

Building LINE Chatbot x MongoDB Atlas

Software Installation

 Visual Studio Code <https://code.visualstudio.com>

 ngrok <https://ngrok.com/>

 Node.js & NPM <https://nodejs.org>

 Github Account <https://github.com>

 Google Account <https://accounts.google.com>

 Postman Desktop <https://www.postman.com>

 LINE Bot Designer

 MongoDB Atlas <https://www.mongodb.com/cloud/atlas>

{

Name: Oa+ (Thepnatee Phojan)

Job: Advance Software Engineer

Company: KBTG

WIFI name: TDPK-WIFI

Username: API

Password: Welcome@2025

}



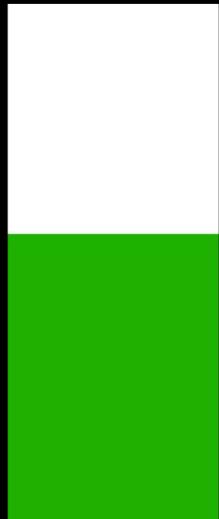
WORKSHOP

LINE API

for Developers x Generative AI



LINE IN THAILAND POPULATION



70M

Thai Population

56M

LINE user

As of June 2024

LINE IN THAILAND TIME SPENT ON APP



151

Mins/day
average time spent on
Social media

90

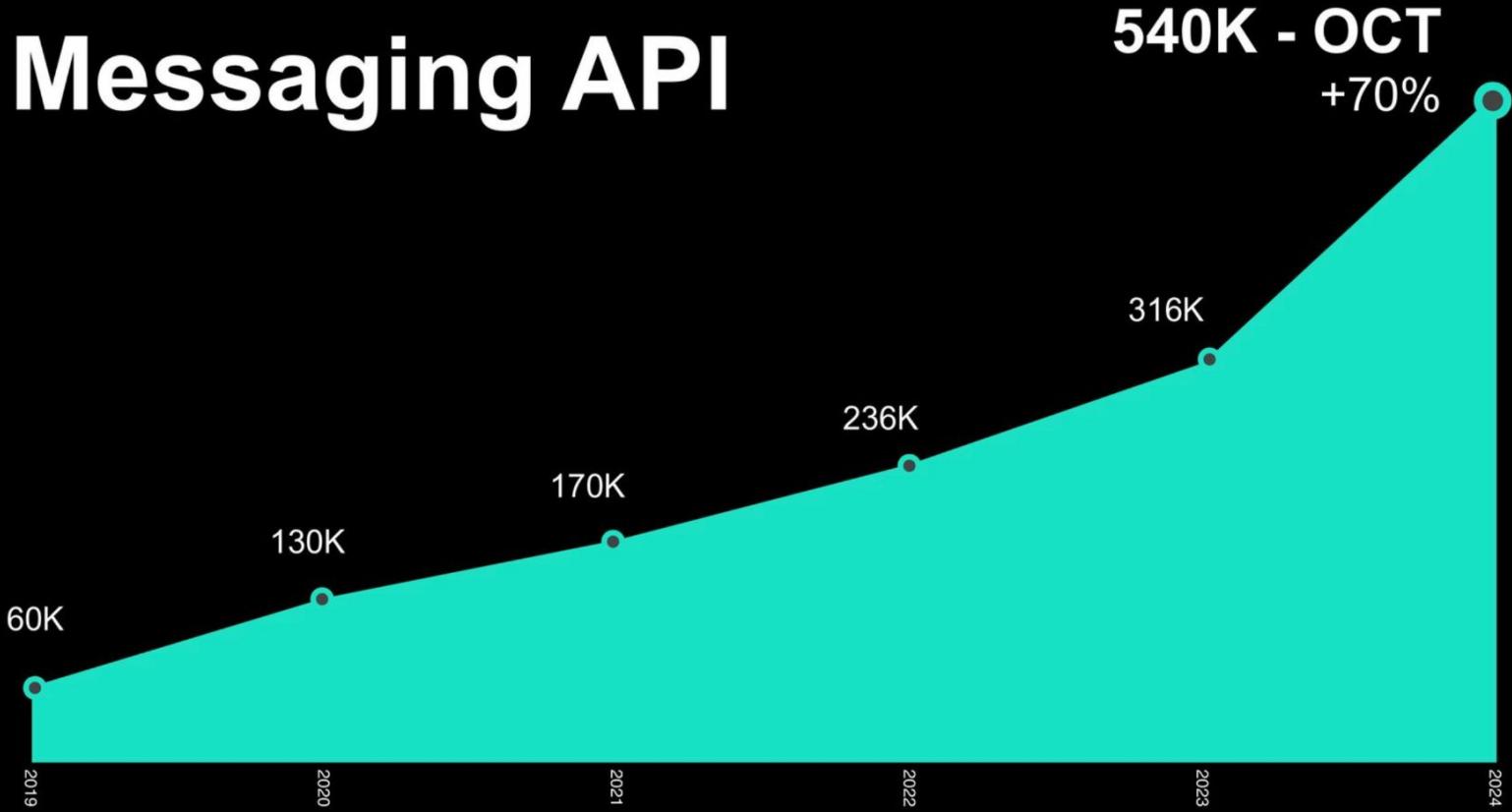
Mins/day
average time spent on
LINE Platform

