聊天機器人修改說明

資訊

網站 https://www.botlibre.biz/

帳號 hjchenntnu@gmail.com
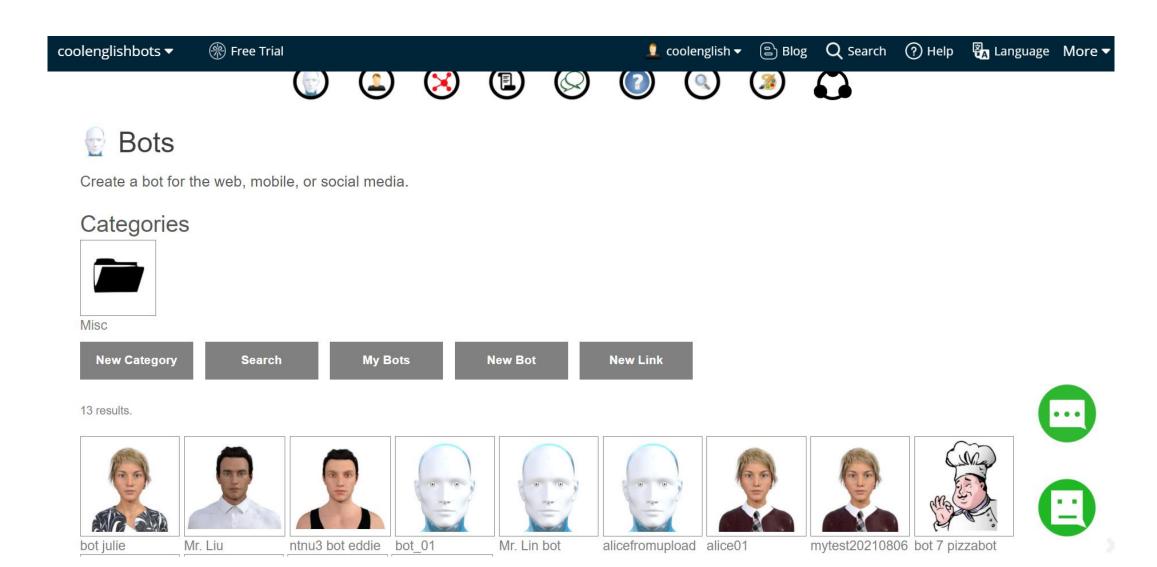
密碼 77341781b

官方手冊 https://www.botlibre.biz/user-manual.pdf
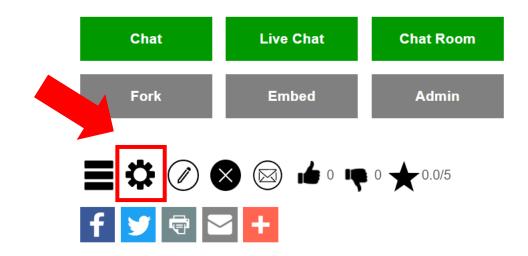
如何查看對話

點擊齒輪符號，進入admin console

ntnu3 bot eddie

| Info | Details | Stats |

Alias: @ntnu3boteddie
Content Rating: Teen

| Chat | Live Chat | Chat Room |
| Fork | Embed | Admin |

👍 0 👎 0 ★ 0.0/5

選擇Training & Chat Logs

Browse : ntnu3 bot eddie

⚙ Admin Console

Users - Configure who can access, and administer your bot.

Avatar - Configure your bot's appearance. Choose an animated avatar, or create your own.

Voice - Configure your bot's language and voice.

Learning & Settings - Configure your bot's learning ability and other settings.

Training & Chat Logs - Train your bot's responses, greetings, and default responses. View your bot's conversations. Import and export chat logs, respon CSV, and AIML files.

Scripts - Add, create, edit, import, and export Self or AIML scripting programs.

