2018 인공지능 챗봇 교육 (사)한국인공지능연구소

왕초보, 코딩없이 챗봇 만들기

우 종 하

발표자 소개

- 챗봇 개발자 모임 운영
 - 페이스북 그룹
 - 챗봇, 인공지능 스피커, 자연어 처리 관련 커뮤니티

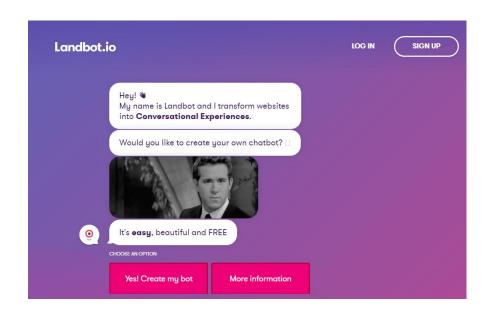


영화홍보 챗봇 만들기

Landbot.io로

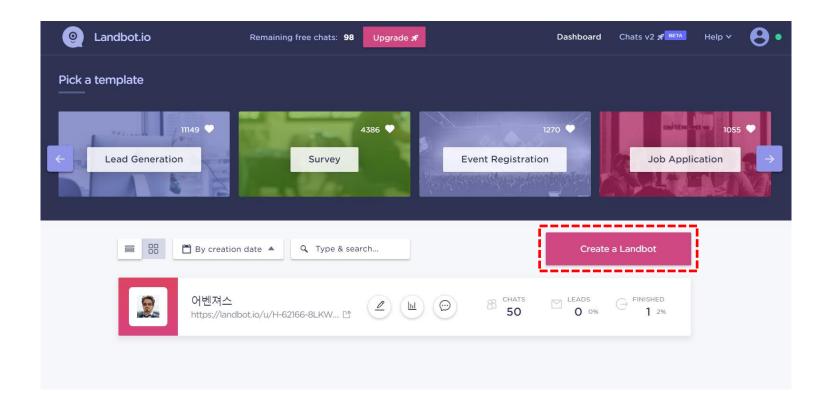
Landbot.io 소개

- 웹 기반 챗봇에 적합
- 플로차트로 쉽게 구현
- 자연어처리
 - 문장 입력은 안됨
 - 메뉴 선택만 가능
- 무료 버전
 - 한달에 100번 챗봇 대화 가능 (계정 여러개로 한번씩 사용)
 - 챗봇 당 최대 30개 대화만 작성 할 수 있음