A photograph of a large audience in a conference room. Many people are seated in rows, facing a stage or screen. Several individuals in the foreground and middle ground have their right hands raised, likely participating in a Q&A session. The room has green ambient lighting and a projector mounted on the ceiling. A screen in the background displays a small icon of a person. The overall atmosphere is that of a technology or developer meet-up.

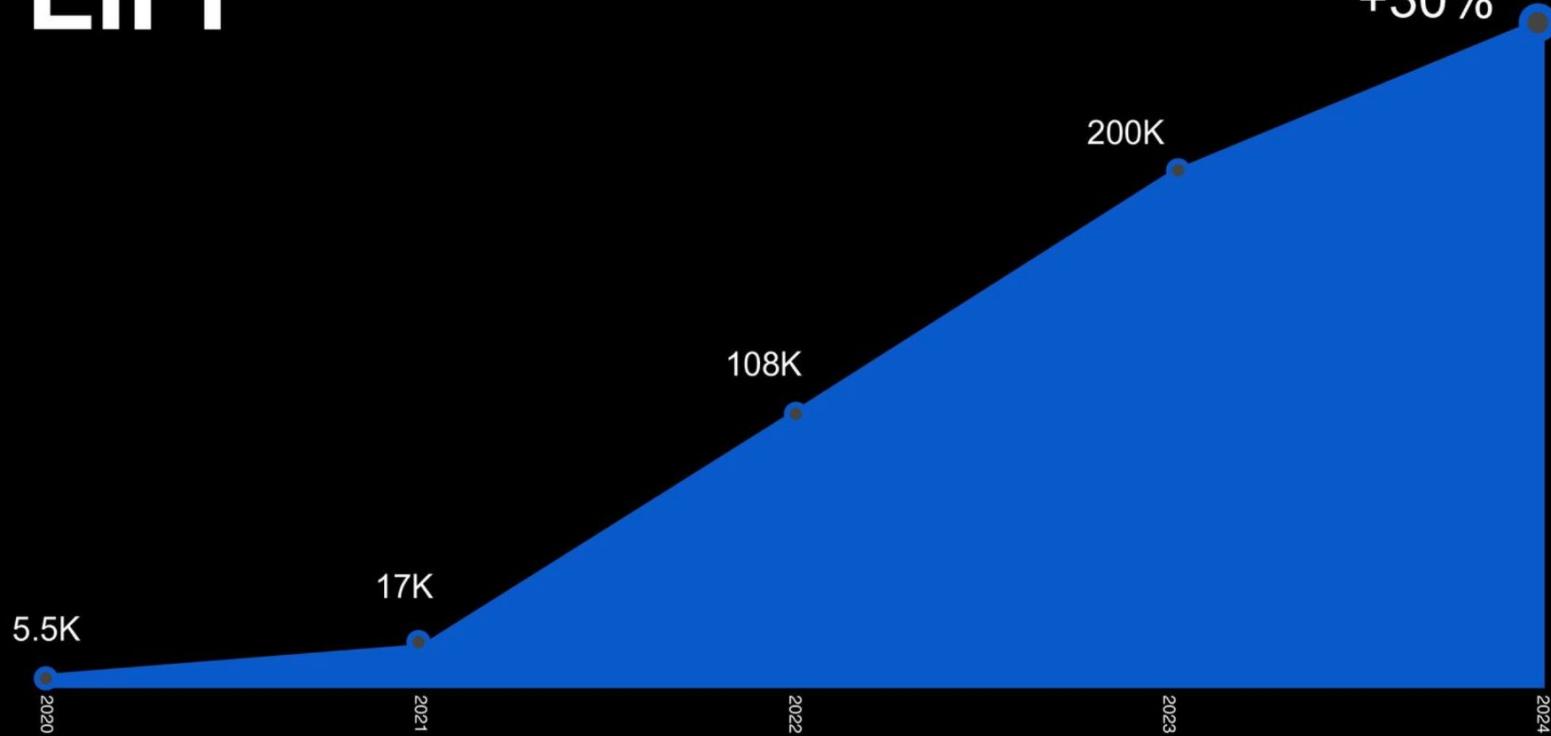
LINE DEV 45K Members

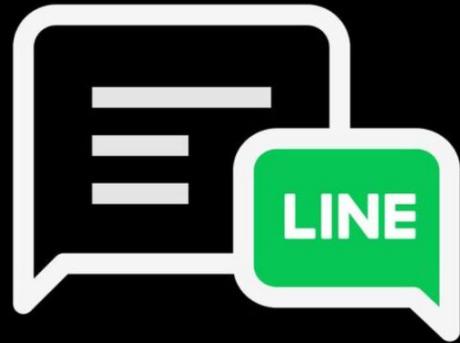


Messaging API



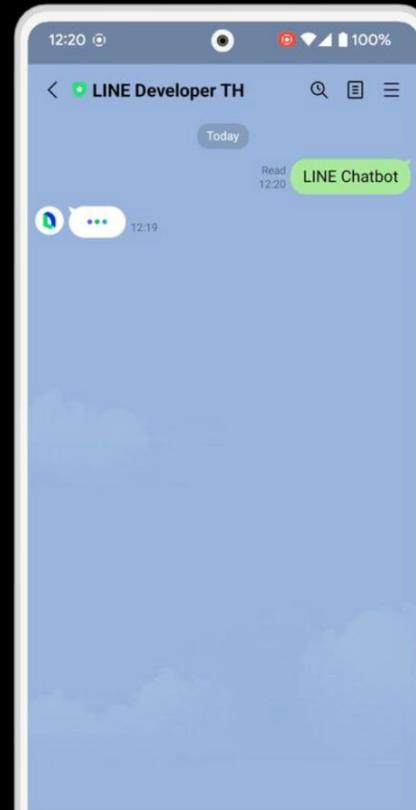
LIFF





Messaging API

Loading Animation





Messaging API



Loading Animation



New Followers or Unblocked?

json

```
{  
    "destination": "xxxxxxxxxx",  
    "events": [  
        {  
            "replyToken": "nHuyWiB7yP5Zw52FIkcQobQuGDXCTA",  
            "type": "follow",  
            "mode": "active",  
            "timestamp": 1462629479859,  
            "source": {  
                "type": "user",  
                "userId": "U4af4980629..."  
            },  
            "webhookEventId": "01FZ74A0TDDPYRVKNK77XKC3ZR",  
            "deliveryContext": {  
                "isRedelivery": false  
            },  
            "follow": {  
                "isUnblocked": true // User has unblocked the LINE Official Account  
            }  
        }  
    ]  
}
```



New Followers or Unblocked?

```
case "follow":  
    if (event.follow.isUnblocked) {  
        if (await util.isWorkshopUserExist(userId)) {  
            await util.richMenuLink(config.RICH_MENU_LINEDEVCONF2, userId);  
            break;  
        }  
        if (await util.isUserTicketed(userId)) {  
            await util.richMenuLink(config.RICH_MENU_LINEDEVCONF1, userId);  
            break;  
        }  
    }  
    break;
```