查看 使用search和duration查看對話及回覆內容
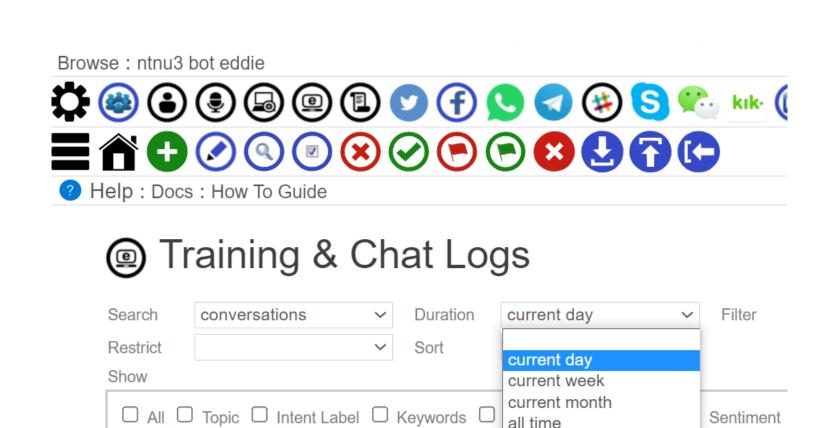
Search

Search

| Name	Description
Conversation	the log of each conversation your bot has had 期間所有對話記錄
Responses	all responses your bot has been trained with 訓練bot的material
Greetings	all greetings your bot will use to start conversations 一開始bot給使用者的問候語
Default Responses	all default responses your bot will use when it does not know a better response 當使用者說的話不在bot能應付的範圍 (no responses / nothing to match)時，就會使用Default responses。它可以是非常general的萬用句(e.g. I see / okay) 或是一個另開話題的問句
Phrases	all phrases (sentences) your bot has encountered 記錄bot遇到的所有句子
Words	all words your bot has encountered 記錄bot遇到的所有字
Flagged responses	all responses that have been flagged by users or administrators 被標記的responses

使用search和duration查看對話及回覆內容
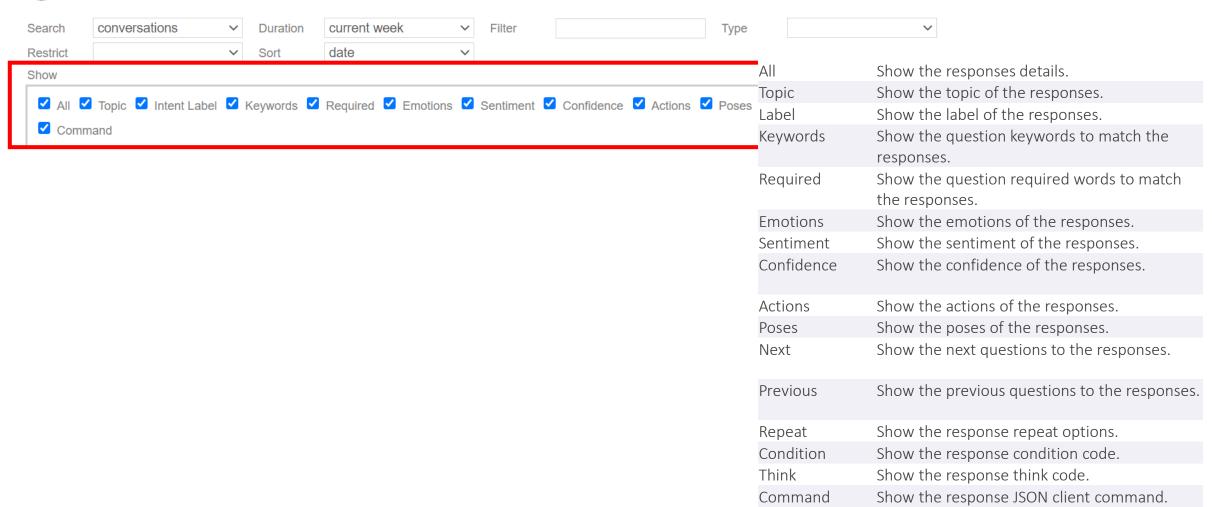
Duration

Filter the results by day,

week, month, or all.