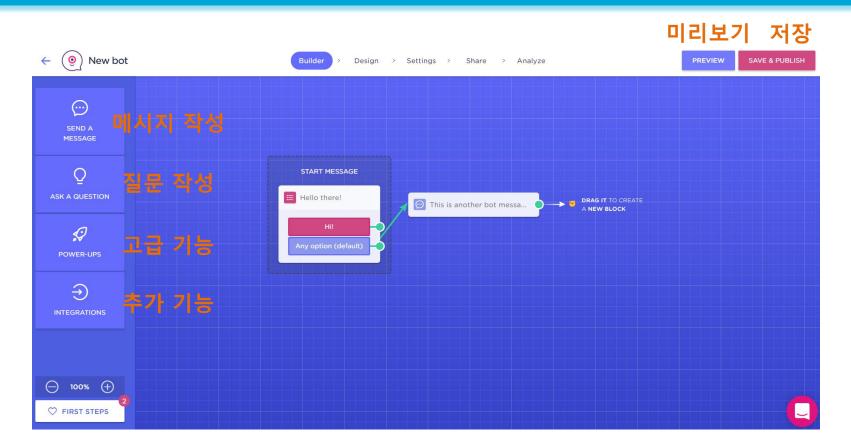


https://landbot.io/

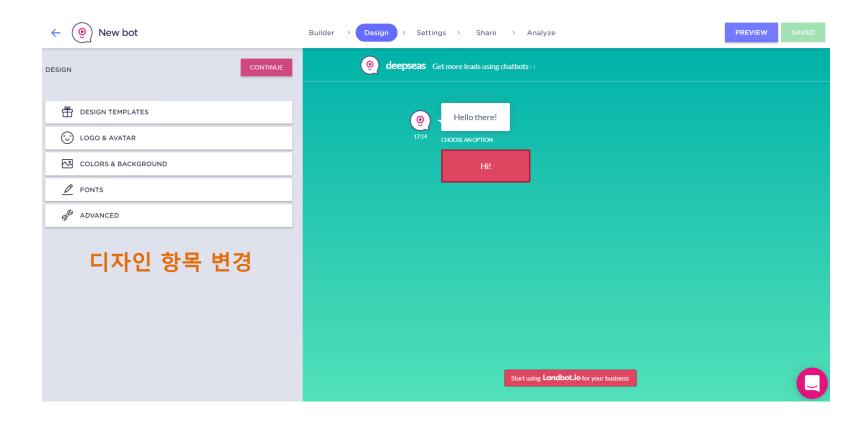
새로운 챗봇 생성



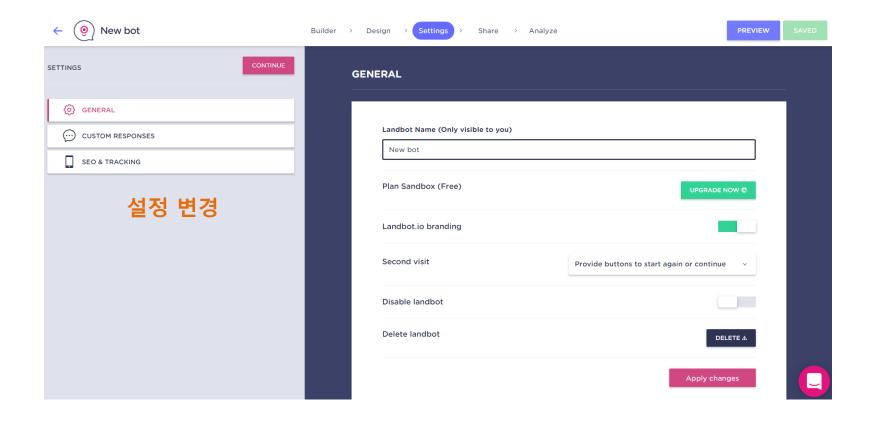
Builder 메뉴



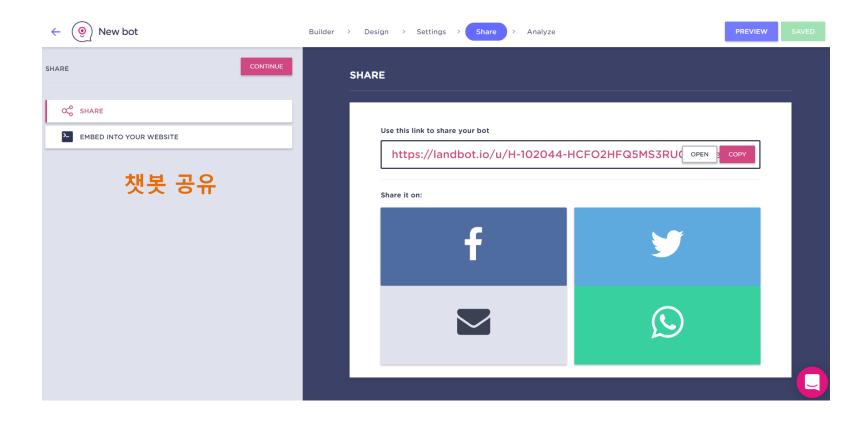
Design 메뉴



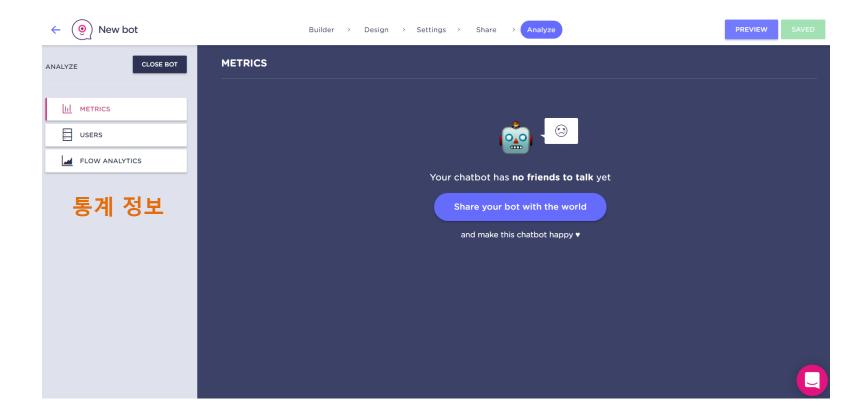
Settings 메뉴



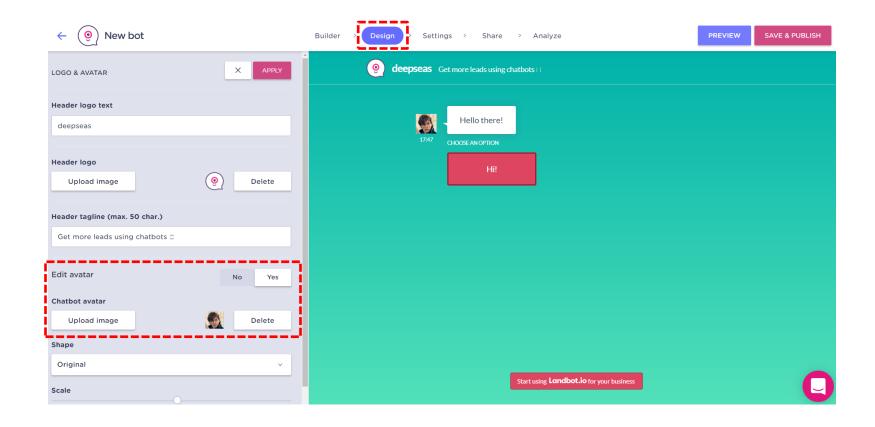
Share 메뉴



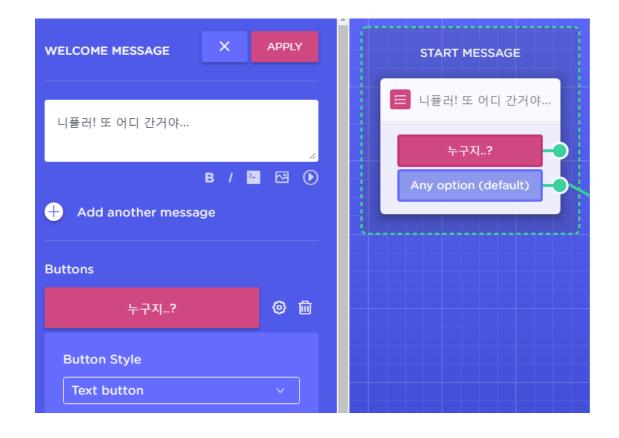
Analyze 메뉴



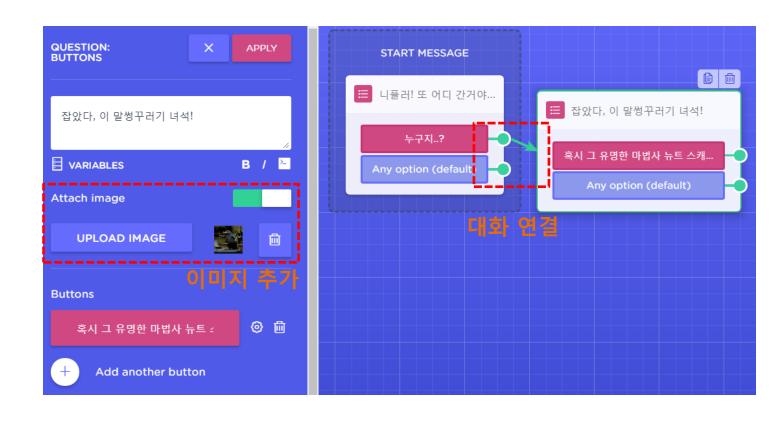
아바타 사진 변경



Welcome 메시지 작성



ASK A QUESTION -> BUTTONS 선택



Buttons에 2개 선택지 추가



