



Microsoft Bot Framework

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#Build2016

GET IT GEAR

본방송

밀리터리 속
규칙과 상식

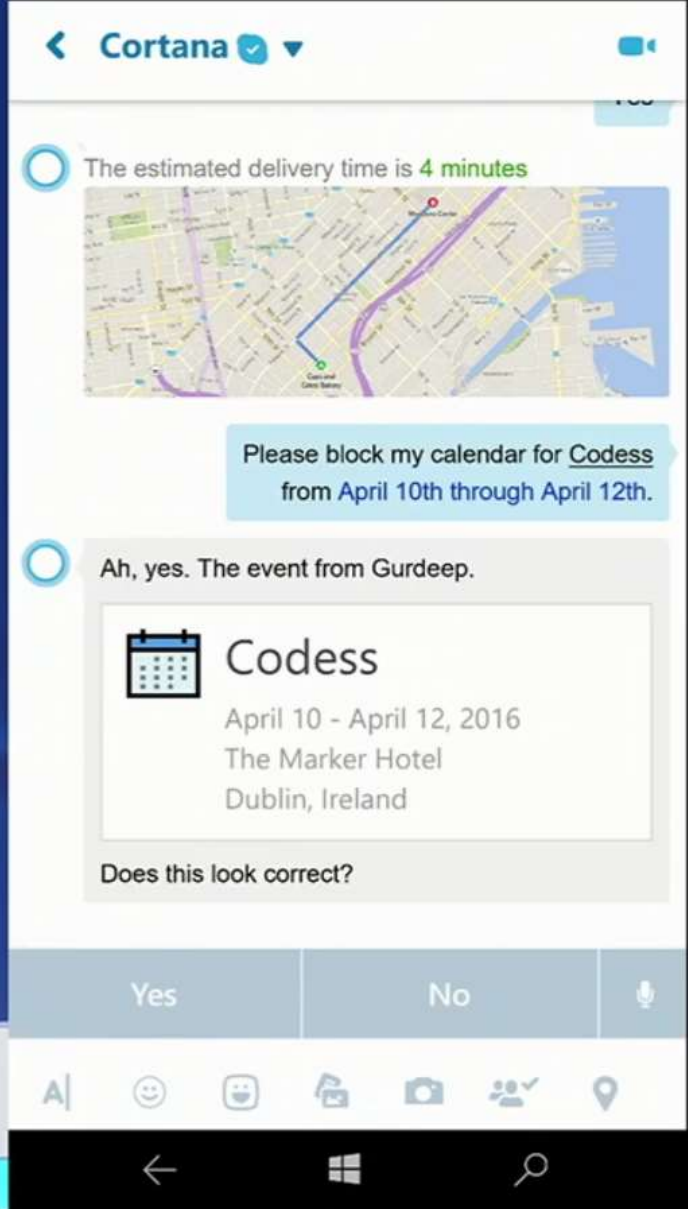
X TM HD

시애틀에는 기2척의 전함이었습니타



00:00:00 / 00:26:06

/ 지금 본방인증하면 남자들을 위한 놀잇감이 내 손안에 HD  GOMTV



Bot FrameworkBot directoryDomino's Pizza BotDomino's Pizza Bot - Bc

←→↺

intelligence.botframework.com:8080/tw/model?wid=15&name=663BAF974FC37B36541060273E8CCC04


📖☆≡🔗🔔⋮

Microsoft

Bot IntelligenceLABS

Rules & DictionariesMachine LearningHuman Assistant

Search ... 🔍



Domino's Pizza Bot

[View in Bot directory](#) | [Edit](#)

Rule-based Natural Language Understanding

Pizza

Rules for Parser_Pizza

Extractors

Parser_Pizza

Intention_Pizza

Filter_Pizza

Semantic Dictionaries

Verb_Deliver

Pizza_Topping

Pizza_Size

Pizza_Sauce

\$DELIVERVERB me quantity \$PIZZAQUANTITY size \$PIZZASIZE pizza with topping \$PIZZATOPPING

can|could|will you|someone|anybody \$DELIVERVERB me quantity \$PIZZAQUANTITY size \$PIZZASIZE pizza

want|wanna|need to \$DELIVERVERB quantity \$PIZZAQUANTITY size \$PIZZASIZE crust \$PIZZACRUST pizza

\$DELIVERVERB me quantity \$PIZZAQUANTITY size \$PIZZASIZE pizza with cheese \$PIZZACHEESE

\$DELIVERVERB me quantity \$PIZZAQUANTITY size \$PIZZASIZE topping \$PIZZATOPPING pizza with

crust \$PIZZACRUST

want|wanna|need to \$DELIVERVERB quantity \$PIZZAQUANTITY size \$PIZZASIZE pizza with

🪟🔍I'm Cortana. Ask me anything.

Domino's Pizza Bot ...

📁

🛒

🔗

PizzaBot - Microsof...


⬆️🔊🗨️📱

10:33 AM
3/30/2016

Bot FrameworkBot directoryDomino's Pizza BotDomino's Pizza Bot - Bc

intelligence.botframework.com:81/ML/DominosPizzaBot

View in Bot directoryEdit



Domino's Pizza Bot

Machine Learning based Natural Language Understanding

Annotation

Feature

Training

History

Web API

Upload

Download

Add user request to training data

Confidence	Request
0.573	can you deliver 3 large pepperoni pizzas to my crib
0.678	grab me a big pizza with peperoni & dbl cheese, will you?
0.704	i want to purchase brooklyn style pizza with bbq alfredo sauce
0.765	I'd like to have a medium pizza deliver to my school, call me at when you arrive

Type a request sentence here

Add

Select words and add correct label to annotate data

can

you

deliver

3

large

pepperoni

pizzas

to

my

crib

Click to apply label:

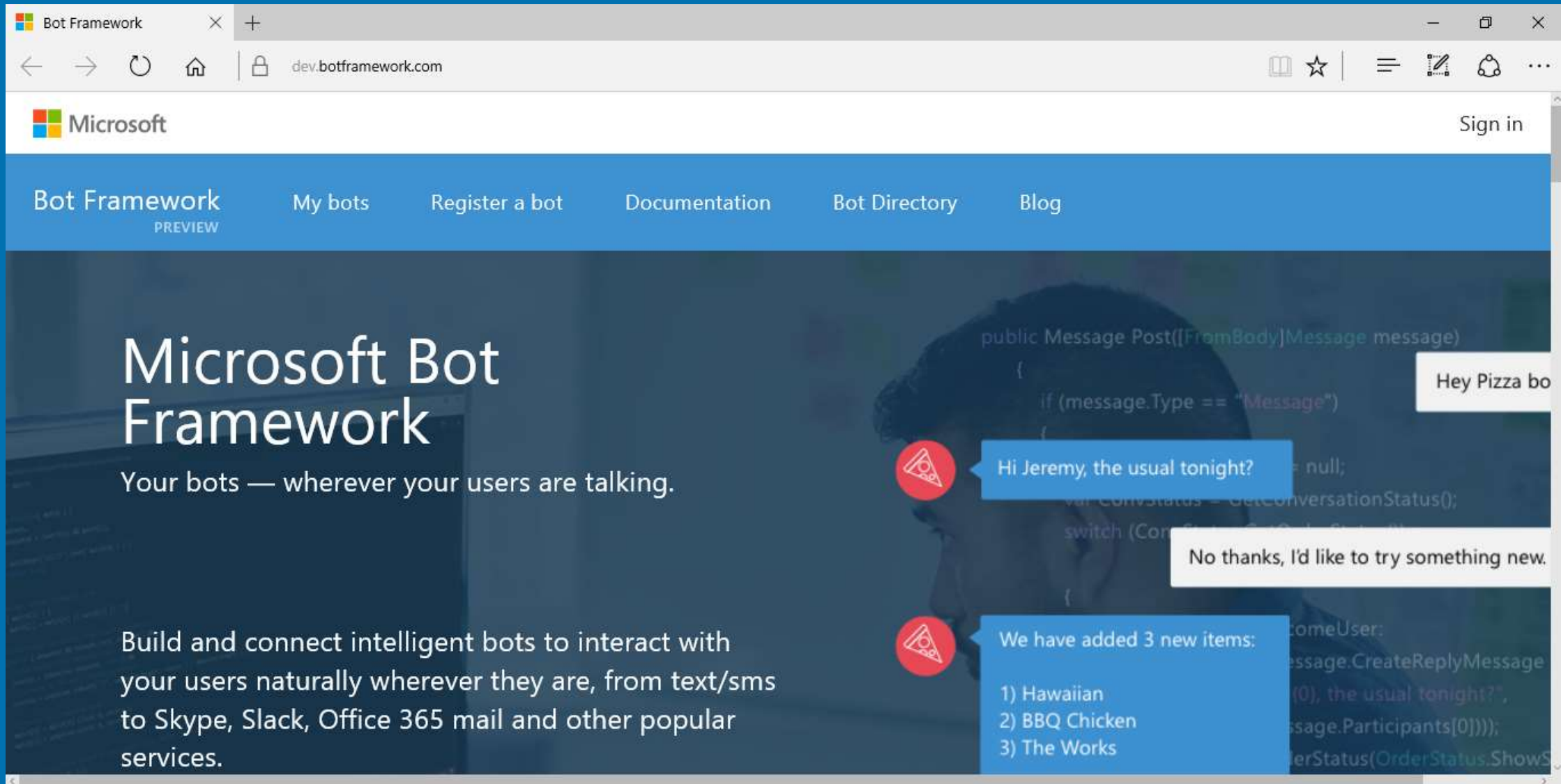
|| LIVE

3:47:59 / 3:48:19



MS Bot Framework

<https://dev.botframework.com>



The screenshot shows the Microsoft Bot Framework website in a web browser. The browser's address bar displays `dev.botframework.com`. The website's header includes the Microsoft logo and a "Sign in" link. A navigation bar contains links for "Bot Framework PREVIEW", "My bots", "Register a bot", "Documentation", "Bot Directory", and "Blog".

The main content area features the heading "Microsoft Bot Framework" and the tagline "Your bots — wherever your users are talking." Below this, a paragraph states: "Build and connect intelligent bots to interact with your users naturally wherever they are, from text/sms to Skype, Slack, Office 365 mail and other popular services."

To the right, a chat interface is overlaid on a background image of a person's profile. It shows a conversation with a bot (indicated by a red pizza icon). The chat messages are:

- Bot: "Hi Jeremy, the usual tonight?"
- User: "Hey Pizza bo"
- User: "No thanks, I'd like to try something new."
- Bot: "We have added 3 new items:"
- Bot list:
 - 1) Hawaiian
 - 2) BBQ Chicken
 - 3) The Works

Background code snippets are visible, including:

```
public Message Post([FromBody]Message message)
{
    if (message.Type == "Message")
    {
        // ...
    }
}
```

```
var convStatus = GetConversationStatus();
switch (ConvStatus)
{
    case null:
        // ...
    }
}
```

```
comeUser;
message.CreateReplyMessage(
    (0), the usual tonight?",
    message.Participants[0]));
lerStatus(OrderStatus.ShowS
```

Overview

<http://docs.botframework.com>

Bot Framework Overview

Bot Framework FAQ

Bot Framework Support

Bot Framework Downloads

- ▶ Bot Connector
- ▶ Bot Builder for C#
- ▶ Bot Builder for Node.js
- ▶ Bot Directory

Bot Framework Overview

The Microsoft Bot Framework provides just what you need to build and connect intelligent bots that interact naturally wherever your users are talking, from text/sms to Skype, Slack, Office 365 mail and other popular services.

Your Bot Framework Bot

Bot Connector	Bot Builder SDKs	Bot Directory
Connect your bot(s) to text/sms, Office 365 mail, Skype, Slack, Facebook Messenger and more...	Build great dialogs within your Node.js- or C#-based bot	COMING SOON - Try, use, and add published bots to the world's top conversation experiences
<ul style="list-style-type: none">Register, connect, publish and manage your bot through the bot dashboardMessage routingAutomatic translation to 30+ languagesUser and state managementEmbeddable web chat controlDebugging tools	<ul style="list-style-type: none">Open source SDK on GithubFrom simple built-in prompts and command dialogs to simple to use yet sophisticated 'FormFlow' dialogsLibraries, samples and tools to make a great conversationalistChat emulatorLeverage related services	<ul style="list-style-type: none">Public directory of bots registered and approved with Bot FrameworkUsers can try your bot from the directory via the web chat controlUsers can discover and add your bot to the channels on which it is configured

Options:

- Connector
- Builder
- Directory

Bot Connector

Getting started | Docum X +

docs.botframework.com/connector/getstarted

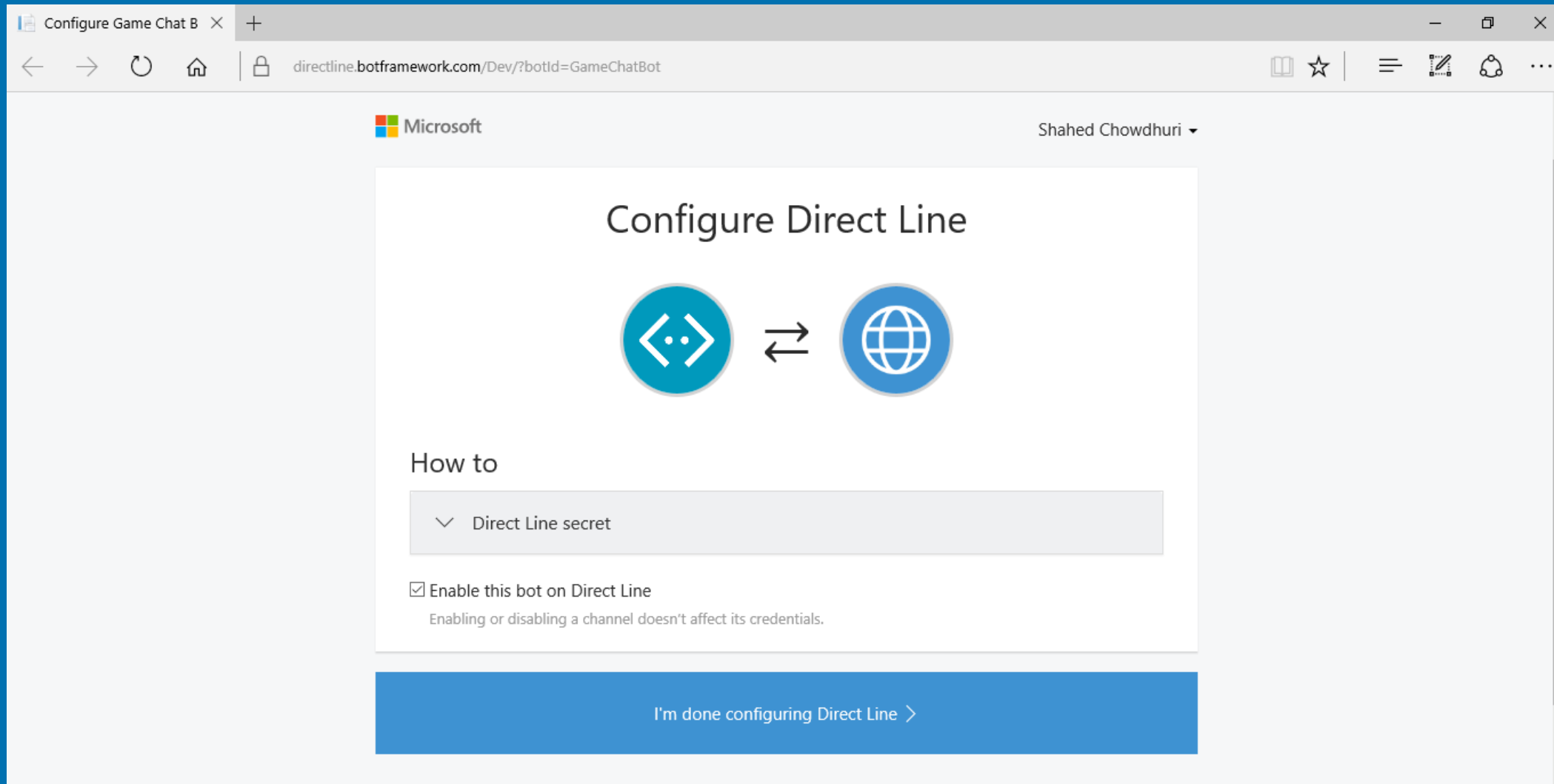
The Microsoft Bot Framework Connector is a communication service that helps you connect your Bot with many different communication channels (GroupMe, SMS, email, and others). If you write a conversational Bot or agent and expose a Microsoft Bot Framework-compatible API on the internet, the Connector will forward messages from your Bot to a user, and will send user messages back to your Bot.

```
graph LR; Bots[Your bot's web service] <--> BC[Bot Connector]; BC <--> Channels[Channels];
```

