. As an introductory offer, I am giving away a burger free on every combo.

OK. Have a look at your order summary.
Item: 2 BK Veggie + 1 Pepsi Pet 600 MI + 1 Regular Fries
Quantity: 3

Should I proceed to checkout?

Yes No

Niki

OK. Have a look at your order summary.
Item: 2 BK Veggie + 1 Pepsi Pet 600 MI + 1 Regular Fries
Quantity: 3

Should I proceed to checkout?

No

I request you to provide any detail that you want to change in your current order.

BK Veggie Combo 3
BK Grill Chicken Combo 0

Proceed

Language Understanding (LUIS)

A machine learning-based service to build natural language into apps, bots, and IoT devices. Quickly create enterprise-ready, custom NLP models to help your users interact with your applications.

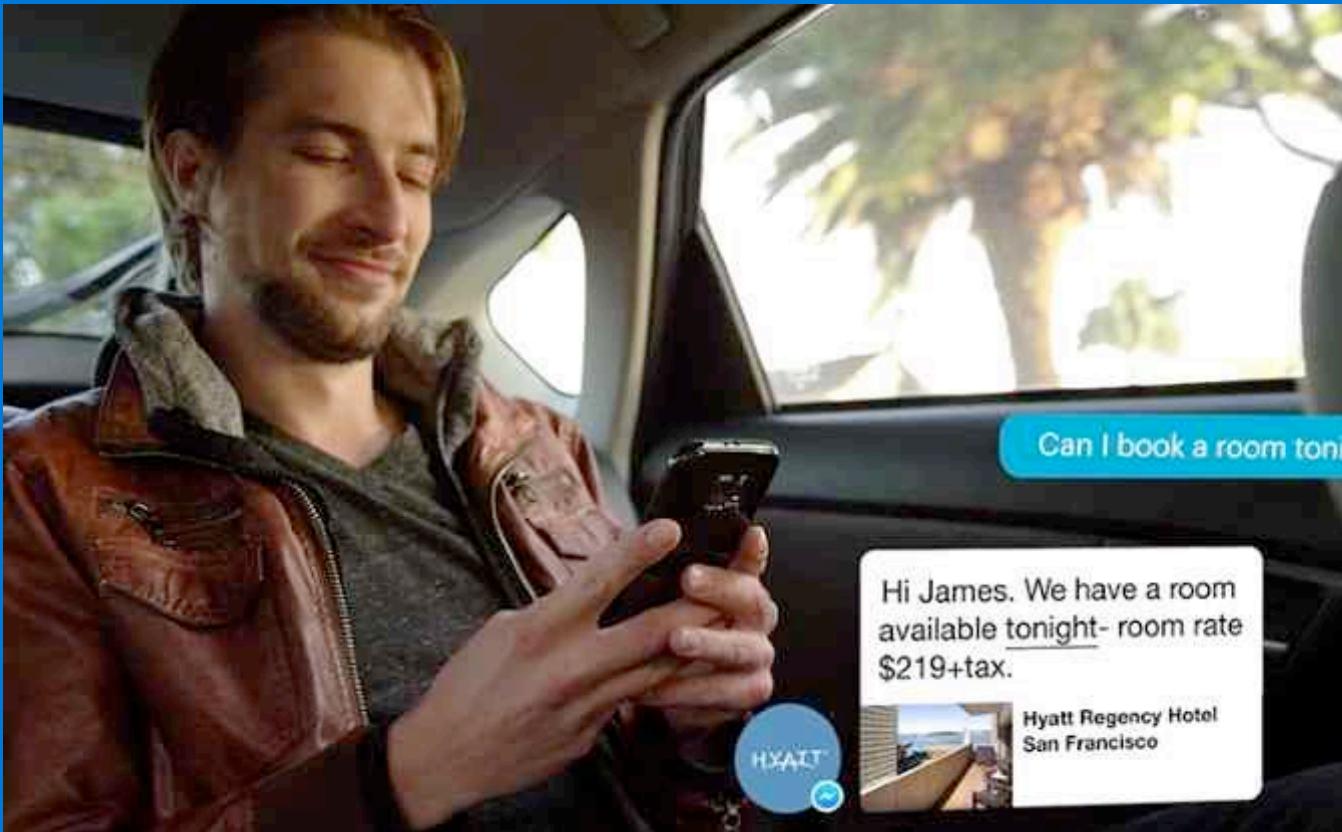
[Login / Sign up](#)

See Language Understanding

What the user says (utterances)

[Book me a flight to Cairo](#)

Text Mining



Can I book a room tonight?