查看時，Show的欄位選擇all，才能看到所有設定

Training & Chat Logs

| Search | conversations ▾ | Duration | current week ▾ | Filter | | Type | ▾ |
| Restrict | ▾ | Sort | date ▾ | | | | |

Show

☑ All ☑ Topic ☑ Intent Label ☑ Keywords ☑ Required ☑ Emotions ☑ Sentiment ☑ Confidence ☑ Actions ☑ Poses
☑ Command

All	Show the responses details.
Topic	Show the topic of the responses.
Label	Show the label of the responses.
Keywords	Show the question keywords to match the responses.
Required	Show the question required words to match the responses.
Emotions	Show the emotions of the responses.
Sentiment	Show the sentiment of the responses.
Confidence	Show the confidence of the responses.
Actions	Show the actions of the responses.
Poses	Show the poses of the responses.
Next	Show the next questions to the responses.
Previous	Show the previous questions to the responses.
Repeat	Show the response repeat options.
Condition	Show the response condition code.
Think	Show the response think code.
Command	Show the response JSON client command.

查看

查看時，Show的欄位選擇all，才能看到所有設定

Topic 主題 (response屬於哪個topic)

#Intent Label 意圖標籤 (設定好回應句之後，可使用同一回應句回應此類別的意圖)

Keywords 關鍵字 (設定question中的關鍵字)

*詳細內容會在**如何修改回覆**提到

如何在bot libre修改回覆 (Conversations)

由左至右分別為:

1. enter a new default response

2. enter a better response for each selected response in the conversations

3. browse the selected responses or phrases

4. select all listed conversations

5. mark the selected responses as incorrect, or decrease their % correctness (the bot will never use these responses to the question again)

6. mark the selected responses as good responses, or increase their % correctness (the bot will use this response to similar questions)
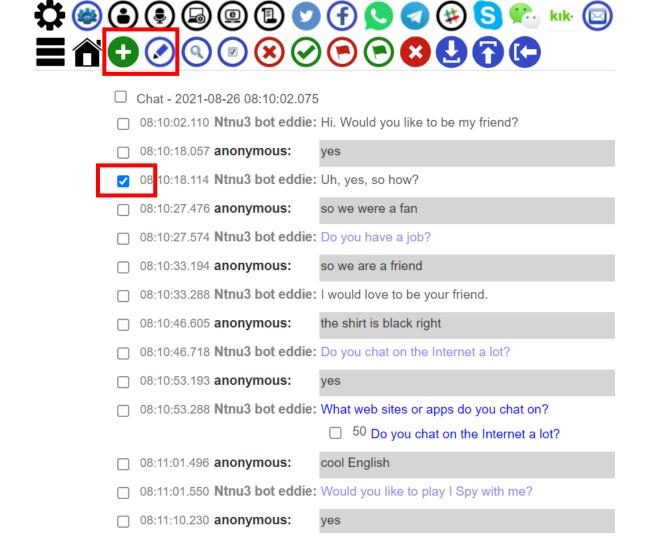
由左至右分別為:

1.   flag the selected phrases as offensive, the bot will never repeat them, and will not let users enter them

2.   unflag the selected phrase as not offensive phrases

3.   remove the response from the question, or delete the conversation

4.   export and download the listed conversations as a chat log, response list, or AIML set

5.   upload and import a chat log, response list, or AIML file from your computer

6.   import a chat log, response list, or AIML script from the shared script library

如果看到chatbot有不適合的回覆

(不一定是直述句，也可能是問句)

可以勾選那則回覆

再按上方工具列新增/修改 回覆

Conversations

Name	Description
Question ★	Edit the question, if desired, you can use * wildcard to make a pattern.
Sentiment	You can associate an emotion with the phrase.
New Response ★	Enter a new response for the phrase.
Condition	Optionally you can give a condition in self code that must evaluate to true for the response to be use.
Think	Optionally you can give a 'think' code in self that is evaluated when the response is used.
Command	Optionally you can give a JSON command (Self code) that is evaluated and returned to the client to support games and virtual assistance.
Topic ★	Optionally you can give a topic to categorize the response under.
Intent Label ★	Optionally you can give a label to reuse the response as.
Keywords ★	Optionally you can give keywords from the question that will influence a response match.
Required ★	Optionally you can give required words from the question that will be required for a response match.

