

# 01. Chatbot是甚麼

聊天機器人 (ChatBot) 是經由對話或文字進行交談的電腦程式。 能夠模擬人類對話，通過圖靈測試。 聊天機器人可用於實用的目的，如客戶服務或資訊獲取。目前，聊天機器人是虛擬助理（如 Google 智能助理）的一部分，可以與許多組織的應用程式，網站以及即時消息平台 (Facebook Messenger) 連接。

## Chatbot 無處不在

我地可以查天氣，叫車，問知識，仲有查訂單



## Microsoft Bot Framework 介紹

Microsoft Bot Framework 也提供可在單一位置建立、測試、部署及管理智慧型 bot 的工具。 Bot Framework 包含模組化且可擴充的 SDK，可用於建立 bot，以及工具、範本和相關的 AI 服務。使用此架構時，開發人員可以建立使用語音的 bot、瞭解自然語言、處理問題和解答等等。

## 動手創建自己的第一個chatbot

1. 準備工作，請參考00.Ready.pdf
2. 在Terminal下，安裝以下Python庫

```
pip3 install botbuilder-core
pip3 install asyncio
pip3 install aiohttp
pip3 install cookiecutter==1.7.0
```

3. 繼續在Terminal 下在指定位置創建你的chatbot應用，你可以參照手冊在Desktop桌面創建一個chatbot 目錄

```
mkdir chatbot

cd chatbot

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

創建過程中，你需要如圖輸入chatbot的名稱，和相關的描述說明（名稱是必須的，但描述可以忽略），如圖所示，建立了一個名為chatbothol01的bot檔案項目

```
$ cookiecutter https://github.com/microsoft/BotBuilder-Samples/releases/download/Templates/echo.zip
You've downloaded /Users/lokinfey/.cookiecutters/echo.zip before. Is it okay to delete and re-download it? [yes]: yes
bot_name [my_chat_bot]: chatbothol01
bot_description [Demonstrate the core capabilities of the Microsoft Bot Framework]:
(pydev)
```

4. 進入該目錄，並安裝對應的依賴庫

```
cd chatbothol01

pip3 install -r requirements.txt
```

5. 啟動bot

```
python3 app.py
```

啟動成功狀態如下圖

```
$ python3 app.py
===== Running on http://localhost:3978 =====
(Press CTRL+C to quit)
```

6. 打開Bot Framework Emulator , 點擊Open Bot Button, 在Open Bot窗體內的Bot URL 輸入 `http://localhost:3978/api/messages`

## Bot Framework Emulator

Version 4

How to build a bot

Start by testing your bot

Start talking to your bot by connecting to  
[More about working locally with a bot](#)

Open Bot

If you don't have a bot configuration, [create one](#)

My Bots

You have not opened any bots

[Sign in with your Azure account.](#)

### Open a bot

Bot URL

Browse

Microsoft App ID

Microsoft App password

Direct Line Speech Region

Direct Line Speech Key

Test Options - Random Seed

Test Options - Random Value

☐ Open in debug mode

☐ Azure for US Government [Learn more.](#)

Cancel

Connect

bot [design guidelines](#) for best practices

Command Line tools  
from [Azure](#) or [locally](#)  
such as

[Understanding \(LUIS\)](#), [QnAMaker](#) and

[Emulator](#)  
[Web Chat](#)

tly to [Azure](#) or  
[ious Deployment](#)

[channels](#)

[view analytics](#)

7. 點擊Connect Button 就可以進入Chatbot, , 如果輸入hello, 如果能如下圖所示, 你的第一個chatbot 就搭建成功了

⌵

JSON

Copy json

▼ root:

type: "message"

serviceUrl: "http://localhost:52392"

channelId: "emulator"

▶ from:

▶ conversation:

▶ recipient:

locale: "en-US"

text: "You said 'hello'"

inputHint: "acceptingInput"

replyToId: "c7c8a620-422d-11ec-8021-efbdebd18aa2"

id: "c7c99080-422d-11ec-8021-efbdebd18aa2"

localTimestamp: "2021-11-10T21:54:53+08:00"

timestamp: "2021-11-10T13:54:53.448Z"

Hello and welcome!

Just now

hello

Just now

You said 'hello'

Just now

⌵

Type your message

➤

[21:54:49] Connecting to bot on http://localhost:3978/api/messages

[21:54:49] Emulator listening on http://[::]:52392

[21:54:49] ngrok not configured (only needed when connecting to remotely hosted bots)

[21:54:49] [Connecting to bots hosted remotely](#)

[21:54:49] [Edit ngrok settings](#)

[21:54:49] -> [conversationUpdate](#)

[21:54:49] <- [message](#) Hello and welcome!

[21:54:49] [POST 200](#) conversations/<conversationId>/activities/<activityId>

[21:54:49] [POST 201](#) directline/conversations/<conversationId>/activities

[21:54:53] -> [message](#) hello

[21:54:53] <- [message](#) You said 'hello'

[21:54:53] [POST 200](#) conversations/<conversationId>/activities/<activityId>

[21:54:53] [POST 201](#) directline/conversations/<conversationId>/activities

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