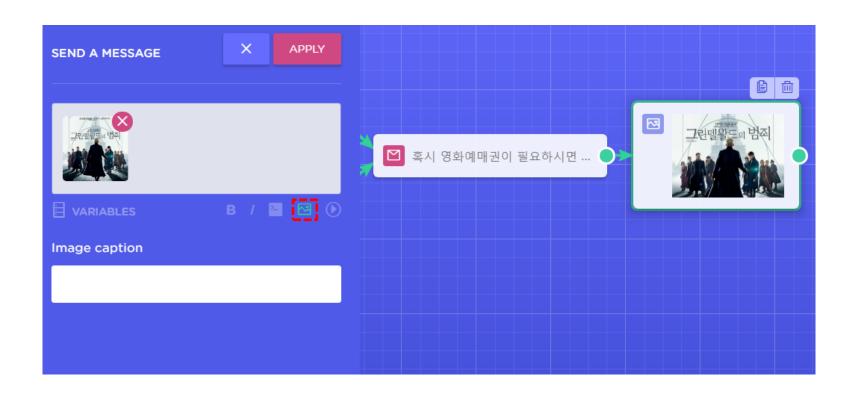
SEND A MESSAGE 선택



ASK A QUESTION -> EMAIL 선택



SEND A MESSAGE -> 이미지 추가



SEND A MESSAGE 선택

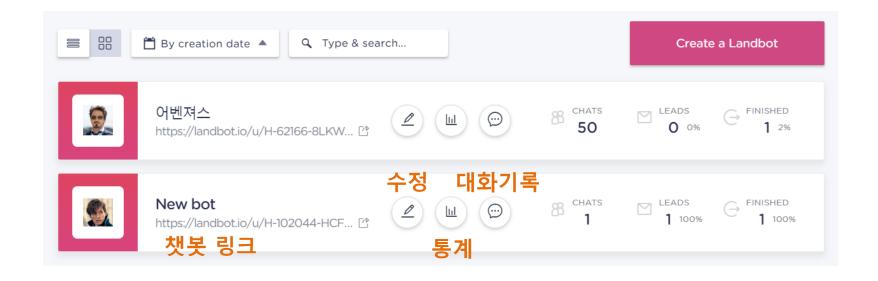


전체 대화 흐름

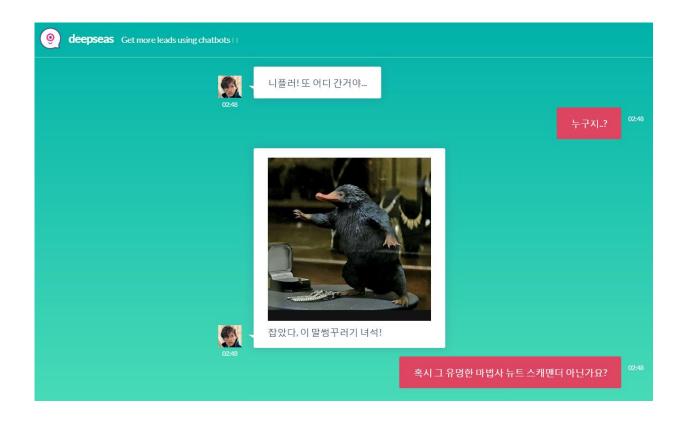




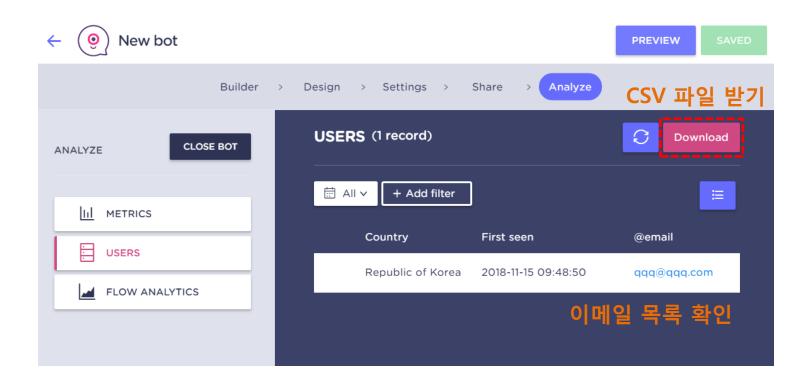
대시보드에서 생성된 챗봇 확인



챗봇 테스트



Analyze -> USERS



타로 챗봇 만들기

Chatfuel로

Chatfuel 소개

- 페북 메신저 전용 챗봇
- 다양한 UI 사용 가능
- 자연어처리
 - 의도 / 개체 분석 안됨
 - 문장 유사도 비교만 지원
- 무료 버전
 - 시작시 Chatfuel 소개 문구
 - 최초 5000명 이후의 유저는 챗 봇 사용 불가