Conversations

Name	Description
Emotions	You can associate an emotion with the response.
Actions	You can associate an action with the response.
Poses	You can associate a pose with the response.
On Repeat ★	Optionally you can give a response to used if the current response has already been used in this conversation.
No Repeat	Require that the response or phrase only be used once.
Next ★	Optionally you can give a next response to give a response a context.
Previous ★	Optionally you can give a previous response to give a response a context.
Require Previous ★	Require that the response only be used if the previous response matches one of the previous responses.
Save ★	Save the corrections to the phrases.

Search | conversations | Duration | all time | Filter

Restrict | | Sort | date

Show

☑ All ☑ Topic ☑ Intent Label ☑ Keywords ☑ Required ☑ Emotions ☑ Sentiment ☑ Confidence ☑

☑ Command

①

Enter the correct response to the phrase

❓ ☑ ☐ Previous: Hi. Would you like to be my friend?

Question: yes

❓ ☑ Auto Reduce

② ❓ ☑ Response: Uh, yes, so how?

❓ Correction: WYSIWYG ▾

Edit ▾ Insert ▾ View ▾ Format ▾ Table ▾ Tools ▾

↩ ↪ **B** *I* A ▾ A ▾ ≡ ≡ ≡ ≡ ☰ ▾ ☰ ▾ ⬅ ➡

Verdana ▾ 11pt ▾

③ Glad that we are friends!

① 視情況選擇previous / require previous
(when the question is specific to the
previous response) 用於建立context

② 若要修改成新的回覆，請務必勾選!!!

③ 輸入新的回覆

4 Topic:

☐ Require Topic ☐

5 Intent Label:

6 Keywords:

Required:

Emotions:

Actions:

Poses:

On Repeat:

☐ No Repeat

Previous:

☐ Require Previous

Next:

4 歸類 response 至某主題

A topic is the general topic category for the response. Topics can be used in responses to track the context of the conversation.

5 用類別標記response，並可重複使用此response

A label lets you name a response and then reuse it just using the name.

6 標記question裡的關鍵字，以利使用特定回覆

Keywords are important words in the question that should influence when the response is used.

Conversations

Topic:

☐ Require Topic ☐

Intent Label:

Keywords:

7 **Required:**

Emotions:

Actions:

Poses:

8 **On Repeat:**

☐ No Repeat

9 **Previous:**

☐ Require Previous

10 **Next:**

7 看到required word才會回專屬回覆

A required word is a word that is required to be in the question for a specific response.

8 同一question多個responses

On repeat lets you set one or many responses to use the second time that response is triggered in the same conversation.

9 previous 提供前文

A previous responses is the bot's preceding response. Previous responses can be used to give a response a context.

10 next 提供後文

The next is a follow-up question that the user might ask after the bot gives the response.

ntnu3 bot eddie 17:52:09
Hello, Coolenglish. So glad that I can chat with you.

coolenglish 17:52:13
friend

ntnu3 bot eddie 17:52:14
I'll always be your fiend.

coolenglish 17:52:18
yes

ntnu3 bot eddie 17:52:18
Glad that we are friends!

看到使用者回覆yes，這個yes可能對到多個questions，但是因為我們剛剛有勾選previous來建立context，所以chatbot就知道下一句要接針對這個context的回覆，也就是剛剛建立的句子Glad that we are friends!

但我們又發現它其中一句回應句有typo，所以一樣再回到conversations那邊，把這句勾選起來，按小鉛筆圖示進去修改

修改

Conversations

after

☐ Chat - 2021-09-01 05:54:29.514
☐ 05:54:29.550 **Ntnu3 bot eddie:** Hello, Coolenglish. So glad that I can chat with you.
☐ 05:54:33.664 **coolenglish:** friend
☐ 05:54:33.699 **Ntnu3 bot eddie:** I'll always be your friend.
☐ 05:54:38.763 **coolenglish:** yes
☐ 05:54:38.807 **Ntnu3 bot eddie:** Glad that we are friends!
☐ 93 Hi. Would you like to be my friend?

before

☐ Chat - 2021-09-01 05:52:09.556
☐ 05:52:09.591 **Ntnu3 bot eddie:** Hello, Coolenglish. So glad that I can chat with you.
☐ 05:52:14.461 **coolenglish:** friend
☐ 05:52:14.505 **Ntnu3 bot eddie:** I'll always be your fiend.
☐ 05:52:18.808 **coolenglish:** yes
☐ 05:52:18.845 **Ntnu3 bot eddie:** Glad that we are friends!
☐ 93 Hi. Would you like to be my friend?

