

# LUIS를 썼더니 우리 카톡봇이 달라졌어요! (Bot Framework + @)

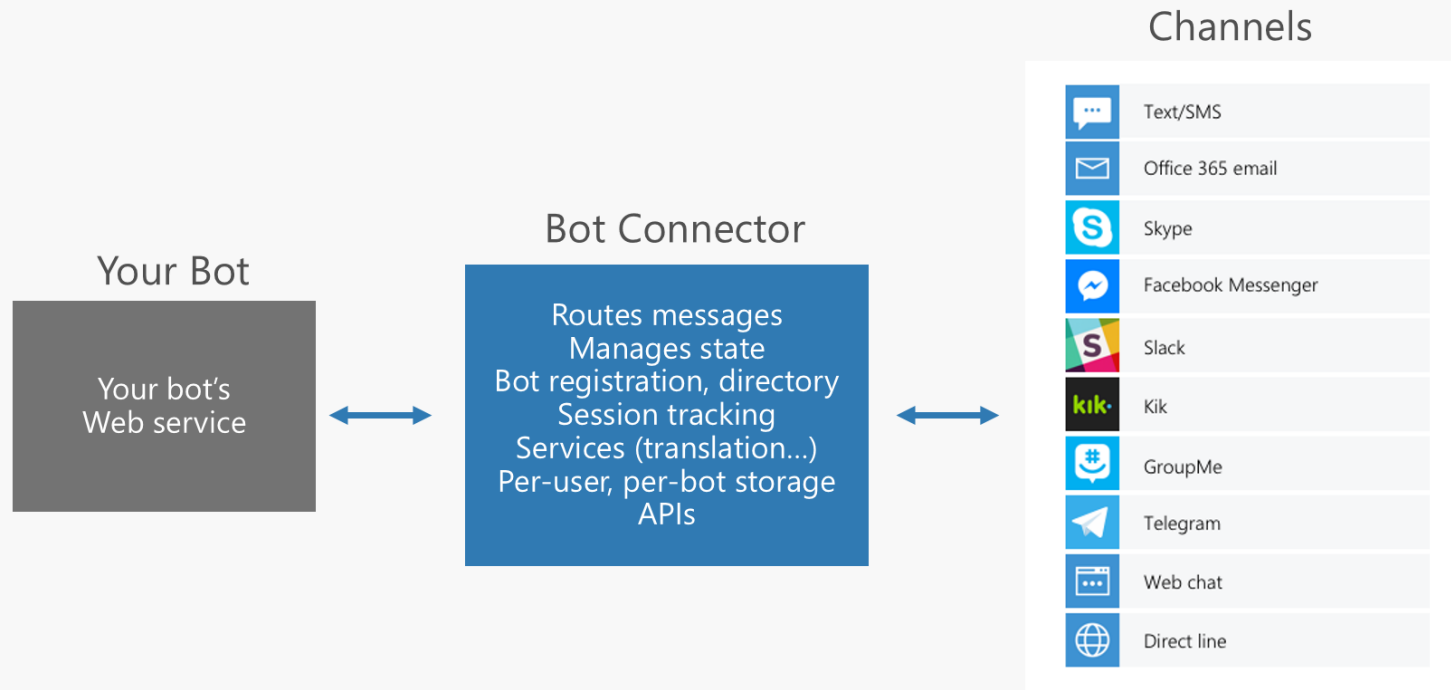
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Microsoft Student Partners