Channels:

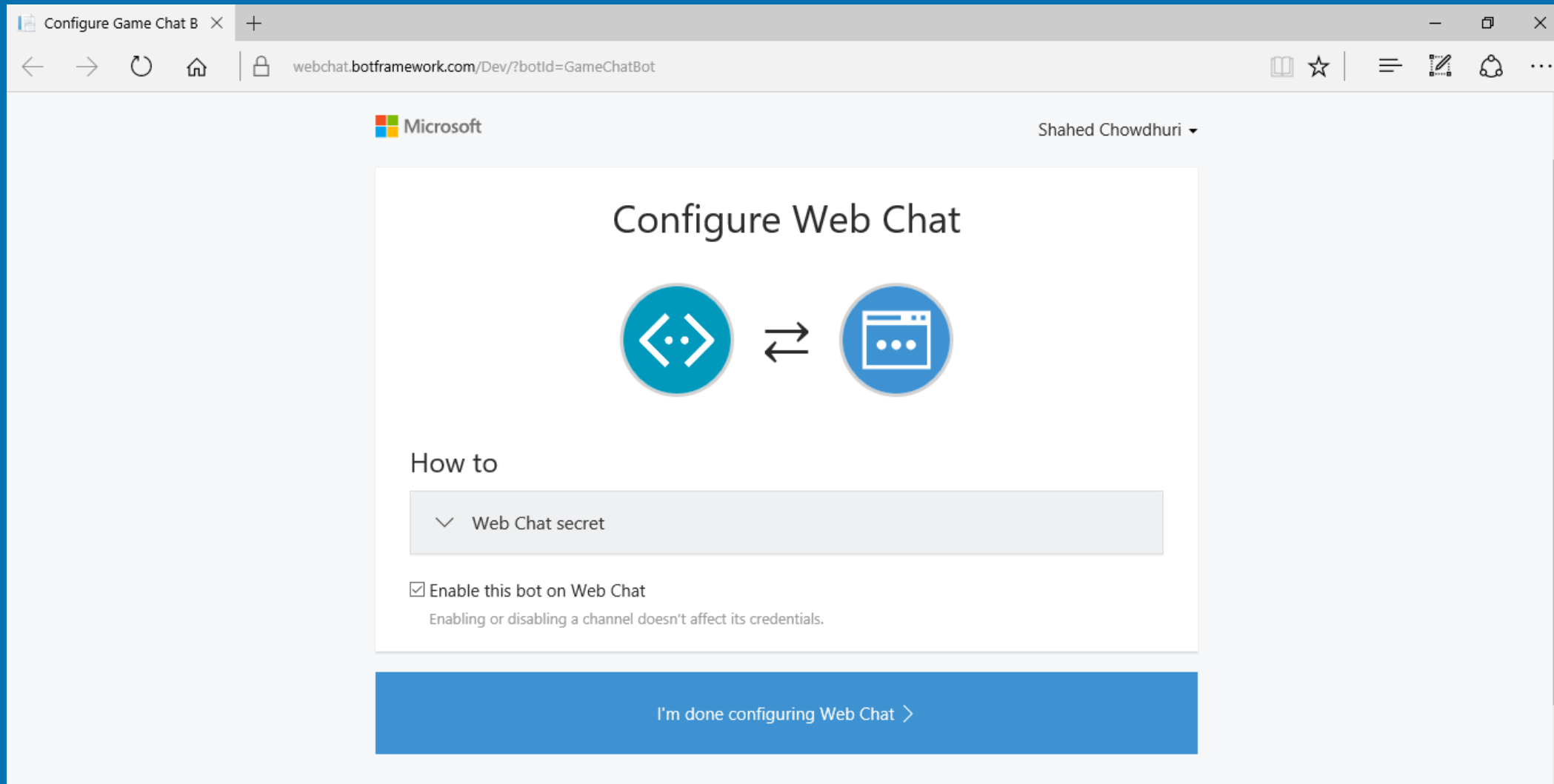
- Email
- GroupMe
- Skype
- Slack
- SMS
- Telegram
- Web
- etc...