修改好之後再測一次

就可以看到剛才的typo被改好了

如何在bot libre修改回覆 (Responses)

Responses

一樣從Training & Chat logs進來，

選擇 Review all responses

或是從search下拉式選單選也可以 (記得改查詢區間)

☐ All ☑ Topic ☑ Intent Label ☑ Keywords ☑ Required ☑ Emo
☑ Command
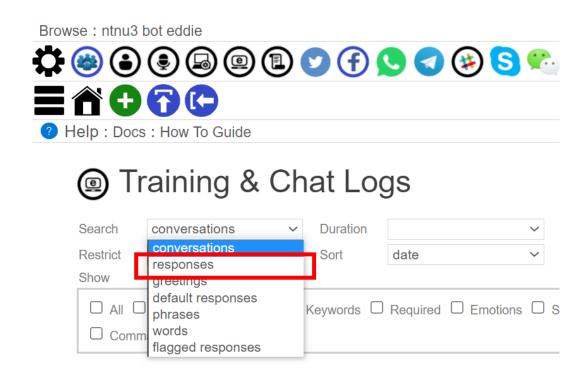
Tasks

? Add a new response.
? Add a new greeting.
? Add a new default response.
? Add a new word.
? Review conversations today.
? Review conversations this week.
? Review greetings.
? Review default responses.
? Review intents & labeled responses.
? Review all responses.
? Review all responses missing keyword.
? Review flagged responses.
? Review flagged words.
? Review keywords.
? Review synonyms.
? Review sentiment.

Browse : ntnu3 bot eddie

? Help : Docs : How To Guide

⊙ Training & Chat Logs

Search   conversations   Duration
Restrict conversations   Sort   date
Show   responses
          greetings
☐ All ☐ default responses   Keywords ☐ Required ☐ Emotions ☐ S
          phrases
☐ Comm   words
          flagged responses

Responses

% friend

⚙ □ -50 I'll always be your fiend.

⚙ □ 100 I'll always be your friend.

question

□ % yo

⚙ □ 100 Hey!

⚙ □ 100 how are you

response(s)

會看到單個單個的question和相對應的response

有時候同一個question可能會有不只一個response

跟前面的修改方式一樣

勾選起來按工具列新增/修改

*文字左邊的數字是confidence，bot會挑confidence高的回覆使用

細節請看參考文件1

如何取得所有responses

Responses

1. 到Training & Chat logs頁面，下方Tasks選擇Review all responses
2. 最上面工具列有一個下載圖示 ⬇️，按下去後會出現一個視窗
3. format選擇要輸出的形式，pages選擇要輸出至第幾頁，並勾選是否連greetings & default responses也一起輸出
4. 根據輸出格式不同，會有不同檔名 (Response list副檔名.res) (AIML副檔名.aiml)

Export ✖

Format Response List ⌄
Pages   1
☑ Greetings ☑ Default Responses
Export   Cancel

Export ✖

Format AIML ⌄
Pages   1
☑ Greetings ☑ Default Responses
Export   Cancel

Responses

Response list

A response list is a list of question/response pairs. Each phrase is separated by a new line, and each question/response list is separated by an empty line.

You can also tag responses with meta data such as keywords, previous, required, etc.

Response lists are the recommended way to train a bot. The bot will automatically find the best matching response for any question, the questions do not need to be exact matches, only sufficiently similar, or include a keyword.

輸出

Responses

AIML則呈現較多語法及功能資訊，簡易教學請看

[參考文件](#)

我自己之前的經驗是用aiml寫出來的東西有個小缺點，使用者講出來的句子一定要跟我們寫的完全相同才會match。所以其中必須運用到許多

[wildcards](#)來稍稍取巧一下，但用太多又會讓整體

question & response太general。

Responses

之前有問過bot libre的support team，他們比較推薦使用response list 來訓練chatbot

"Using a response list would be better than AIML, as these templates use features not supported by AIML."

post下方admin的回覆

"If you use a response list instead of AIML, then you can set a topic just by setting the topic of the response, and topics can be either required, or optional."