https://chatfuel.com/

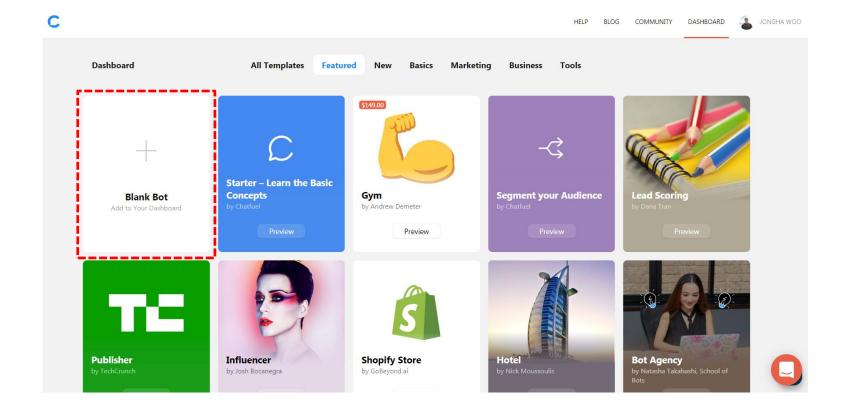
페이스북 페이지 생성



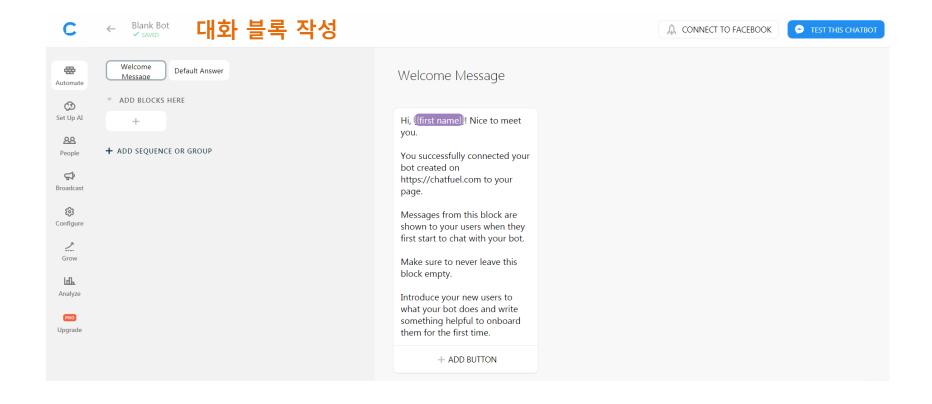




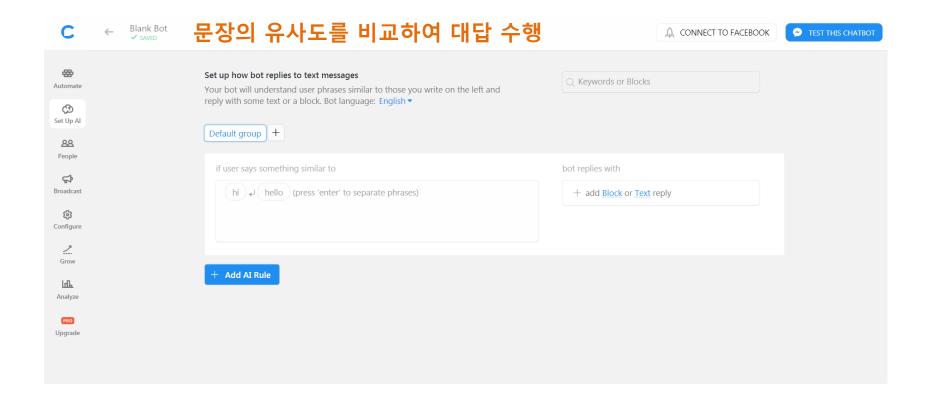
새로운 챗봇 생성



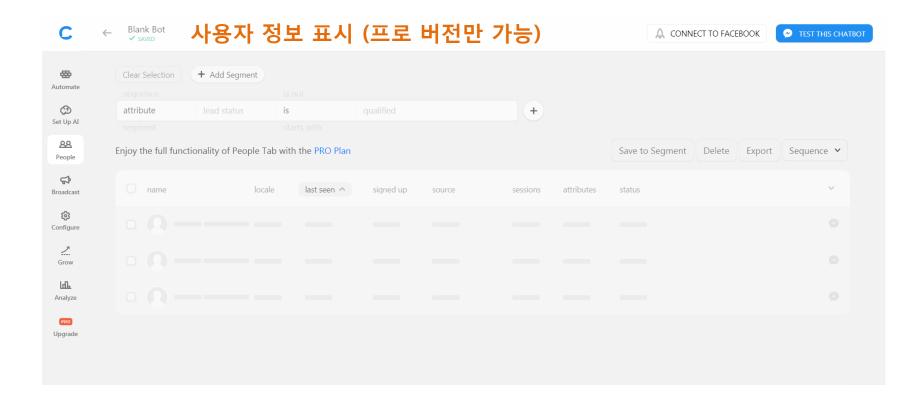
Automate 메뉴



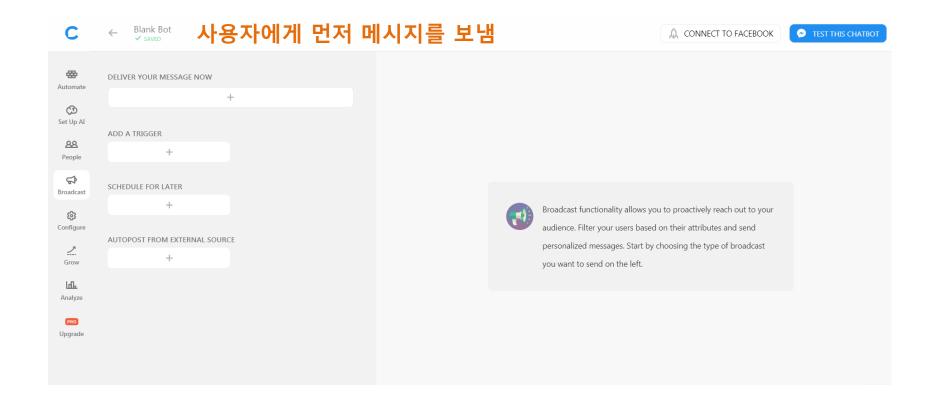
Set Up AI 메뉴



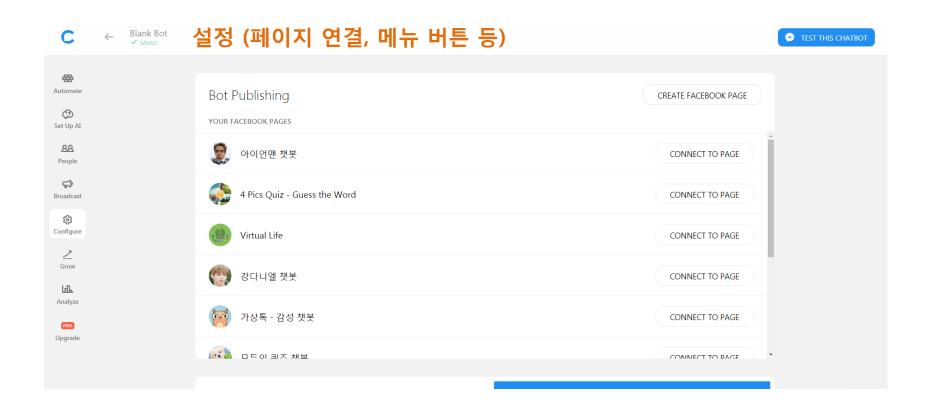
People 메뉴



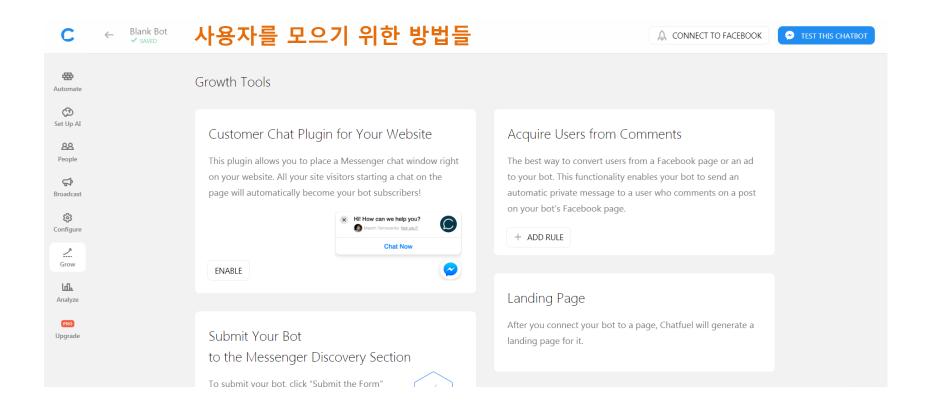
Broadcast 메뉴



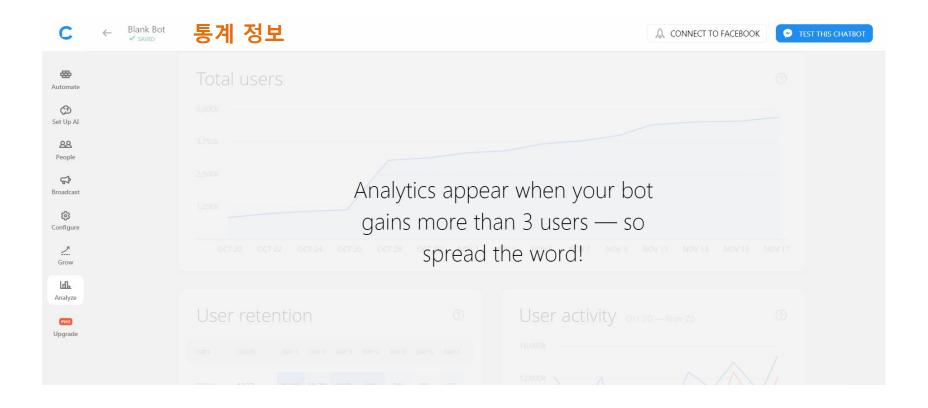
Configure 메뉴



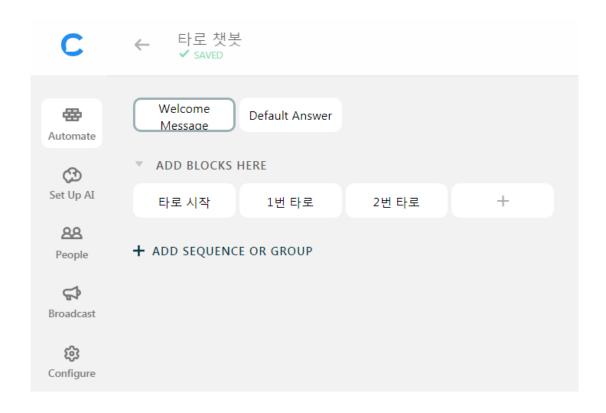
Grow 메뉴



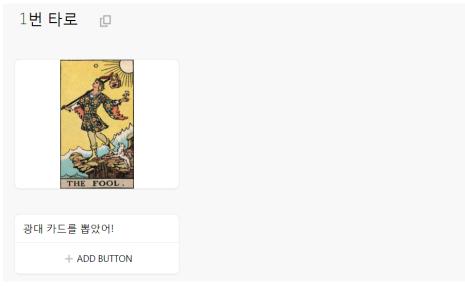
Analyze 메뉴

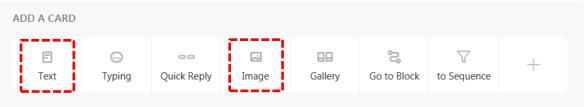


전체 블록

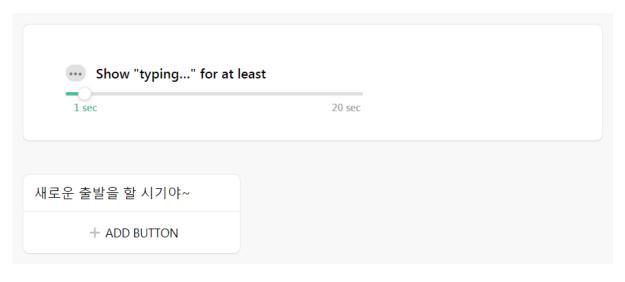


1번 타로 블록



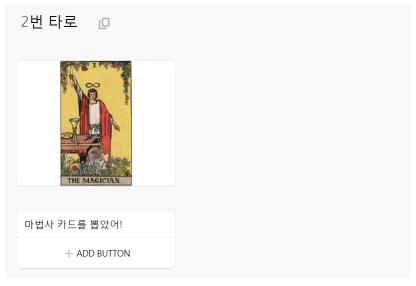


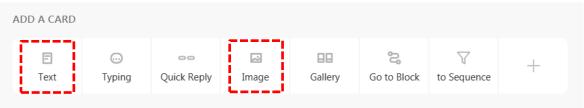
1번 타로 블록



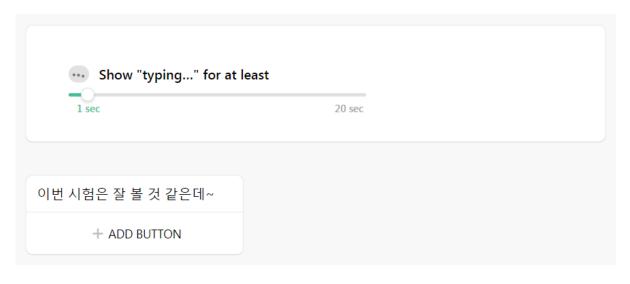


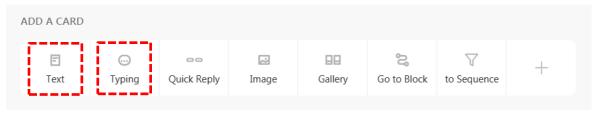
2번 타로 블록



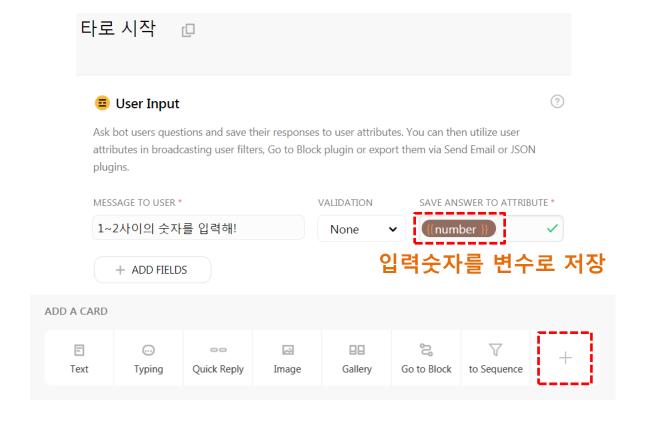


2번 타로 블록

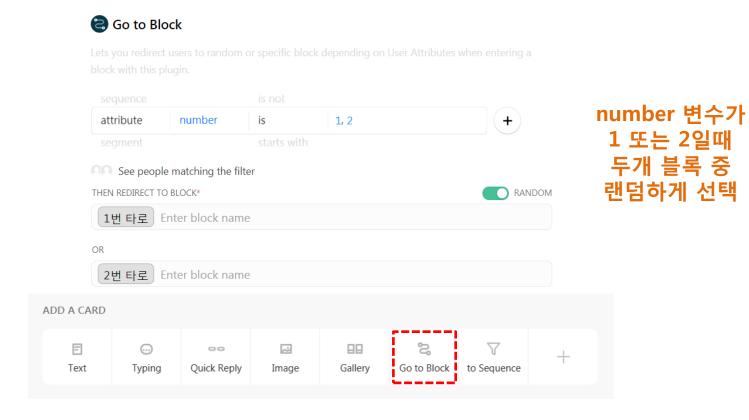