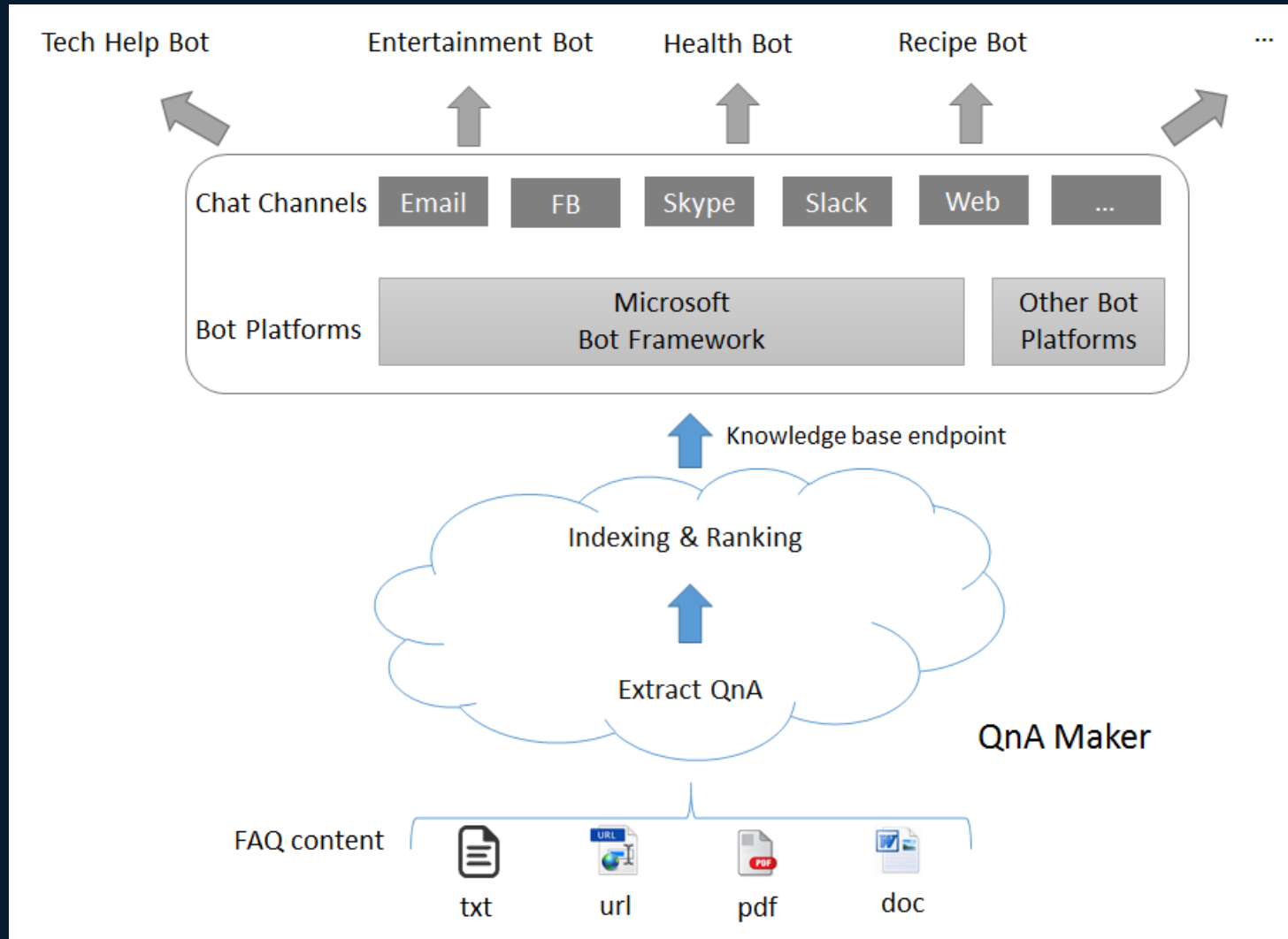
# INDEX

 Bot + @ Language  
Understanding  
Intelligent Service Using DirectLine 가능한 시나리오 Q & A

# Bot Connector



# Bot + QnA Maker



# Cognitive API + @

The screenshot shows the Microsoft Azure Cognitive Services API page in Korean. The browser window has a tab titled 'Cognitive 서비스 - 인텔' and the address bar shows 'https://azure.microsoft.com/ko-kr/services/cognitive-services/'. The page header includes the Microsoft Azure logo, a phone number '영업 080-808-0694', and a search bar. Below the header, there's a navigation bar with links like 'Azure가 적합한 이유', '솔루션', '제품', '설명서', '가격', '교육', 'Marketplace', '파트너', '블로그', '리소스', and '지원'. A '무료 계정' (Free Account) button is also visible.

## Cognitive Services API 살펴보기

**시각**  
자동으로 콘텐츠를 조정하고 얼굴, 이미지 및 감정 인식에 대한 지능적인 정보를 반환하는 더욱 개인화된 앱을 빌드하기 위한 첨단 이미지 처리 알고리즘입니다.

- Computer Vision API
- Face API
- Content Moderator
- Emotion API 미리 보기
- Video API 미리 보기
- Custom Vision Service 미리 보기
- Video Indexer 미리 보기