aiml 寫進去後，bot libre的chatbot可以整合比對response list，並選擇最適合的response

綜合以上+我實測過後的想法是**建立一般question & response和metadata可以用response list，需要使用進階語法功能再用aiml寫。**

如何使用response list和aiml撰寫
training responses

response list + aiml

1. 我分別使用**response_list_script.res**和**aiml_script.aiml**這兩個檔案撰寫，上傳到training & chat logs後到chatbot測試句子，測試這兩種寫法可以做到的functions

2. 需要修改或新增時，重新上傳檔案即可，系統會自動新增內容，但不會把舊的刪掉，所以再次測試過後要回review all responses 刪除原本不適合或沒通過的response

3. 沒問題的話再下載一份含有全部training responses (response_list_script內容 + aiml_script內容) 的response list，看看chatbot消化過後的responses長什麼樣子

4. 以下教學先講response list的寫法，再介紹aiml的寫法，最後再呈現最終res的樣子

response list---greeting

greeting是一開始進入對話時，chatbot和使用者說的問候語。

這邊是用template跟判斷式的寫法。

greeting: Template("{ if (speaker.name == null) { random ("Hello sweetheart",

"How are you doing?",

"Hi my darling"); }

else { (random ("Hello ", "Hi ") + speaker + random (". How was your day?",

". I was hoping you would chat with me today.",

". I have been waiting for you.")); } }")

default response會在chatbot training responses
以及 **使用者說的內容** 無法match時出現

default: This is an example of a default response.

default: Sorry, I don't understand.

在response list寫的時候記得空一行

一行一個response且前面都要標註是哪一種

(前面greeting我們用template寫，這邊示範一行一行寫)

greeting: 打招呼1

greeting: 打招呼2

default: default response 1

default: default response 2

response list---question & response

question 通常是使用者講的話，response是機器人給使用者的回覆

(在寫script的時候是這樣設定，但如果遇到多輪對話，上一輪response
就會是下一輪的question)

question: i love spinach

response: Spinach is my favorite food.

keywords: spinach

question: do you like field hockey

response: I only play ice hockey.

keywords: "field hockey"

keywords是compound word的話，
記得加quotation marks

---

question & response 基本寫法

question:

response: 必要!!!

topic:

intent label:

keywords: 需要時再加
                       metadata
required: 順序不影響

on repeat:

previous:

require previous:

next:

response list---question & response

question: does the order of metadata matter   第一輪

response: i don't think so

question: so the order does not matter   第二輪

response: that's right

previous: i don't think so

required: order

keywords: order

topic: order

on repeat: correct

label: #order

question: the order doesn't matter, right?

#order

前面有標記過label的話
之後要使用label的回覆就
不用再把它寫進response，
可以直接寫

---

question & response 基本寫法

question:

response: 必要!!!

topic:

intent label:

keywords: 需要時再加

required: metadata
                  順序不影響

on repeat:

previous:

require previous:

next:

response list---question & response

question: I want a boyfriend desperately.

response: Are you single?

兩個不同對話的question中都有yes，為了使機器人給出正確回覆，可使用previous或是更嚴格一點的require previous來建立context

question: yes

response: Great, wanna go out sometime?

require previous: Are you single?

也可以使用metadata，標註相關資訊

question: I am in a good mood.

response: Are you happy?

question: yes

response: I am please to hear that.

require previous: Are you happy?

response list---pattern & template

pattern & template 可視為具有語法功能的question & response

可加入wildcard字元 e.g. ^ 和 *

pattern: ^ hello ^

template: Welcome my guest!

Pattern("^ hello ^")

Template("Welcome my guest!")

pattern & template 基本寫法

有兩種寫法，兩種都ok

(1) 像question & response一樣的寫法

pattern:

template:

(2) function式寫法

Pattern("這一輪的問題")

Template("這一輪的回答")

也可以Pattern + response搭配，或是question + Template搭配

Pattern("show me a star sign *")

A star sign (*) matches 1 or more words. You can say "Show me a star sign please, could you?"