Hi James. We have a room available tonight- room rate \$219+tax.

HYATT

Hyatt Regency Hotel San Francisco

Niki

I Need three veg combo

Yo Darshill! Let me help you buy a burger. As an introductory offer, I am giving away a burger free on every combo.

OK. Have a look at your order summary. Item: 2 BK Veggie + 1 Pepsi Pet 600 MI + 1 Regular Fries Quantity: 3

Should I proceed to checkout?

No

I request you to provide any detail that you want to change in your current order.

BK Veggie Combo 3

BK Grill Chicken Combo 0

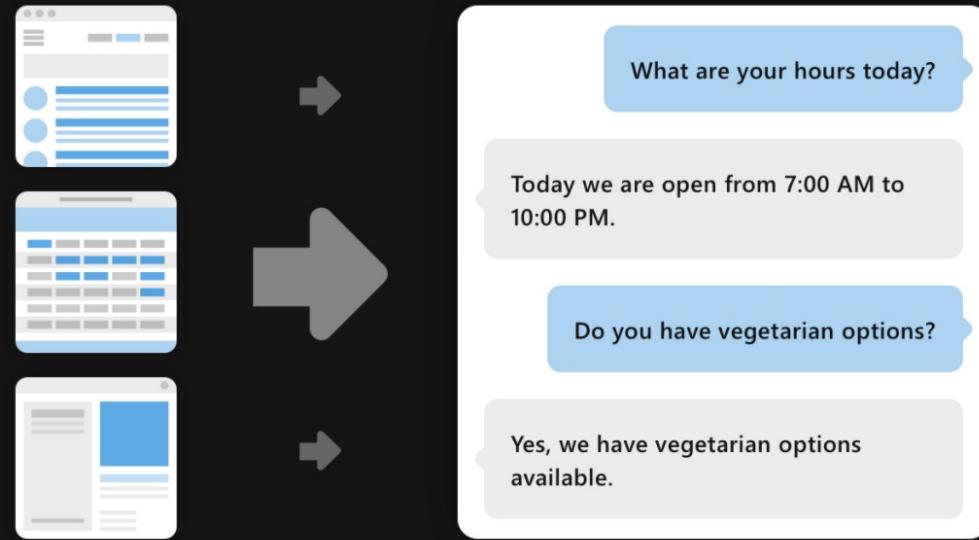
Proceed

From data to bot in minutes

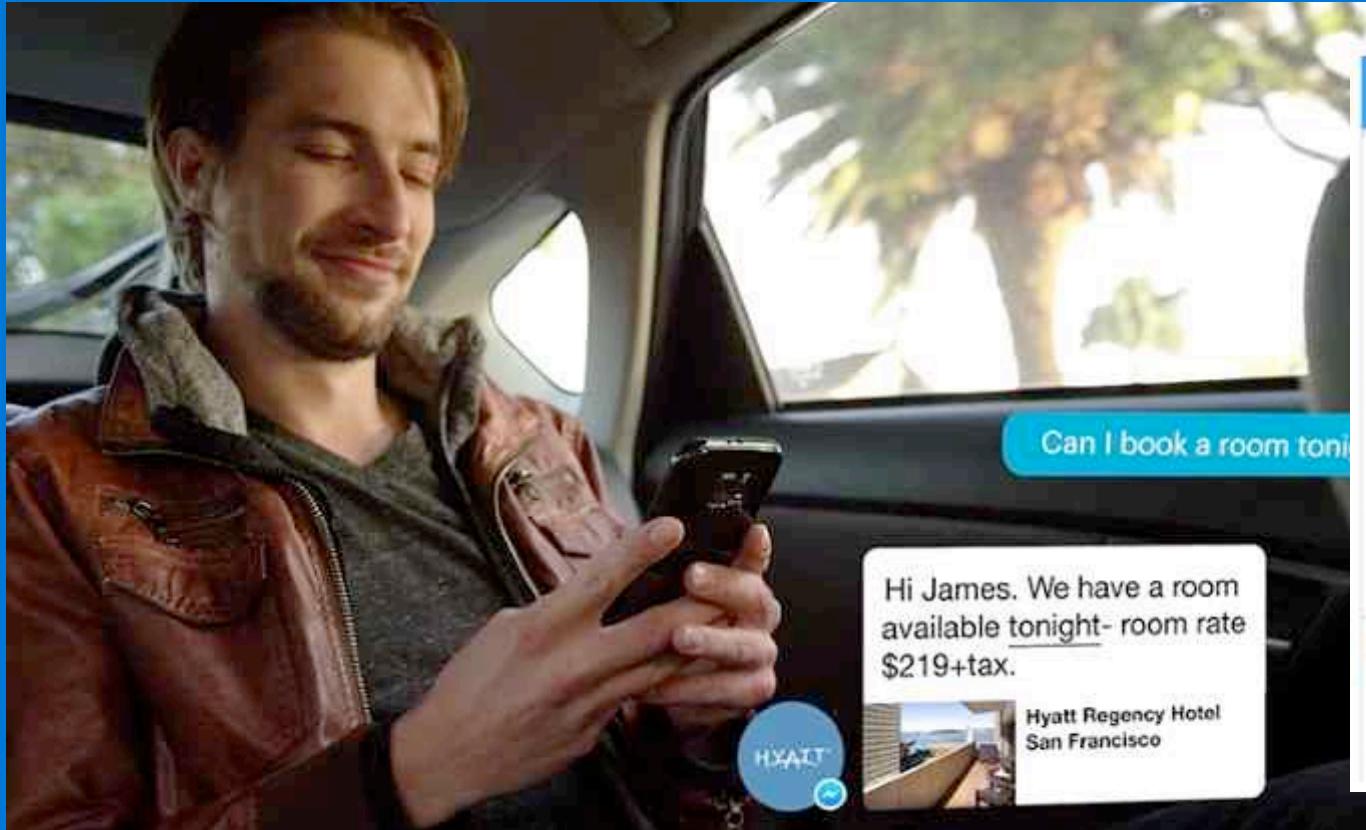
Build, train and publish a sophisticated bot using FAQ pages, support websites, product manuals, SharePoint documents or editorial content through an easy-to-use UI or via REST APIs.

[Get started >](#)

No code experience



Chatbot Planning



Niki

I Need three veg combo

Yo Darshill! Let me help you buy a burger. As an introductory offer, I am giving away a burger free on every combo.

OK. Have a look at your order summary.
Item: 2 BK Veggie + 1 Pepsi Pet 600 MI + 1 Regular Fries
Quantity: 3

Should I proceed to checkout?

Yes No

Niki

OK. Have a look at your order summary.
Item: 2 BK Veggie + 1 Pepsi Pet 600 MI + 1 Regular Fries
Quantity: 3