Narrowcast API Expanded to Users over 50+

```
// Example of filtering by age 50+
but less than 70

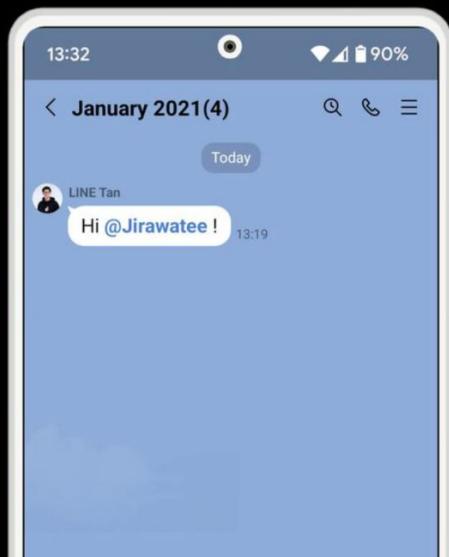
{
  "type": "age",
  "gte": "age_50",
  "lt": "age_70"
}
```



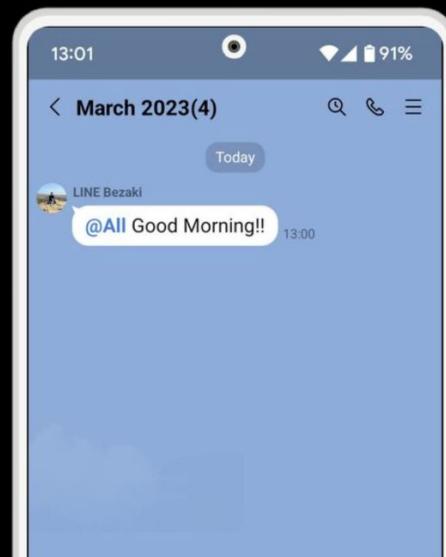
The Revolution of Mentioning

In Messaging API

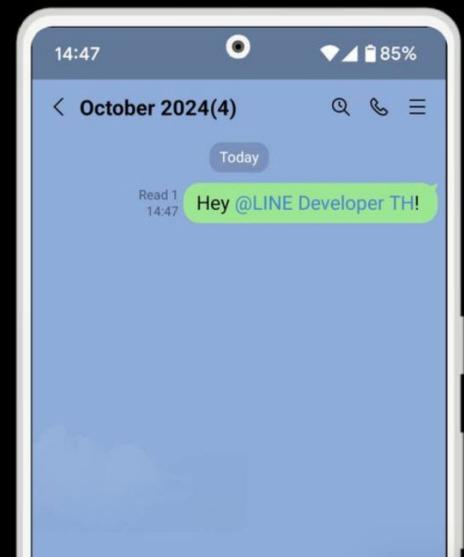
User-to-User



User-to-All



User-to-Bot



Text Message v2



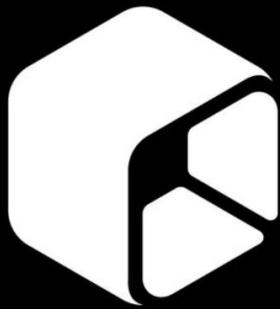
```
{
  "type": "textV2",
  "text": "Welcome, {user1}",
  "substitution": {
    "user1": {
      "type": "mention",
      "mentionee": {
        "type": "user",
        "userId": "U3c28a70ed7c5e7..."
      }
    }
  }
}
```

Text Message v2



```
type: "textV2",
text: "Welcome, {user1}! {love} {everyone} There is a newcomer!",
substitution: {
  "user1": {
    "type": "mention",
    "mentionee": {
      "type": "user",
      "userId": "U3c28a70ed7c5e7..."
    }
  },
  "love": {
    "type": "emoji",
    "productId": "5ac1bfd5040ab15980c9b435",
    "emojiId": "001"
  },
  "everyone": {
    "type": "mention",
    "mentionee": {
      "type": "all"
    }
  }
}
```





Unverified - LINE MINI App



NEW

In the Messaging API, you can now use the shared audience in Business Manager to send messages

2025/02/12

In the Messaging API, you can now specify the shared audience in Business Manager as the recipient for narrowcast messages. Accordingly, we've added the following endpoints: - Get a list of shared aud...