Pattern("^ a caret sign")

A caret sign (^) matches 0 or more words. You can say "Could you please show me a caret sign?"

joke

Template("{random ("Did you hear the one about the Mountain Goats in the Andes? It was Ba a a a a d.",

"I never forget a face, but in your case I'll make an exception.",

"It is better to be silent and be thought a fool, than to open your mouth and remove all doubt.") }")

Pattern & Template 可做簡單的語法應用，例如Pattern裡的*可為1至多個字

e.g. Japanese, Korean Indie, hip hop

在Template要寫語法的話，記得加{}，加{star}後代表此處填入Pattern裡的*的值

所以這邊會回 I love　　Japanese　　　　too.

　　　　　　　　　　　Korean Indie

　　　　　　　　　　　hip hop

Pattern("I love * music")

Template("I love {star} too.")

response list---pattern & template

Pattern("^ good morning *")

Template("Good morning {star[1]}.")

(Hi) good morning my friend

Good morning my friend

可以指定要重覆使用者的哪一個字或話，例如這句有兩個wildcard字元，如果只寫{star}的話，^跟*的內容都會出現在{star}的位置。有標數字的話就只會有一個。

pattern: my name is *

template: Pleased to meet you {star}.

think: speaker.name = star;

question: what is my name

template: Your name is {speaker.name}.

可將star內容記錄下來存成一個object
需要時使用

aiml---pattern & template

```
<aiml>

  <category>

    <pattern>RANDOM QUESTION</pattern>

    <template>

      <random>

        <li>Where are you from?</li>

        <li>Do you have any brothers or sisters?</li>

        <li>What is your favorite movie?</li>

      </random>

    </template>

  </category>

</aiml>
```

aiml 基本架構

最外層

每一組question & response

question (通常全大寫、不需標點、無縮寫) <pattern> </pattern>

response <template> </template>

其他功能

隨機

串列

指定(有點像require previous)

```
<aiml>

  <category>

    <pattern>TELL ME A JOKE</pattern>

    <template> Why did the chicken cross the road? </template>

  </category>

  <category>

    <pattern>^ WHY ^</pattern>

    <that>Why did the chicken cross the road?</that>

    <template> To get to the other side.</template>

  </category>

</aiml>
```

```
<aiml>

  <category>

    <pattern>DO [YOU U] (REALLY) [LIKE LOVE LUV] ME</pattern>

    <template>Yes, I love you.</template>

  </category>

  <category>

    <pattern>I LIKE * AND *</pattern>

    <template>I see. You like <star/> and <star index="2"/>.</template>

  </category>

</aiml>
```

可使用wildcards字元

[ ] 為必要元素，這個位置一定要有字

() 為可省略元素，可有可無

出現多於一個*時

一樣可使用編號去對

Pattern("do [you u] (really) [like love luv] me")

Yes, I love you.

confidence: 50

有運用到functions的會被轉成pattern & template形式，

其餘會以question & response呈現，且前方無

question: / response: 標記

Pattern("i like * and *")

Template("I see. You like {star[0]} and {star[1]}.")

confidence: 50

metadata也會一併呈現

Pattern("^ why ^")
To get to the other side.
confidence: 50
require previous: Pattern("why did the chicken cross the road?")

tell me a joke
Why did the chicken cross the road?
confidence: 50

response list + aiml 上傳到chat logs測試再輸出成res檔後

the order doesn t matter right
#order

does the order of metadata matter
i don't think so

so the order does not matter
that's right
label: #order
on repeat: correct
keywords: order
required: order
previous: i don't think so
topic: order

有運用到functions的會被轉成pattern & template形式，
其餘會以question & response呈現，且前方無

question: / response: 標記

metadata也會一併呈現

參考文件

前面的教學是我根據Bot Libre的官方文件精簡後整理的，細節和範例再麻煩大家到以下連結觀看，文件上寫得很清楚易懂。

必看!!!

1. Chat Logs : how to train your customer service bot by monitoring its chat logs, using keywords and topics.

2. Training & Chat Logs

3. What are the supported response and chat log formats for importing and exporting?

4. AIML

參考用

1. Pandorabots AIML Fundamentals ／ AIML Reference

2. Wildcards in AIML

3. Rich HTML Responses, Buttons, Links, and Choices

4. bot libre user manual