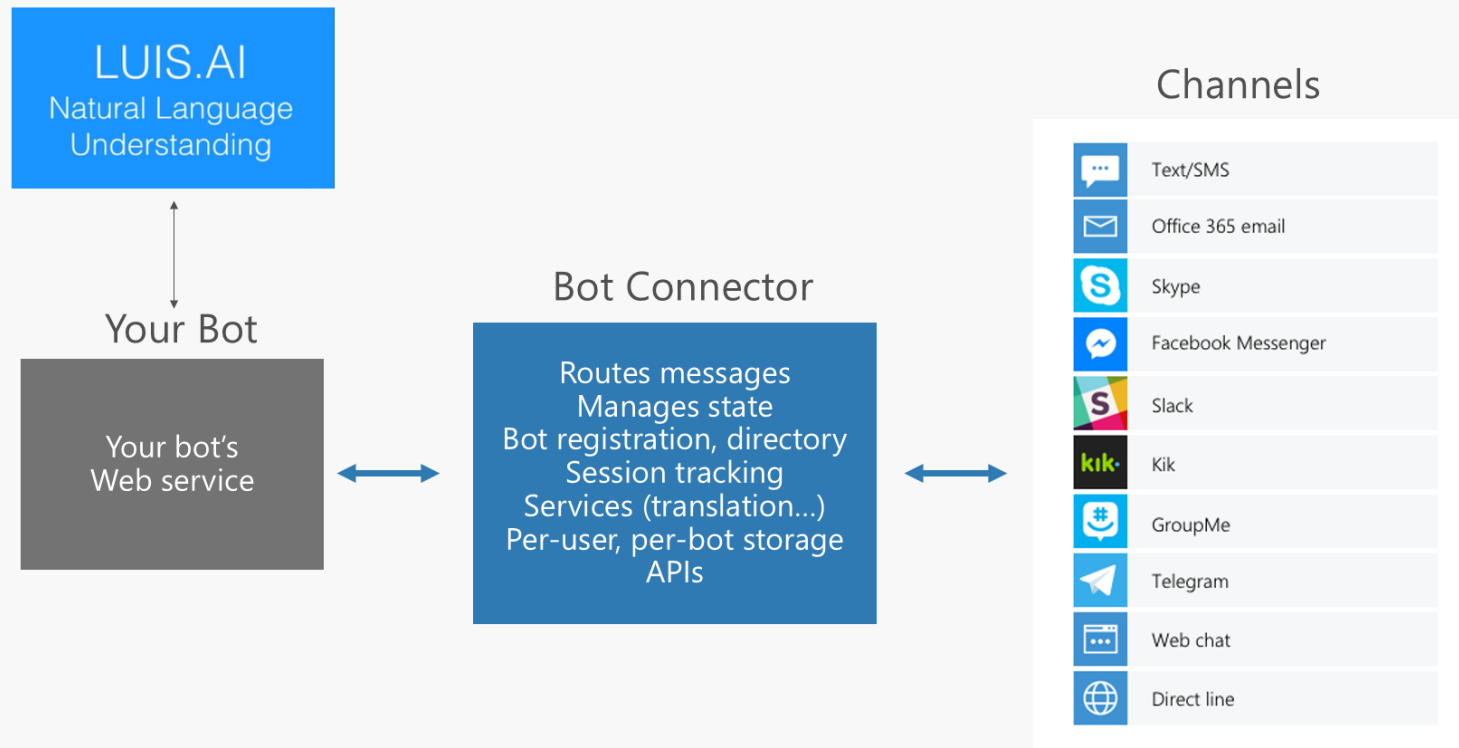
**음성**  
응용 프로그램에서 음성 언어 처리

- Translator Speech API
- Speaker Recognition API 미리 보기
- Bing Speech API
- Custom Speech Service 미리 보기

**언어**  
앱이 자연어를 처리하고, 의미 및 주제를 평가하고, 사용자가 원하는 것을 인식하는 방법을 학습할 수 있도록 합니다.

- Language Understanding Intelligent Service 미리 보기
- Text Analytics API 미리 보기
- Bing Spell Check API
- Translator Text API
- Web Language Model API 미리 보기
- Linguistic Analysis API 미리 보기