Configure: Direct Line



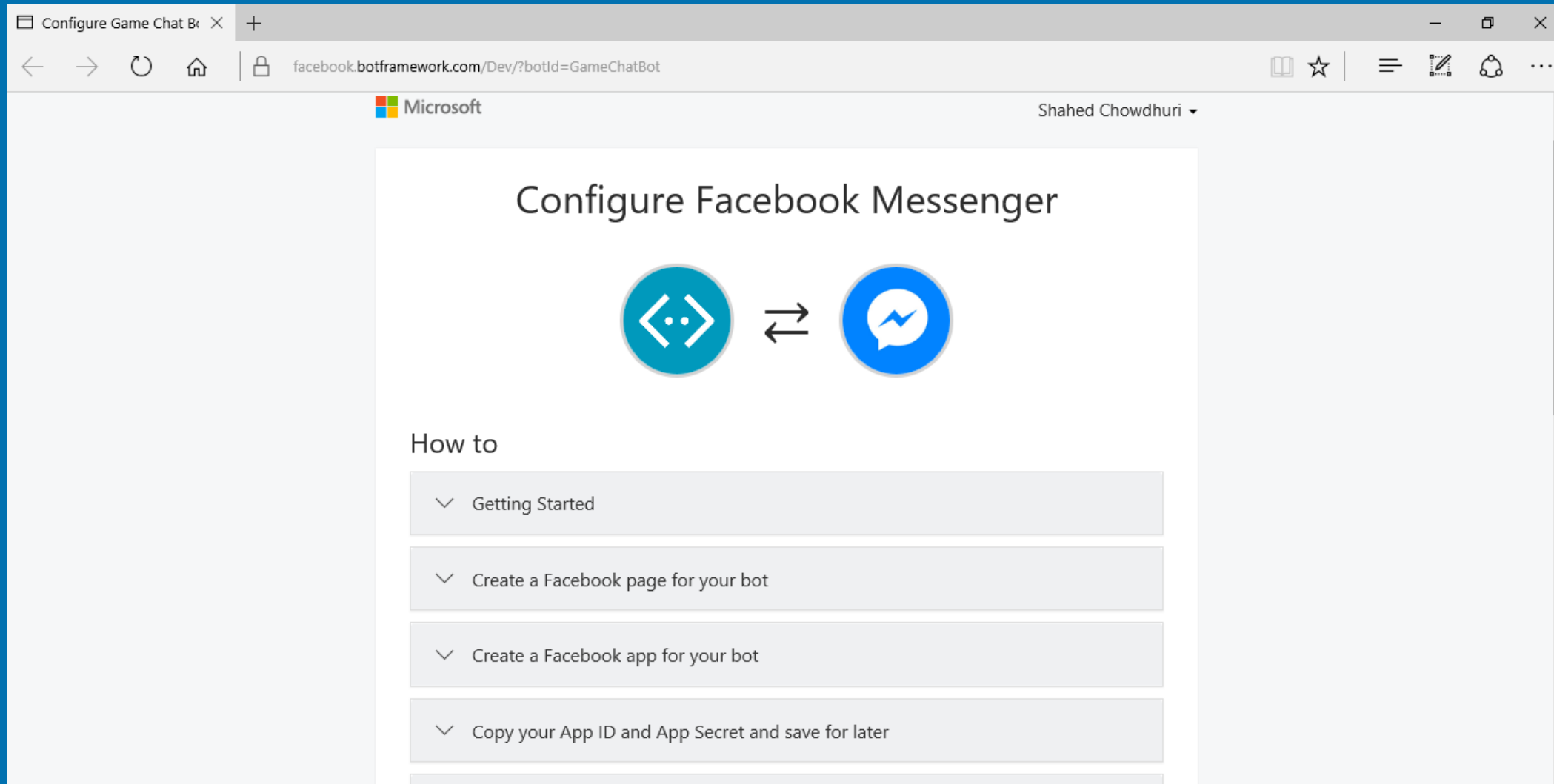
<https://directline.botframework.com/Dev/?botId=YOUR-BOT-ID>

Configure: Web Chat



<https://webchat.botframework.com/Dev/?botId=YOUR-BOT-ID>

Configure: Facebook Messenger



<https://facebook.botframework.com/Dev/?botId=YOUR-BOT-ID>

FB Developer Settings

The screenshot shows the Facebook Developer Dashboard for an application named 'Anti-Curse Bot'. The browser's address bar displays the URL `developers.facebook.com/apps/460344630830218/dashboard`. The left sidebar contains navigation links: 'Anti-Curse Bot' (selected), 'Dashboard', 'Settings', 'Roles', 'Alerts', 'App Review', 'PRODUCTS', 'Facebook Login', 'Messenger', 'Webhooks', and '+ Add Product'. The main content area has a top bar with 'APP ID: 460344630830218' and a 'View Analytics' link. The dashboard itself features a blue robot icon, the app name 'Anti-Curse Bot' with a green status dot, and a note that the app is public. It displays the 'API Version' as 'v2.6' and the 'App ID' as '460344630830218'. The 'App Secret' is masked with dots, with a 'Show' button to reveal it. Below this is a section titled 'Get Started with the Facebook SDK' with a 'Choose a Platform' button. At the bottom, there is a section for 'Facebook Analytics for Apps'.

Anti-Curse Bot - Dashbr ✕

← → ↺ 🏠 🔒 developers.facebook.com/apps/460344630830218/dashboard

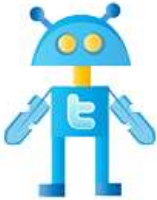
📖 ☆ ☰ 🛠️ 🔔 ⋮

🤖 Anti-Curse Bot ▾

APP ID: 460344630830218 | 🔗 View Analytics

🛠️ Tools & Support Docs 👤

Dashboard



Anti-Curse Bot •

This app is public and available to all users [?]

API Version [?]

App ID

v2.6

460344630830218

App Secret

..... Show

Get Started with the Facebook SDK

Use our quick start guides to set up the Facebook SDK for your iOS or Android app, Canvas game or website.

Choose a Platform

Facebook Analytics for Apps

Get Analytics and Trends

facebook for developers

<https://developers.facebook.com>

Bot Builder SDK for C#

The screenshot shows a web browser window with the URL `docs.botframework.com/sdkreference/csharp`. The page has a blue header with navigation links: "Bot Framework PREVIEW", "My bots", "Register a bot", "Documentation" (which is highlighted), and "Bot Directory". On the left side, there is a sidebar with a "Documentation Home" link and a "Bot Builder for C#" section that is expanded, showing sub-links for "Getting Started", "Dialogs", "FormFlow", "Namespaces", "Classes", and "Files". The main content area is titled "High Level Features:" and contains a bulleted list of features. At the bottom of the page, there is a footer with links for "Contact us", "Privacy & cookies", "Terms of use", "Code of conduct", and a copyright notice "© 2016 Microsoft".

Getting Started | Bot Bui X +

docs.botframework.com/sdkreference/csharp

Bot Framework PREVIEW My bots Register a bot Documentation Bot Directory

< Documentation Home

Bot Builder for C#

- ▶ Getting Started
- ▶ Dialogs
- ▶ FormFlow
- ▶ Namespaces
- ▶ Classes
- ▶ Files

High Level Features:

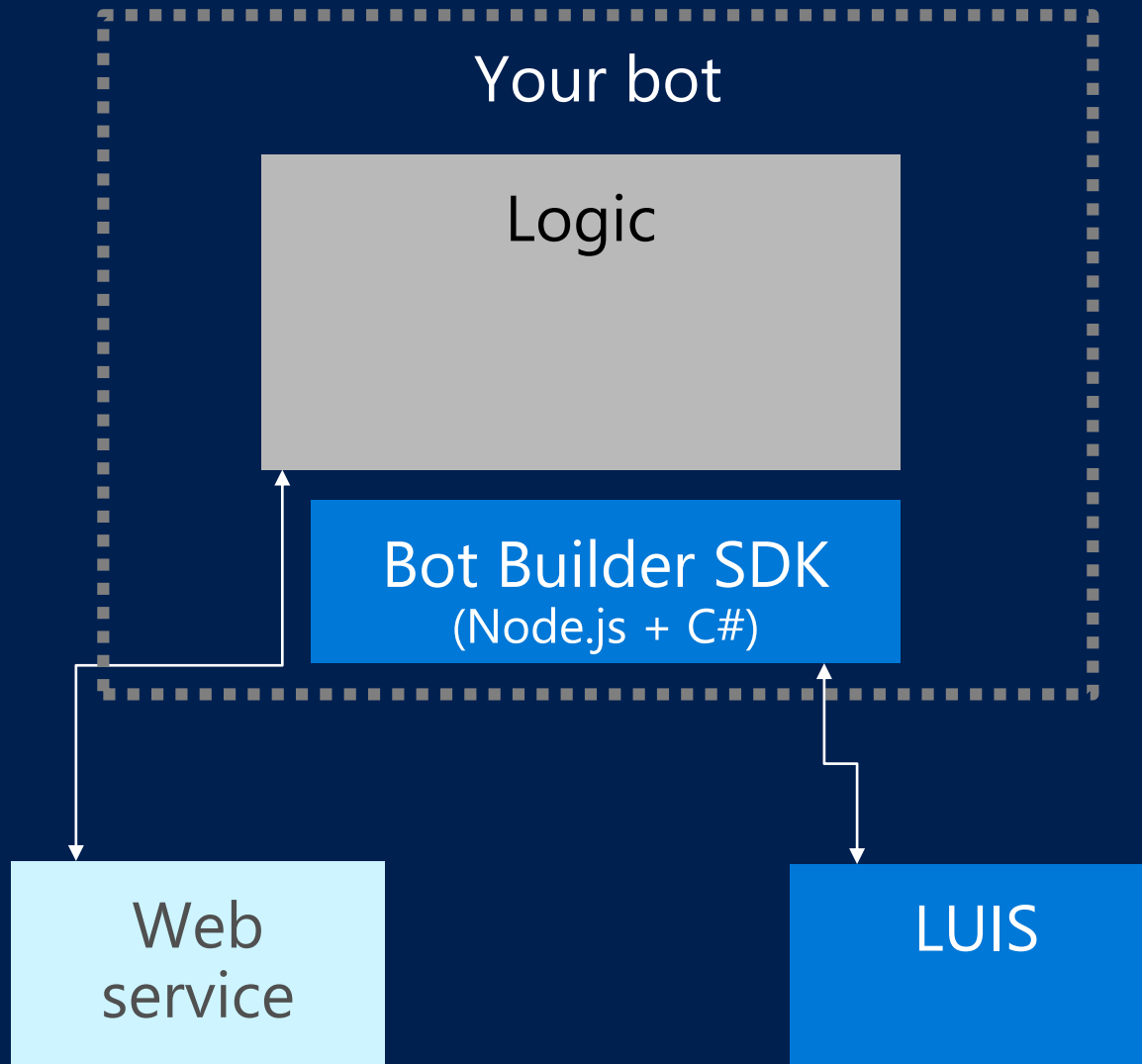
- Powerful dialog system with dialogs that are isolated and composable.
- Built-in dialogs for simple things like Yes/No, strings, numbers, enumerations.
- Built-in dialogs that utilize powerful AI frameworks like **LUIS**.
- Bots are stateless which helps them scale.
- **FormFlow** for automatically generating a bot from a C# class for filling in the class and that supports help, navigation, clarification and confirmation.
- SDK source code is found on <http://github.com/Microsoft/botbuilder>.

Contact us Privacy & cookies Terms of use Code of conduct © 2016 Microsoft

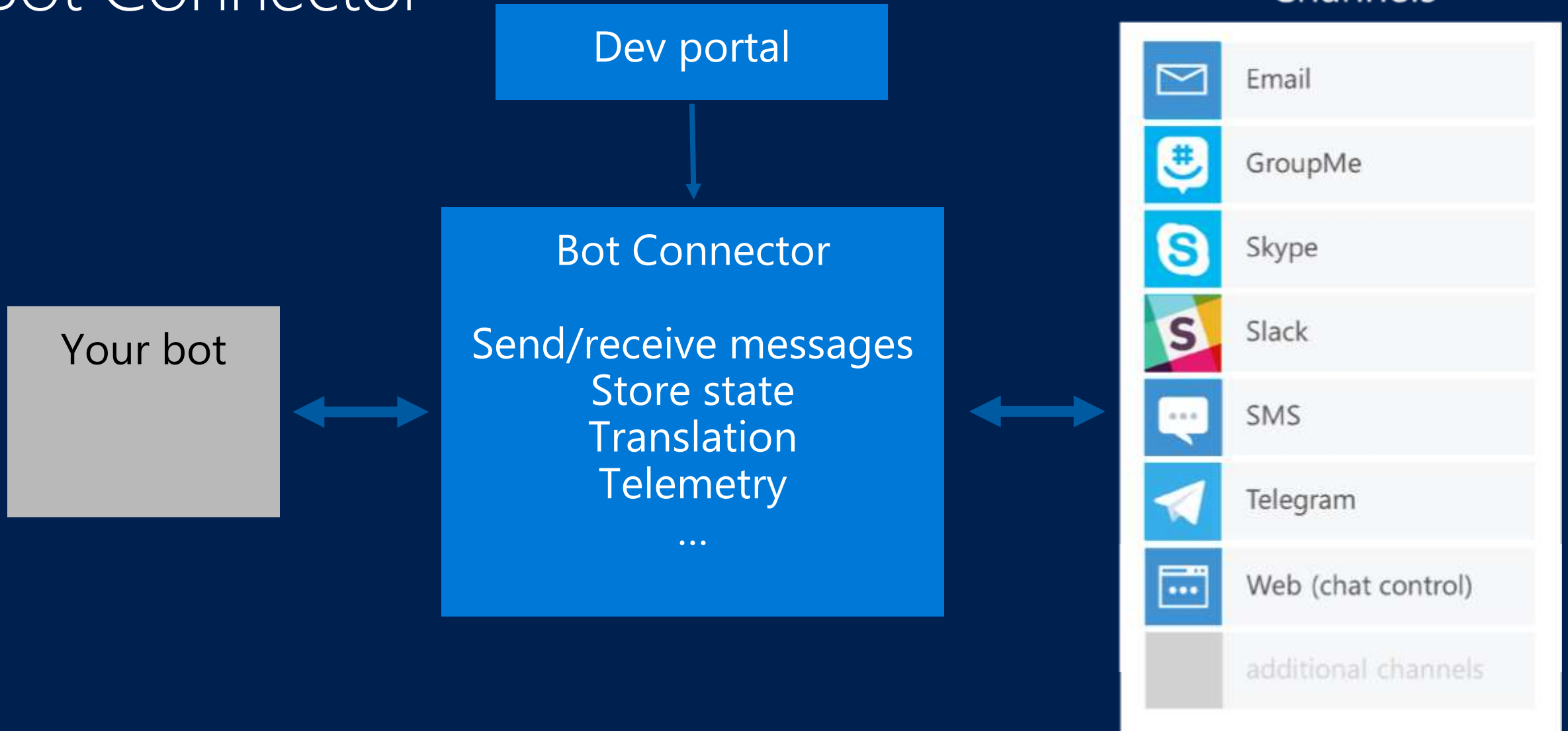
Features:

- Dialogs
- AI
- LUIS
- Stateless
- Scalable
- FormFlow
- GitHub!

<http://docs.botframework.com/sdkreference/csharp>



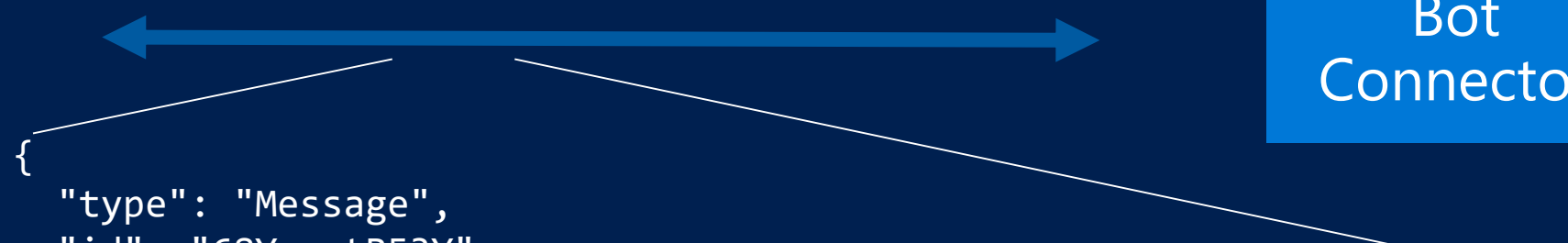
Bot Connector



Bot Connector messages

Your bot

Bot
Connector



```
{
  "type": "Message",
  "id": "68YrxgtB53Y",
  "conversationId": "DphPaFQrDuZDKyCez4AFGcT4vy5aQDje1lLGIjB8v18MFtb",
  "language": "en",
  "text": "You can say \"/order\" to order!",
  "attachments": [ ],
  "from": {
    "name": "+12065551212",
    "channelId": "sms",
    "address": "+12065551212",
    "id": "Ro52hKN287",
    "isBot": false
  },
  "channelData": { SMS data here },
  "botUserData": { your data here },
  ...
}
```

GitHub!