Messaging API

NEW

When you create a new LIFF app, we recommend that you create it as a LINE MINI App

2025/02/12

In the future, the LINE Front-end Framework (LIFF) and the LINE MINI App will be integrated into a single brand. As a result of this integration, LIFF will be integrated into the LINE MINI App. After ...

LIFF LINE MINI App

Docs

End of life

Flex Message

Flex Message Simulator

Flutter

Group

Imagemap message

iOS

Life cycle

LIFF

LINE Ads

LINE API Expert

LINE Blockchain Platform

LINE Developers site

LINE Login

LINE MINI App

LINE Official Account

LINE Platform

LINE Login SDK

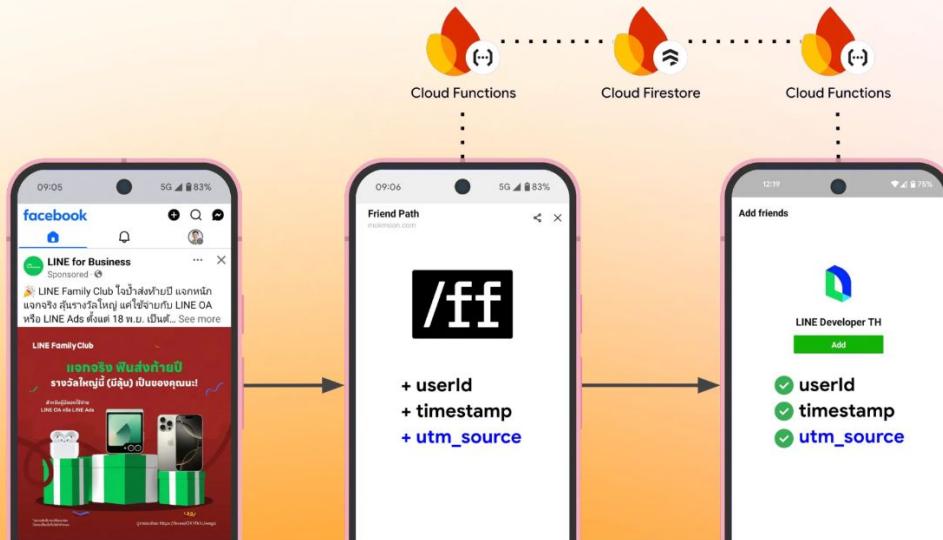
LINE Things

LINE TV

Maintenance

Messaging API

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Featured

รู้หมด ใครเพิ่มเพื่อน LINE OA จากช่อง
ทางไหน ด้วยระบบ Friend Path ที่คุณก็
สร้างเองได้

Course Outline

LINE Messaging API

- ทำความเข้าใจ LINE API และการใช้งาน
- การทำงานของ Webhook
- การจัดการ Webhook Events
- การสร้าง ข้อความโต้ตอบอัตโนมัติ (Message Objects & Actions)
- การสร้าง Chatbot ด้วย Cloud Functions for Firebase
- เทคนิคการส่งข้อความขึ้นสูง (Push & Reply Message)
- ความปลอดภัยในการพัฒนา LINE Chatbot

LINE Flex Message

- ทำความเข้าใจ Flex Message
- ใช้ Flex Message Simulator สร้างดีไซน์สวย ๆ
- ใช้ ChatGPT ช่วยสร้าง Flex Message

LINE Rich Menus

- วิธีสร้าง Rich Menu ด้วย Messaging API
- การใช้ Rich Menu Aliases
- การทำ Rich Menu Switch Action