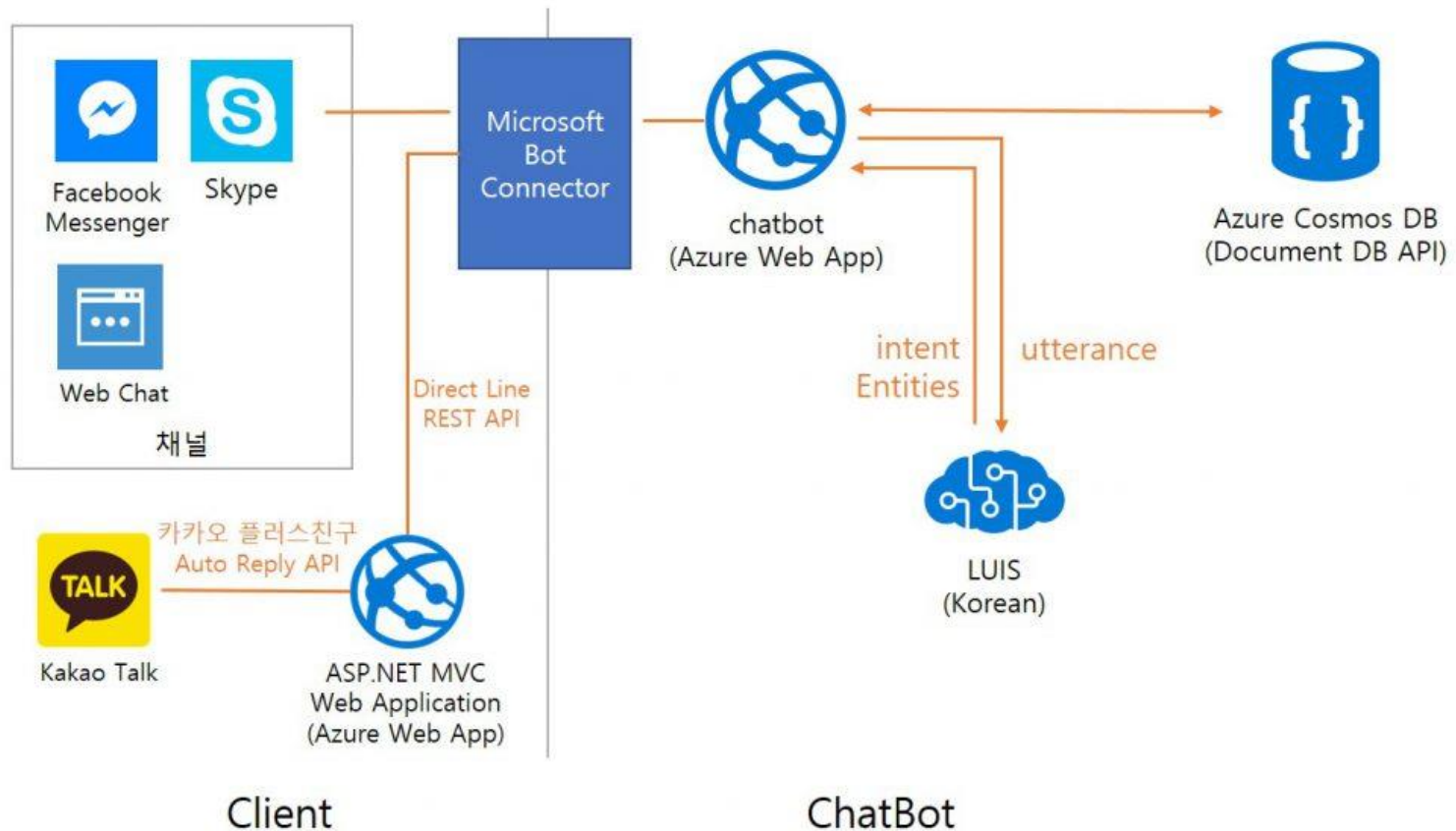
<https://azure.microsoft.com/ko-kr/services/cognitive-services/>



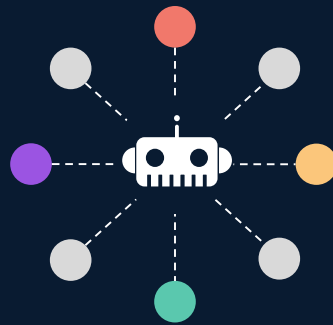
# Using Direct Line



# 기본 Logic







# Luis - Hands On Lab

# Intent

[My apps](#) > [TravelAgent](#) > Intents

## Intents

A listing of intents in the application. Click an intent to view/edit its details, or add a new intent ... [Learn more](#)

Add Intent

Search for intent ...



Intent Name ↓	Utterances	
Bookflight	0	 
GetWeather	0	 
None	0	

# Entity

Add Entity

×

Entity name (REQUIRED)

Airline

Entity type (REQUIRED)

Simple

▼

Save

Cancel

Add Entity

×

Entity name (REQUIRED)

Location

Entity type (REQUIRED)

Hierarchical

▼

Child # 1

FromLocation

Child # 2

ToLocation

+ Add child

Save

Cancel

# Custom Entities

Microsoft Cognitive Services

Academic Knowledge API

Bing Autosuggest API

Bing Image Search API

Bing News Search API

Bing Speech API

Bing Spell Check API

Bing Video Search API

Bing Web Search API

Computer Vision API

Content Moderator

Custom Speech Service

Emotion API

Entity Linking API

Face API

Knowledge Exploration Service

## Pre-built Entities

LUIS includes a set of pre-built entities. When a pre-built entity is included in your application, its predictions will be included in your published application and be available to you in the LUIS web UI while labeling utterances. The behavior of pre-built entities **cannot** be modified. Unless otherwise noted, pre-built entities are available in all LUIS application locales (cultures). Below is a table of pre-built entities supported per culture.