The screenshot shows the GitHub web interface for the Microsoft/BotBuilder repository. The browser's address bar displays 'github.com/Microsoft/botbuilder'. The repository page header includes the GitHub logo, navigation links (Personal, Open source, Business, Explore), and utility links (Pricing, Blog, Support). A search bar and 'Sign in'/'Sign up' buttons are also present. The repository name 'Microsoft / BotBuilder' is prominently displayed, along with statistics: 198 watchers, 2,131 stars, and 374 forks. Below this, tabs for 'Code', 'Issues' (72), 'Pull requests' (1), 'Pulse', and 'Graphs' are visible. The main content area contains a description of the Microsoft Bot Builder SDK as part of the Microsoft Bot Framework, with a link to 'http://botframework.com'. A progress bar shows repository metrics: 706 commits, 4 branches, 29 releases, and 26 contributors. At the bottom, there are buttons for 'Branch: master', 'New pull request', 'Find file', and 'Clone or download'. A recent commit by 'Stevenic' is listed, showing a merge of pull request #409, with the latest commit hash 'c2dcafc' made 9 days ago. A file named 'CSharp' is shown with an update to version 1.2.3.0 from 12 days ago.

GitHub - Microsoft/BotBuilder

Personal Open source Business Explore Pricing Blog Support This repository Search Sign in Sign up

Microsoft / BotBuilder

Watch 198 Star 2,131 Fork 374

Code Issues 72 Pull requests 1 Pulse Graphs

The Microsoft Bot Builder SDK is one of three main components of the Microsoft Bot Framework. The Microsoft Bot Framework provides just what you need to build and connect intelligent bots that interact naturally wherever your users are talking, from text/SMS to Skype, Slack, Office 365 mail and other popular services. <http://botframework.com>

706 commits 4 branches 29 releases 26 contributors

Branch: master New pull request Find file Clone or download


Stevenic Merge pull request #409 from mulyoved/master Latest commit c2dcafc 9 days ago

CSharp Update version to 1.2.3.0 12 days ago


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



Variety of Creative Apps




How-Old.net
HOW OLD DO I LOOK? #HowOldNet




Sorry if we didn't quite get the age and gender right - we are still working on this feature

Try Another Photo!



TwinsOrNot.net
Are you twins? #TwinsOrNotRobot



Perfect match


Help us improve or start over


You can also click a pic to compare to someone new

Powered by Project Oxford


Facebook 365 Twitter 1.85K

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MyMoustache.net
15,381 faces analyzed and counting #MyMoustacheRobot



De-stache Me! Try Again!

Sorry if we didn't quite get the moustache quite right - we are still improving this feature

It doesn't look like you have a moustache! #NOSTACHE


LAUGHING GETTING THERE ULTIMATE ME!


You Everyone Else (16086)



Mimicker Alarm


Mimic a happy face





CaptionBot

I think it's a young man jumping in the air on a skateboard




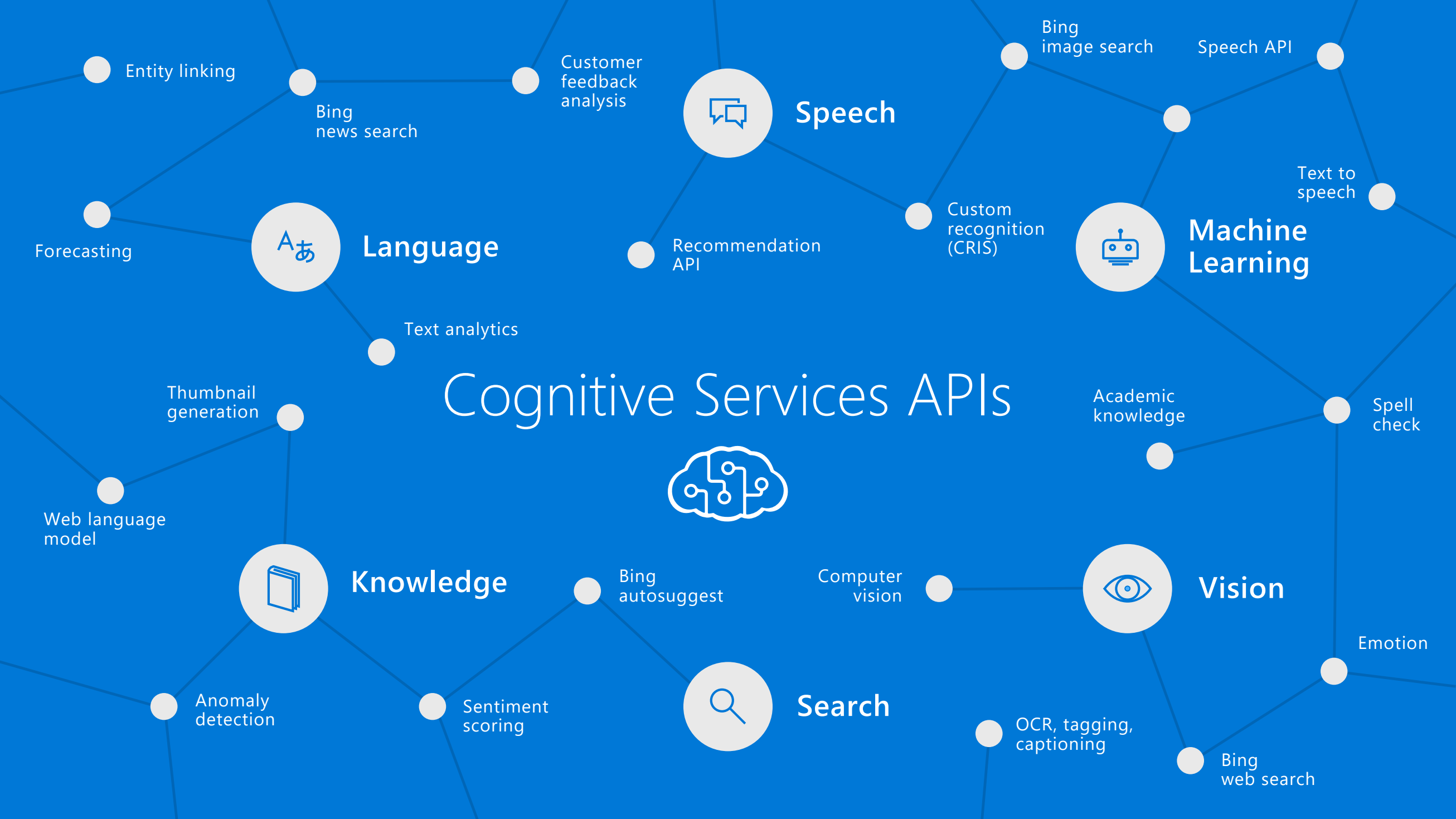
How did I do?