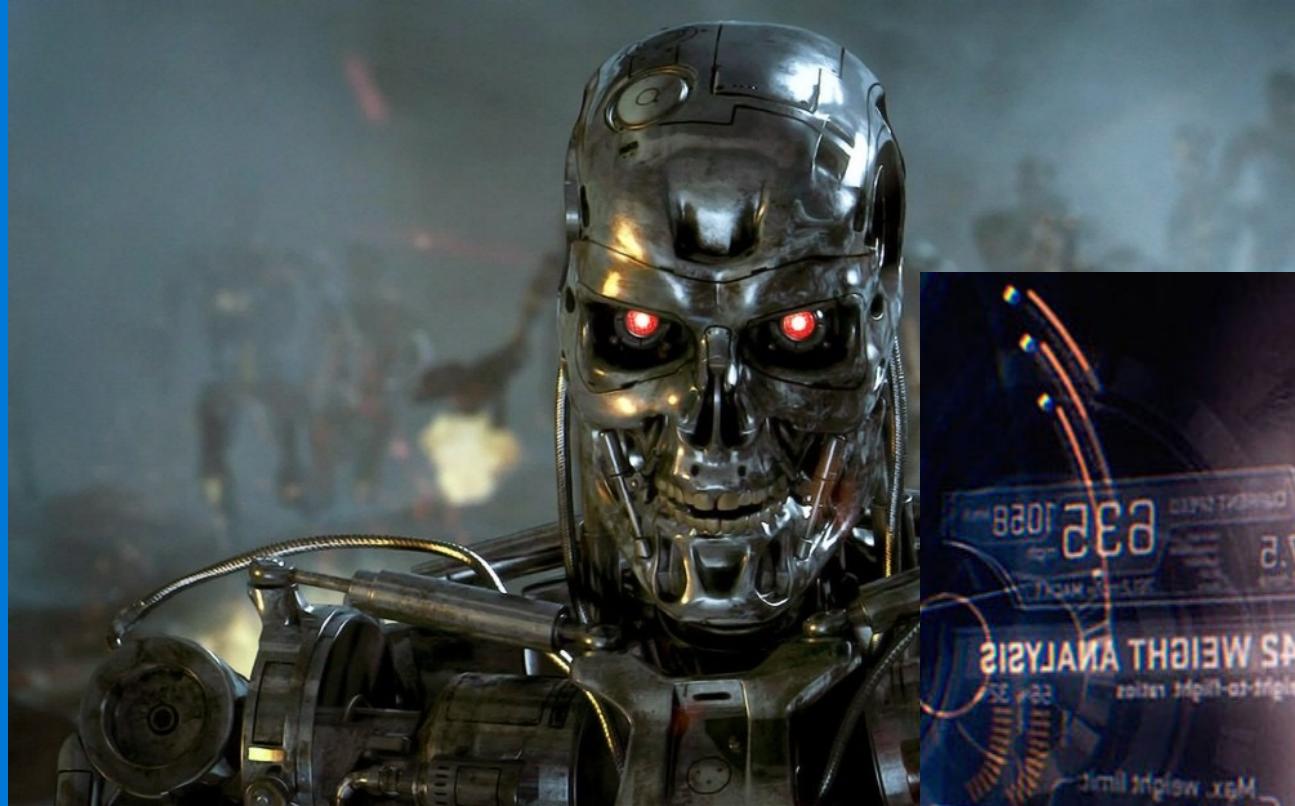
Should I proceed to checkout?