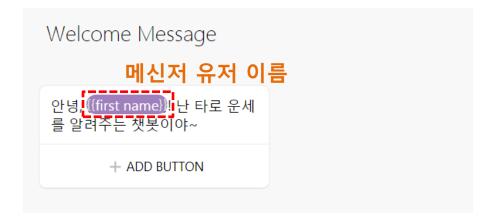
타로 시작 블록



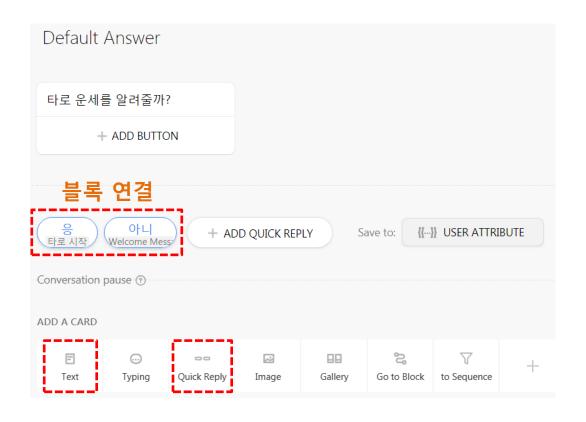
타로 시작 블록



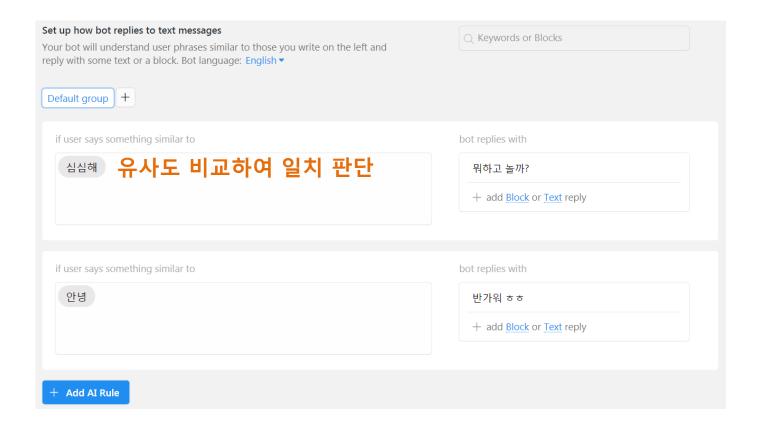
Welcome Message 블록



Default Answer 블록



Set Up AI 문장 추가



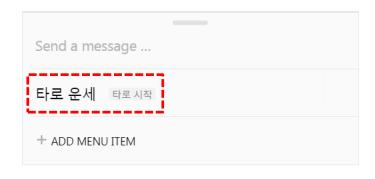
고정 메뉴 설정

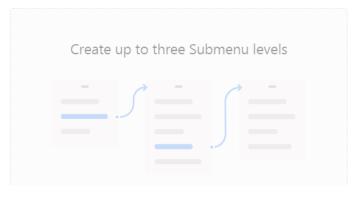
Persistent Menu Configure 탭 선택



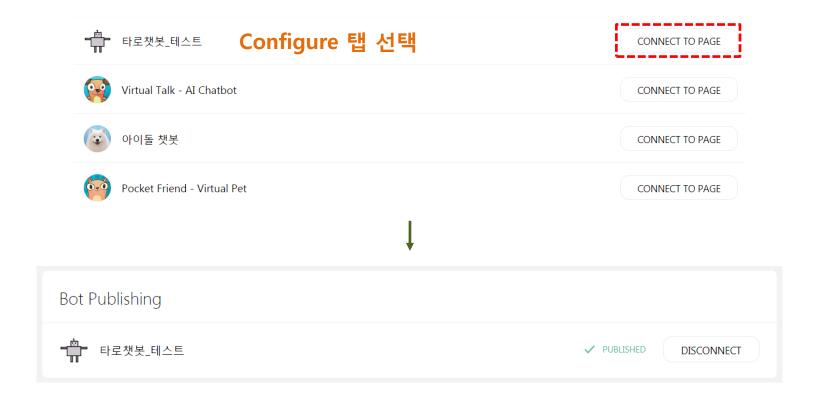
The Persistent Menu is open by default in Messenger and can be minimized at any time. NOTE: Your bot's menu is cached by Messenger but updates are fetched periodically. To refresh the menu, delete the conversation from Messenger and add again.

Allow User Input 🚺 💿 키보드 입력 허용





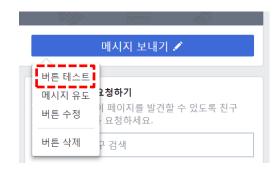
페이스북 페이지 연결



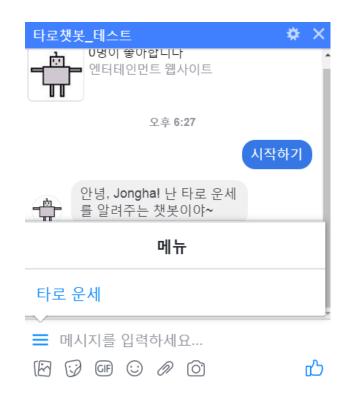
페이스북 페이지 메시지 버튼 추가





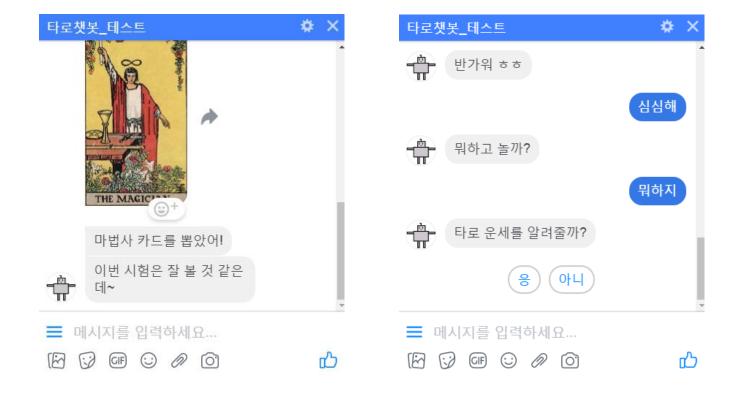


챗봇 테스트





챗봇 테스트



Dialogflow로 트와이스 챗봇 만들기

Dialogflow 소개

- 구글의 챗봇 서비스
- 다양한 채널 지원
 - 카카오톡 제외
- 자연어처리
 - 의도 / 개체 분석
- 무료 버전