Workshop & Showcase

- Chatbot Connect MongoDB Atlas



Introduction & Overview of LINE Official Account

LINE Official Account & LINE Account

	LINE Official Account (บัญชีทางการ)	LINE Account (บัญชีส่วนตัว)
การส่งข้อความ	<ul style="list-style-type: none">เพิ่มเพื่อนโดยไม่จำกัดจำนวนส่งหาเพื่อนทั้งหมดที่ยังคงติดตามบัญชีทางการเลือกส่งหาเพื่อเฉพาะกลุ่มที่กำหนดเองได้ <ul style="list-style-type: none">มีรูปแบบในการส่งข้อความที่หลากหลายพร้อมการแนบลิงก์ในภาพหรือวิดีโอเพื่อพาไปยังหน้าร้านออนไลน์	<ul style="list-style-type: none">จำกัดจำนวนในการเพิ่มเพื่อนของบัญชีส่วนตัว <ul style="list-style-type: none">ส่งหาในลักษณะเขต เป็นข้อความ ภาพ วิดีโอ และการส่งลิงก์แยก
ฟีเจอร์	<ul style="list-style-type: none">สามารถเข้าถึงข้อมูลเชิงลึกของข้อความที่ส่งหากลุ่มค่าได้ทั้งจำนวนผู้รับ, จำนวนครั้งที่เปิดด่าน, จำนวนครั้งที่คลิก, และข้อมูลอื่นๆ อีกมากมาย	<ul style="list-style-type: none">ไม่มีเครื่องมือช่วยวัดผลทางการสื่อสาร <ul style="list-style-type: none">ไม่มีฟีเจอร์เสริม

Feature LINE Official Account

1 Broadcast Message

ส่งข้อความพร้อมรูปภาพ, วิดีโอ, หรือไฟล์ต่าง ๆ

2 Auto Reply

ตอบกลับอัตโนมัติเมื่อผู้ใช้งานส่งข้อความมาหา

3 Rich Menu

สร้างเมนูที่แสดงผลด้านล่างของหน้าจอแท็บ



4 Rich Message & Rich Video

ส่งข้อความที่มีรูปภาพหรือวิดีโอกับลิงก์ไปยังผู้ติดตาม

5 Coupons & Loyalty Program

สร้างคูปองส่วนลดหรือโปรโมชันพิเศษให้ลูกค้า

6 Surveys & Polls

สร้างแบบสอบถามหรือโพล

7 Analytics

ดูข้อมูลเชิงสถิติ

Package ของ LINE Official Account

	พรี	เบสิก	โปร
ราคาแพ็คเกจ	-	1,280 บาท*	1,780 บาท*
จำนวนข้อความ บรรดัดแคลสต์	300 ข้อความ	15,000 ข้อความ	35,000 ข้อความ
จำนวนข้อความ บรรดัดแคลสต์	-	0.10 */ข้อความ	0.06 */ข้อความ
การใช้งาน MyCustomer CRM	369 บาท*	369 บาท*	รวมอยู่ในแพ็คเกจโปร (ไม่มีค่าใช้จ่ายเพิ่มเติม)

Types of LINE Official Account

	Icon	Price
Unverified		-
Verified		888 บาท ตลอดอายุการใช้งาน
Premium		ค่าใช้จ่ายขั้นต่ำตามที่กำหนด

LINE Agency

**CARAT**Carat (Thailand) **Clicknext**Clicknext **Data First**Data First **dentsu X**Dentsu X (Thailand) Dot Matter **EGG
DIGITAL**EGG Digital **essence
mediacom**EssenceMediacom Thailand **FarEast
FarmeLine
DDB**Far East Farme Line DDB **GEN
AD**Generation Advertising **group^m**GroupM Thailand **i-dac
BANGKOK**i-dac (Bangkok) **ignite ROI
ADVERTISING**ignite ROI 

Premium ID

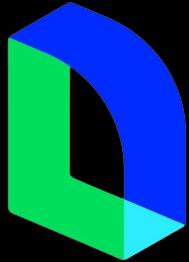
Basic ID - ໄອດີແບບສຸນ

@AX3DLI24C7



Premium ID

@linecafe



Introduction & Overview of **LINE** Developers

Feature LINE Official Account



LINE Messaging API

ส่ง และรับข้อความ, สติ๊กเกอร์, รูปภาพ และอีบฯ



LINE Login

เข้าสู่ระบบของ LINE



LINE Pay

รวมระบบการชำระเงินออนไลน์ผ่าน LINE



/ff LIFF (LINE Front-end Framework)

สร้างเว็บแอปพลิเคชันที่สามารถเปิดใช้งานภายในแอป LINE



LINE Beacon

ส่งการแจ้งเตือนแบบพุชหรือข้อความไปยังผู้ใช้ที่อยู่ใกล้กับอุปกรณ์ Beacon



LON (LINE Official Notification)

บริการส่งข้อความด้วยเบอร์มือถือผ่าน LINE OA (LINE Official Account)

LINE features with the LINE URL scheme

Opening the camera and camera roll



[Using LINE features with the LINE URL scheme | LINE Developers](#)

With the **LINE** URL scheme, you can let users open the camera or the camera roll. Camera roll is where the users can select images to share in a chat.