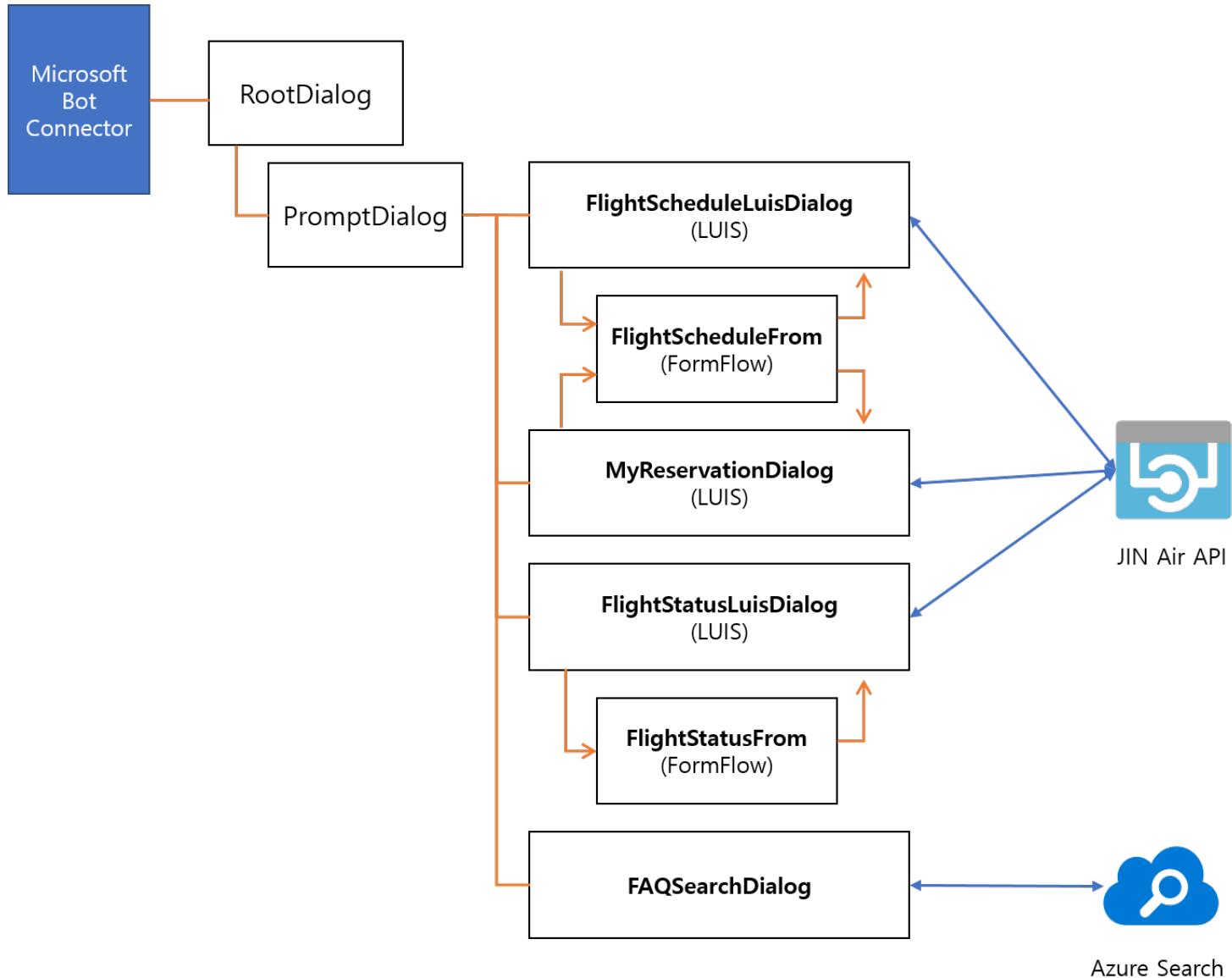
No

I request you to provide any detail that you want to change in your current order.

BK Veggie Combo 3
BK Grill Chicken Combo 0

Proceed





JinairBot

Version: 0.1

 Settings

Dashboard

Intents

Entities

Prebuilt domains PREVIEW

Features

Train & Test

Publish App

 Back to App list

flight_schedule_search

Here you are in full control of this intent; you can manage its utterances, used entities and suggested utterances ... [Learn more](#)

Utterances (46) Entities in use (3) Suggested utterances

Type a new utterance & press Enter ... 

 Save	 Discard	 Delete	Reassign Intent ▾	Labels view (Ctrl+E): Entities ▾	Search in utterances ... 	
<input type="checkbox"/>	Utterance text					Predicted Intent
<input type="checkbox"/>	[\$date] [\$itinerary::from] 에서 [\$itinerary::to]			0.96	flight_schedule_sea...	
<input type="checkbox"/>	[\$itinerary::from] [\$itinerary::to] [\$date] 스케줄			1	flight_schedule_sea...	
<input type="checkbox"/>	[\$itinerary::from] [\$itinerary::to] [\$date] 스케줄			0.99	flight_schedule_sea...	
<input type="checkbox"/>	[\$itinerary::from] 출발 [\$itinerary::to] 도착 스케줄 알려줄래?			0.99	flight_schedule_sea...	
<input type="checkbox"/>	[\$date] [\$itinerary::from]에서 [\$itinerary::to] 가는 스케줄 알려주세요			1	flight_schedule_sea...	
<input type="checkbox"/>	[\$itinerary::from]에서 [\$itinerary::to] 가는 비행기 스케줄 알려줘			1	flight_schedule_sea...	



감사합니다
Thank you!