 - 분당 180번 API 호출 제한



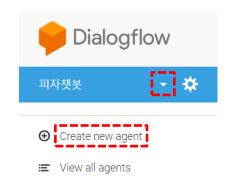
Build natural and rich conversational experiences



Give users new ways to interact with your product by building engaging voice and text-based conversational interfaces, such as voice apps and chatbots, powered by Al. Connect with users on your website, mobile app, the Google Assistant, Amazon Alexa, Facebook Messenger, and other popular platforms and devices.

https://dialogflow.com/

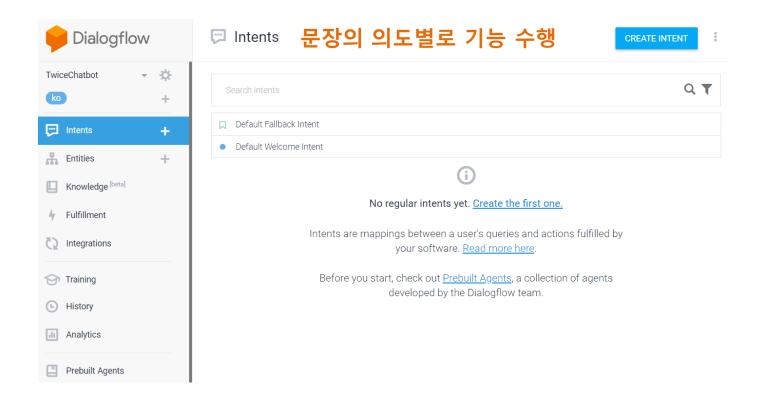
새로운 챗봇 생성



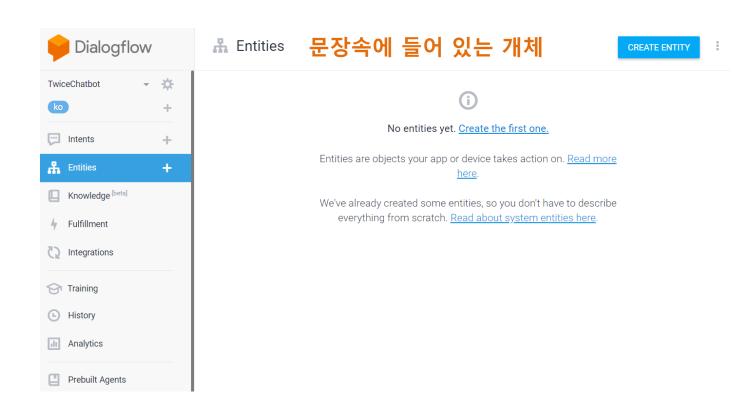
SEO로 생성 후 나중에 한글로 수정 가능 TwiceChatbot DEFAULT LANGUAGE ● Korean (South Korea) − ko Primary language for your agent. Other languages can be added later. GOOGLE PROJECT Create a new Google project Create a new Google project CREATE DEFAULT TIME ZONE (GMT+9:00) Asia/Tokyo Date and time requests are resolved using this timezone. ▼

Enables Cloud functions, Actions on Google and permissions management.