★★★★★

Try another






The Magic behind CaptionBot.ai
Powered by Microsoft Cognitive Services





Cognitive Services

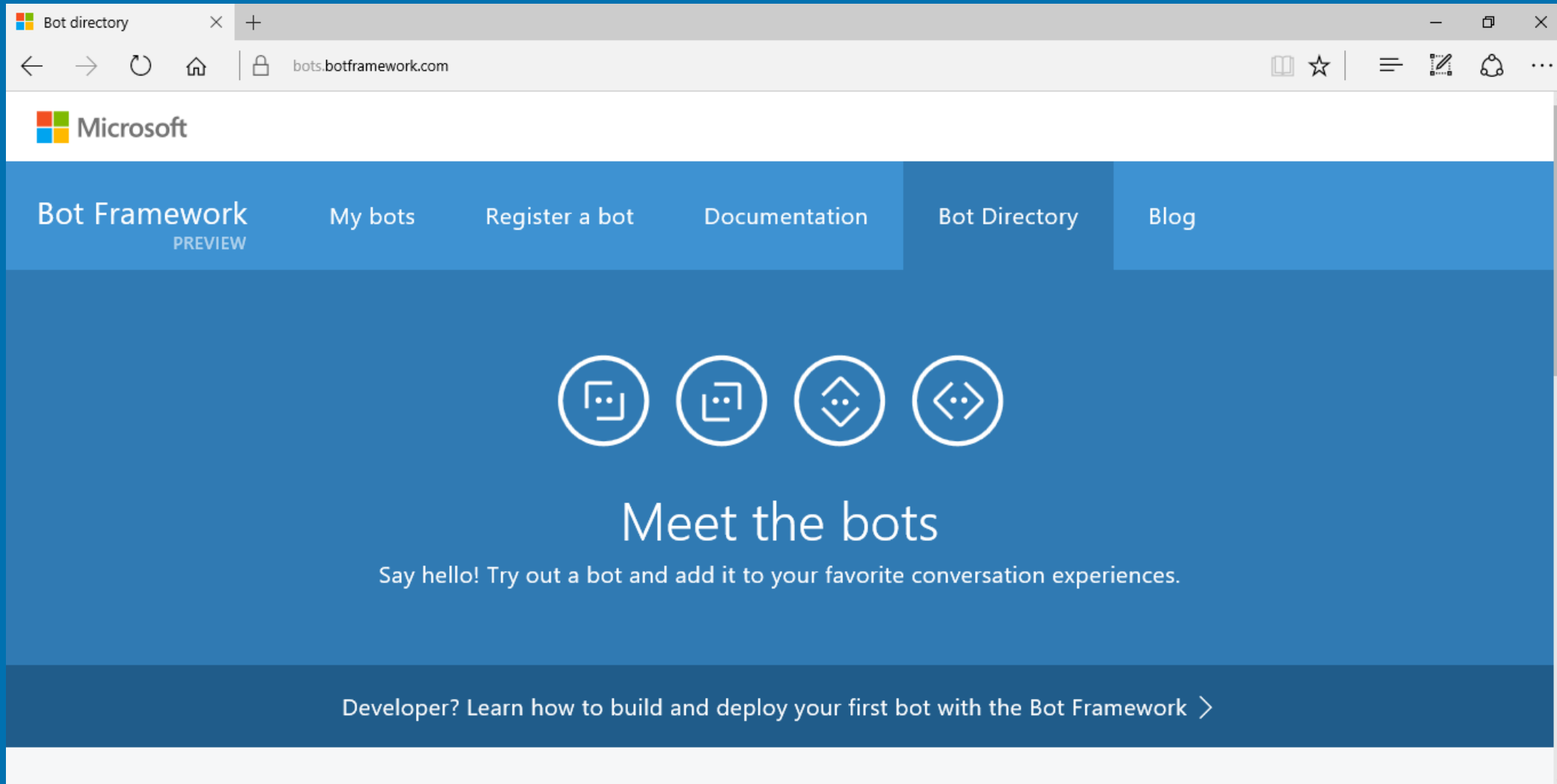
microsoft.com/cognitive

 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/>



Bot Directory



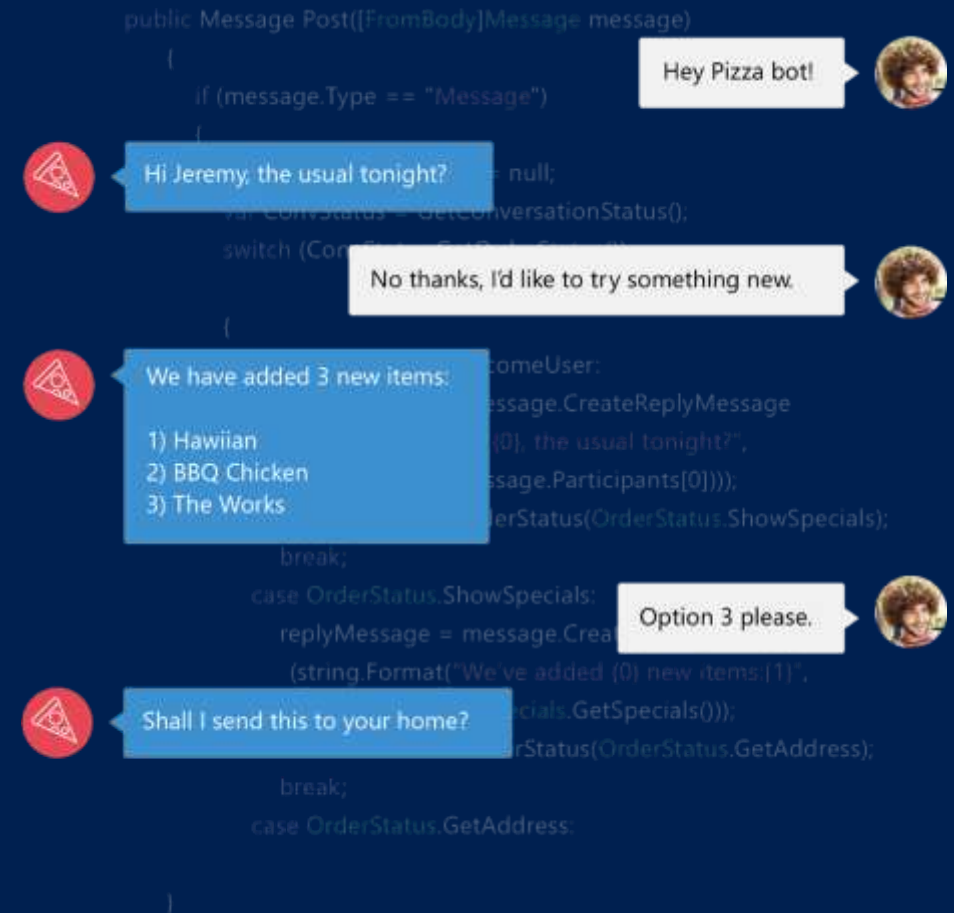
<https://bots.botframework.com/>

Bot Framework

Bot Framework is a Microsoft-operated service and an SDK.