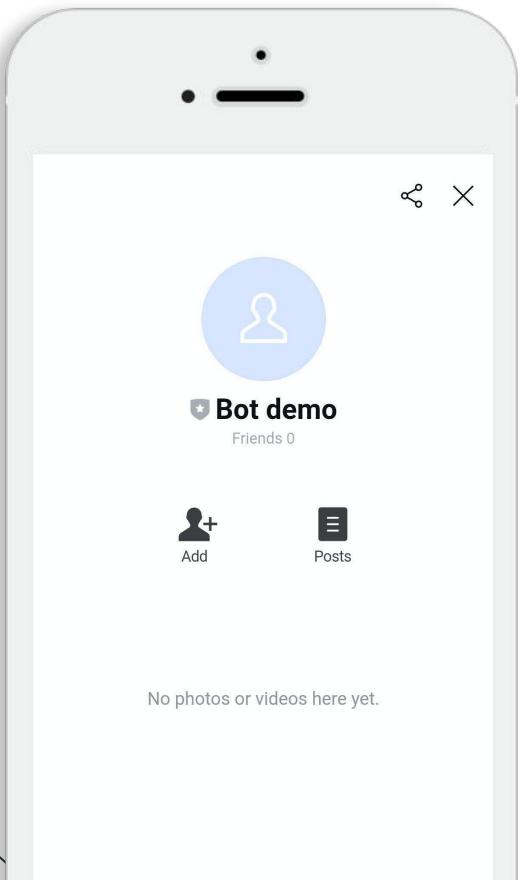
Sending location information



[Using LINE features with the LINE URL scheme | LINE Developers](#)

With the **LINE** URL scheme, you can open the location information screen and let users send their location information to your **LINE** Official Account.

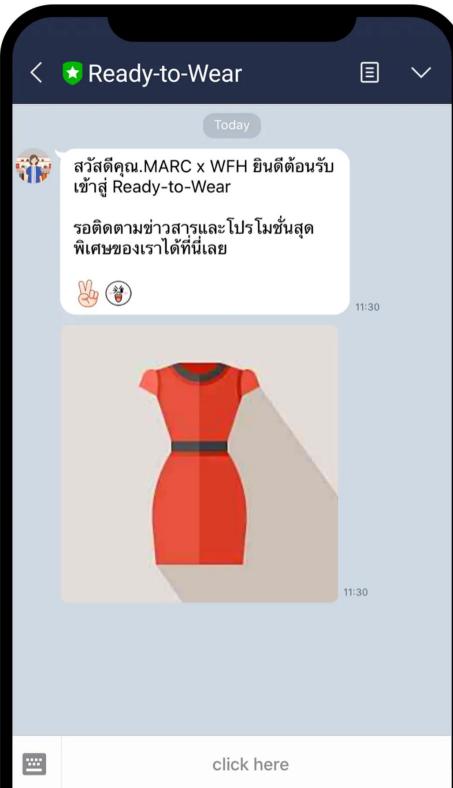
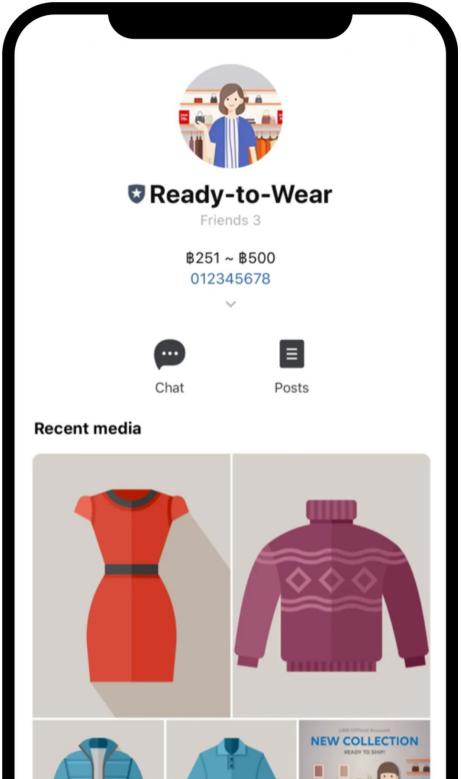
Sharing a LINE Official Account



[Using LINE features with the LINE URL scheme | LINE Developers](#)

With the LINE URL scheme, you can recommend and encourage users and their friends to add your LINE Official Account.