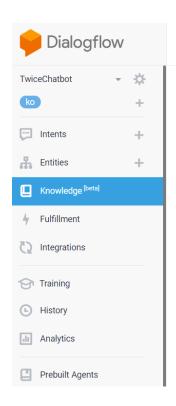
Intents 메뉴



Entities 메뉴



Knowledge 메뉴

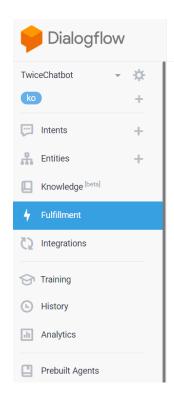


☑Knowledge Bases 문서나 웹에서 자동으로 지식베이스 생성

G

Knowledge Connector is a beta feature, please "Enable beta features and APIs" in agent setting page first.

Fulfillment 메뉴



Webhook

♦ Fulfillment 웹훅으로 외부 서버와 연동

Your web service will receive a POST request from Dialogflow in the form of the response to a user query matched by intents with webhook enabled. Be sure that your web service meets all the webhook requirements specific to the API version enabled in this agent.

Inline Editor (Powered by Cloud Functions for Firebase)

DISABLED

Build and manage fulfillment directly in Dialogflow via Cloud Functions for Firebase. Docs

```
index.js package.json

// See https://github.com/dialogflow/dialogflow-fulfillment-nodejs
// for Dialogflow fulfillment library docs, samples, and to report issues
'use strict';

const functions = require('firebase-functions');
const {WebhookClient} = require('dialogflow-fulfillment');

const {Card, Suggestion} = require('dialogflow-fulfillment');

process.env.DEBUG = 'dialogflow:debug'; // enables lib debugging statements

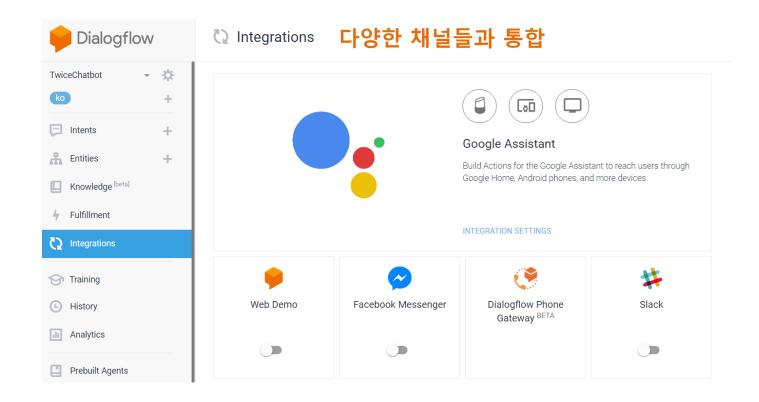
process.env.DEBUG = 'dialogflow:debug'; // enables lib debugging statements

const agent = new WebhookClient({ request, response });
const agent = new WebhookClient({ request, response });
console.log('Dialogflow Request headers: ' + JSON.stringify(request.headers));
console.log('Dialogflow Request body: ' + JSON.stringify(request.body));

function welcome(agent) {

fu
```