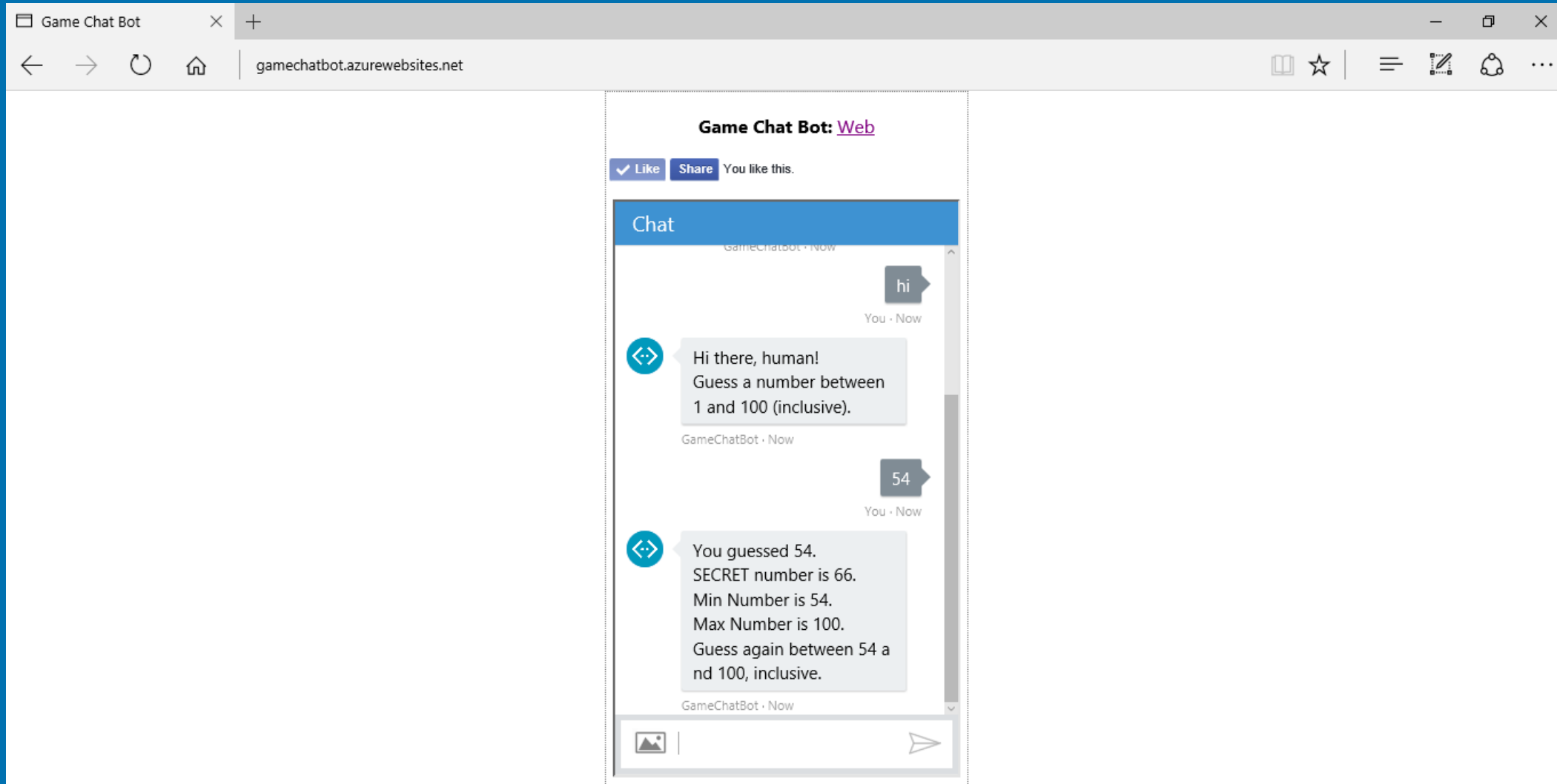
Bot Framework is one of many tools Microsoft offers for building a complete bot.

Others include: LUIS, Speech APIs, Azure, more



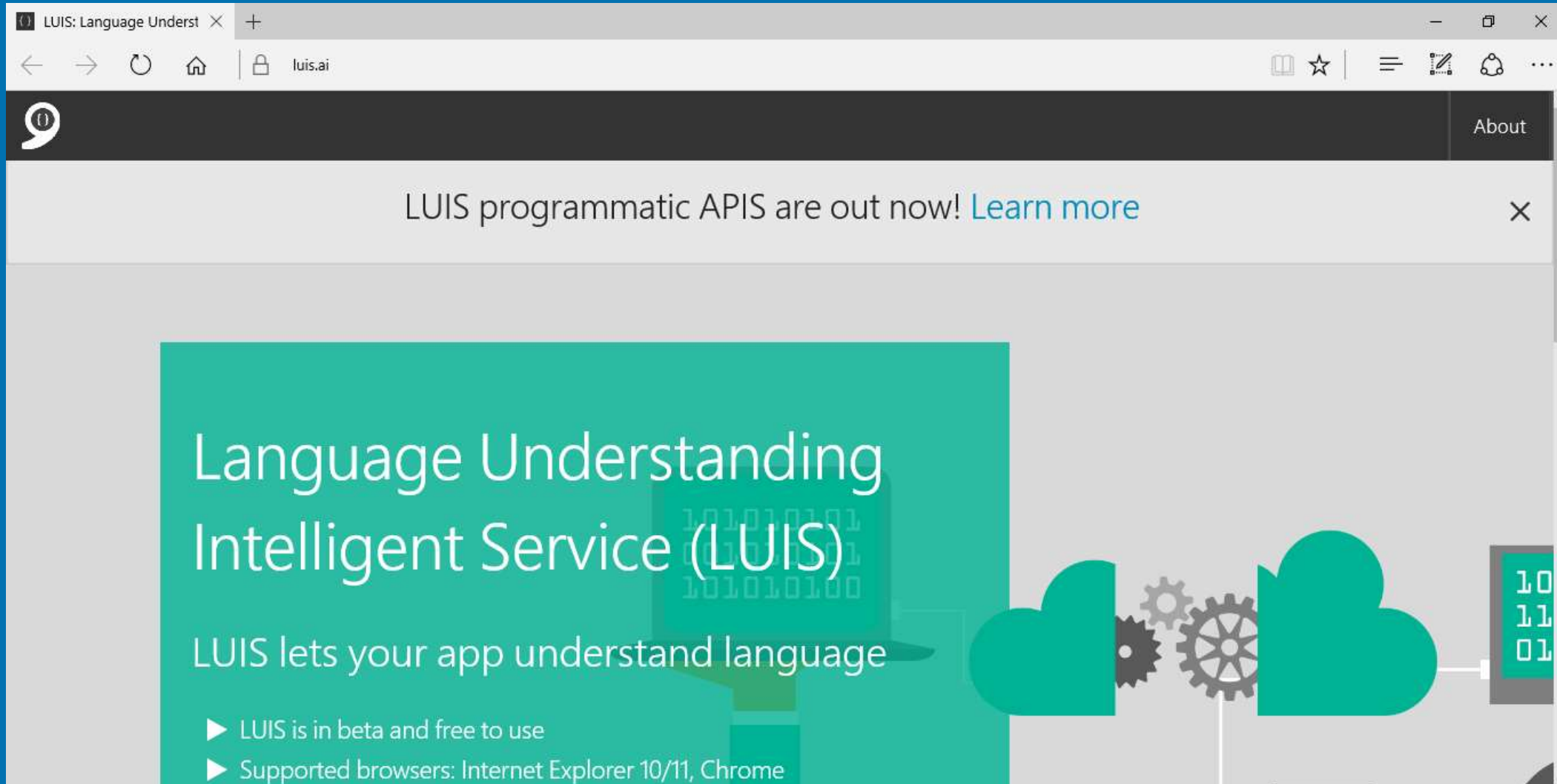
Demo

Game Chat Bot



<http://gamechatbot.azurewebsites.net/>

Language Understanding Intelligent Service



<https://www.luis.ai/>

감사합니다

Thank you~!