Pre-built entity	en-US	fr-FR	it-IT	es-ES	zh-CN	de-DE	pt-BR	ja-JP	ko-KR
Datetime	✓	✓	✓	✓	✓	✓	✓	✓	-
Number	✓	✓	✓	✓	✓	✓	✓	✓	-
Ordinal	✓	✓	✓	✓	✓	✓	✓	✓	-
Percentage	✓	✓	✓	✓	✓	✓	✓	✓	-
Temperature	✓	✓	✓	✓	✓	✓	✓	✓	-
Dimension	✓	✓	✓	✓	✓	✓	✓	✓	-
Money	✓	✓	✓	✓	✓	✓	✓	✓	-
Age	✓	✓	✓	✓	✓	✓	✓	✓	-
Geography	✓	-	-	-	-	-	-	-	-
Encyclopedia	✓	-	-	-	-	-	-	-	-
URL	✓	-	-	-	-	-	-	-	-
Email	✓	-	-	-	-	-	-	-	-
Phone number	✓	-	-	-	-	-	-	-	-

Below is a table of pre-built entities with example utterances and their return values.

Pre-built entity	Example utterance	JSON
builtin.number	ten	<code>{ "type": "builtin.number", "entity": "ten" }</code>
builtin.number	3.1415	<code>{ "type": "builtin.number", "entity": "3 . 1415" }</code>
builtin.ordinal	first	<code>{ "type": "builtin.ordinal", "entity": "first" }</code>

# Utterance

Microsoft Cognitive Services

Carol Hanna Sign out

Language Understanding My apps My keys Docs Pricing Support About

TravelAgent

Dashboard

Intents

Entities

Features

Train & Test

Publish App

Bookflight

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

Utterances Entities in use Suggested utterances

book me 2 adult business tickets to Paris tomorrow on Air France

Save Discard Delete Reassign Intent

Labels view (Ctrl+E): Entities Search in utterances

Utterance text	Predicted intent

← Back to App list

Intent를 끌어내기 위한 수단.

Label Utterance -> Intent Label, Entity Label

Intent Label 이 기본.

Entity Label의 경우 조금 더 복잡한 **질의** 설정이 가능.

# Utterance

[My Apps](#) > [TravelAgent](#) > [Intents](#) > Bookflight

## Bookflight

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

Utterances   Entities in use   Suggested utterances

Type a new utterance & press Enter ...



Save   Discard   Delete   [Reassign Intent](#)

Labels view (Ctrl+E):

Entities

Search in utterances ...



Utterance text

Predicted Intent



book me [\$number] adult business tickets to paris [\$datetime] on air france

**N.A**  
Bookflight

# Phrase

-Phrase : 구, 관용어

Ex) 아메리카노 – 아아,  
americano, 아이스 아메리카노  
...

Add Phrase list

Phrase list name (REQUIRED)

Cities

Phrase list values (REQUIRED)

London, Paris, Seattle, Berlin, Dubai, Cairo,

☒ Is exchangeable?

☒ Is active?

SaveCancel

# Pattern Phrase

-Regex(Regular Expression)  
: 한 개체의 '이름'에 표현될  
수 있는 문자열, 정규표현식

Edit Pattern

✕

Pattern name (REQUIRED)

Flight number

Pattern value (REQUIRED)

[A-Za-z]{2}[0-9]{3}

☒ Is active?

[Learn about supported regex syntax](#) ▾

SaveCancel





# 가능한 시나리오

온프레미스

## 1. Windows Server

**Bot Template(iis) + ngrok(Local server to Public) + Other Services..**



# 가능한 시나리오

온프레미스

## 2. Linux

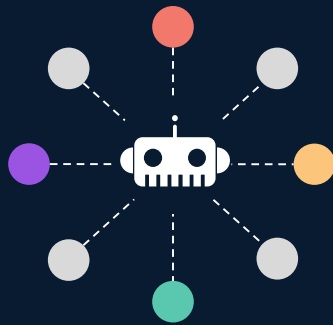
**ASP.NET Core WebAPI(Local) + ngrok + Other services....**



# 가능한 시나리오

Public Cloud

Azure(Bot Service)or AWS....(Bot Template) + SQL Databases + Other...



THANK YOU