Integrations 메뉴



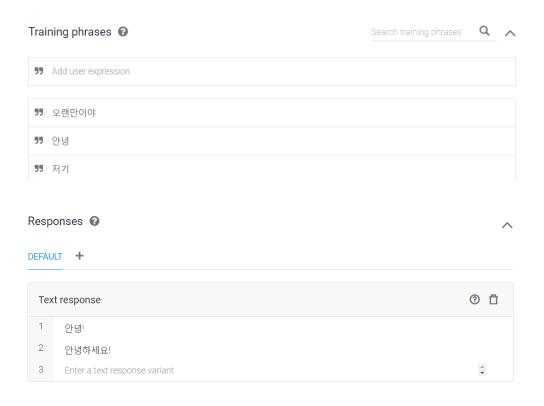
전체 의도



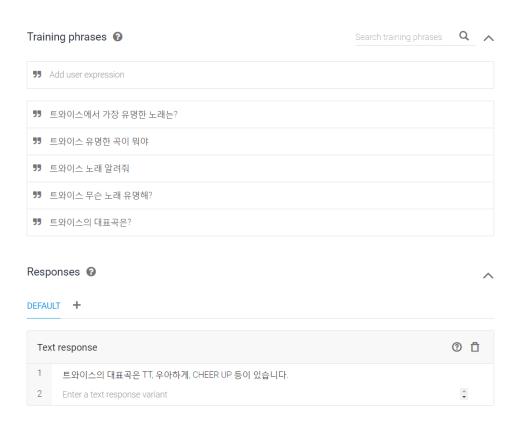
Default Fallback 의도



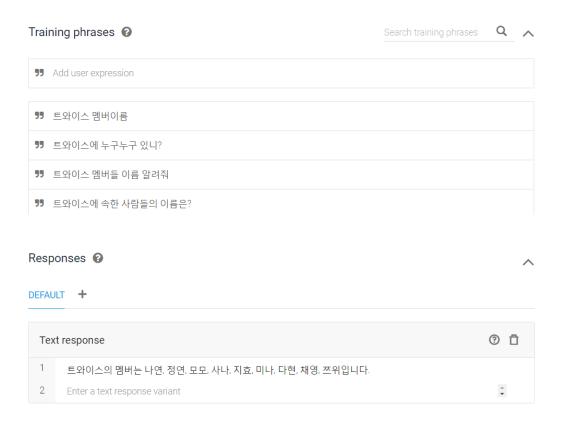
Default Welcome 의도



대표곡 의도



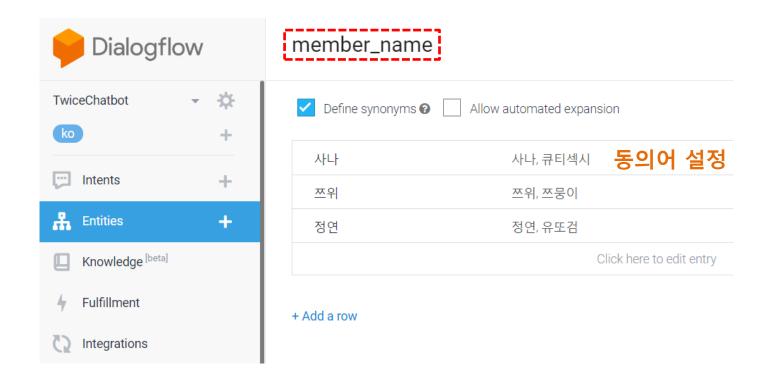
멤버 의도



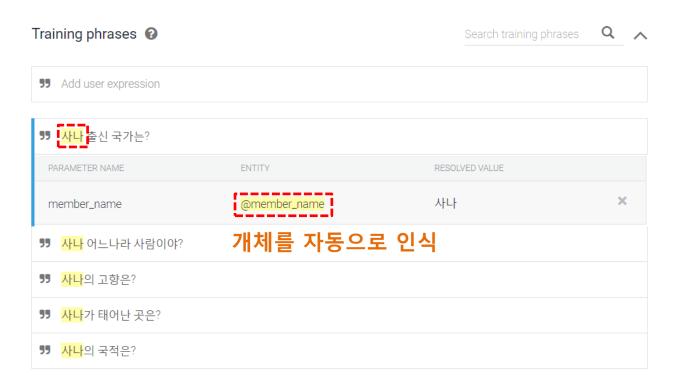
챗봇 테스트

트와이스의 대표곡이 뭐야 트와이스 멤버 누구야? See how it works in Google Assistant. See how it works in Google Assistant. Agent Agent COPY CURL COPY CURL 트와이스의 대표곡이 뭐야 트와이스 멤버 누구야? DEFAULT RESPONSE DEFAULT RESPONSE 트와이스의 대표곡은 TT, 우아하게, CHEER UP 등 트와이스의 멤버는 나연, 정연, 모모, 사나, 지효, 이 있습니다. 미나, 다현, 채영, 쯔위입니다. INTENT INTENT 대표곡 멤버

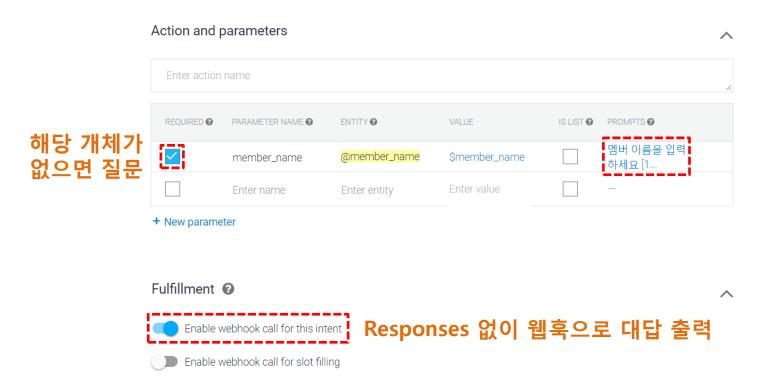
멤버 이름 개체



국적 의도



국적 의도



Fulfillment 변경

Fulfillment

외부 웹훅 서버가 아니라 내장 에디터 사용 Webhook

DISABLED



Your web service will receive a POST request from Dialogflow in the form of the response to a user query matched by intents with webhook enabled. Be sure that your web service meets all the webhook requirements specific to the API version enabled in this agent.

Inline Editor (Powered by Cloud Functions for Firebase)

ENABLED



Build and manage fulfillment directly in Dialogflow via Cloud Functions for Firebase. Docs

```
<u>*</u>
          package.json
index.js
 1 // See https://github.com/dialogflow/dialogflow-fulfillment-nodejs
 2 // for Dialogflow fulfillment library docs, samples, and to report issues
     'use strict';
 5 const functions = require('firebase-functions');
 6 const {WebhookClient} = require('dialogflow-fulfillment');
    const {Card, Suggestion} = require('dialogflow-fulfillment');
```

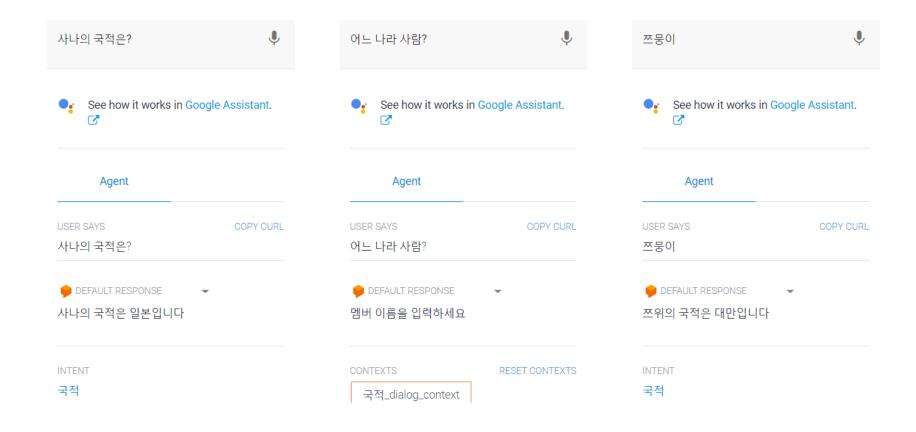
Fulfillment 변경

```
function nation(agent) {
 var answer;
 if( parameter.member_name == "사나" )
     answer = '사나의 국적은 일본입니다';
 else if( parameter.member name == "쯔위" )
     answer = '쯔위의 국적은 대만입니다';
 else if( parameter.member name == "정연" )
     answer = '정연의 국적은 한국입니다';
 agent.add(answer);
```

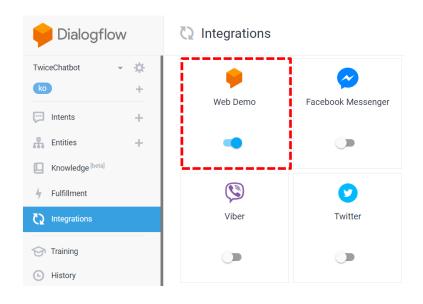
```
let intentMap = new Map();
intentMap.set('Default Welcome Intent', welcome);
intentMap.set('Default Fallback Intent', fallback);
intentMap.set('국적', nation);
agent.handleRequest(intentMap);
```

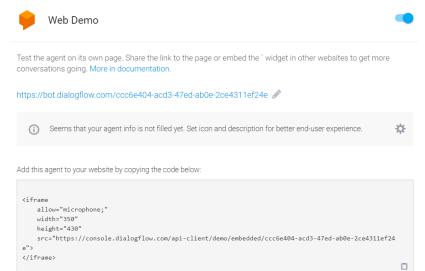
DEPLOY Firebase 서버에 업로드

챗봇 테스트

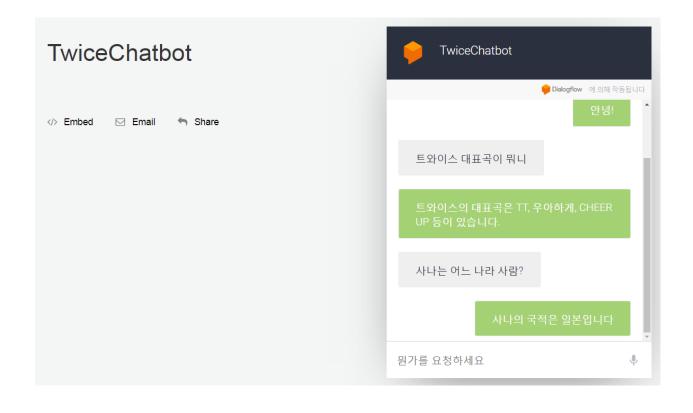


웹페이지 연결





웹페이지 연결



감사합니다