Opening the Chat Screen



[Using LINE features with the LINE URL scheme | LINE Developers](#)

With the **LINE URL** scheme, you can let users open a chat screen with your **LINE** Official Account.

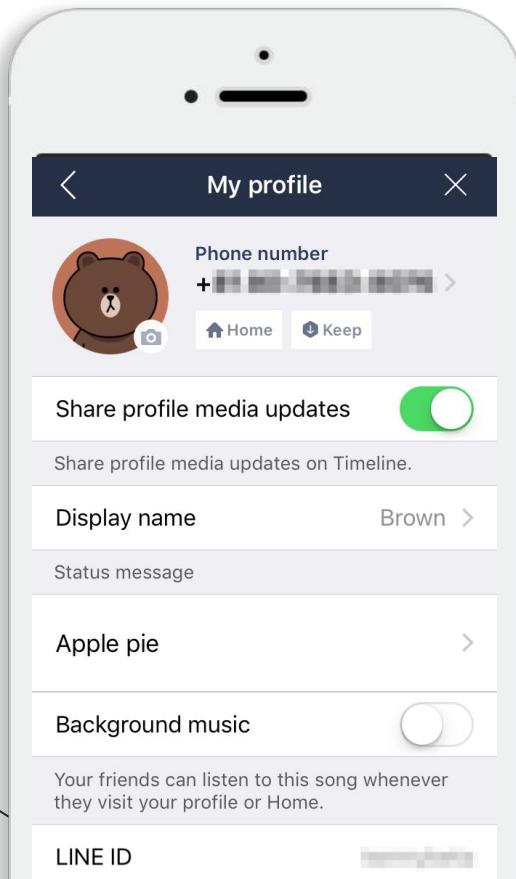
Sending text messages



[Using LINE features with the LINE URL scheme | LINE Developers](#)

With the **LINE** URL scheme, you can set a text message for a user to send to their friends or to **LINE** Official Accounts.

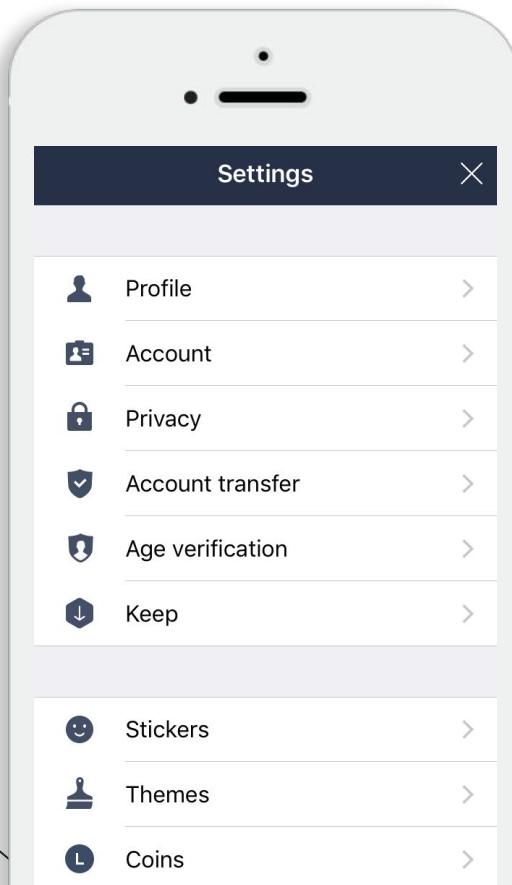
Opening profile information



[Using LINE features with the LINE URL scheme | LINE Developers](#)

With the **LINE URL** scheme, you can let users open their "My profile" screen. On this screen, users can update their display name and status message, set their LINE ID and view profile settings.

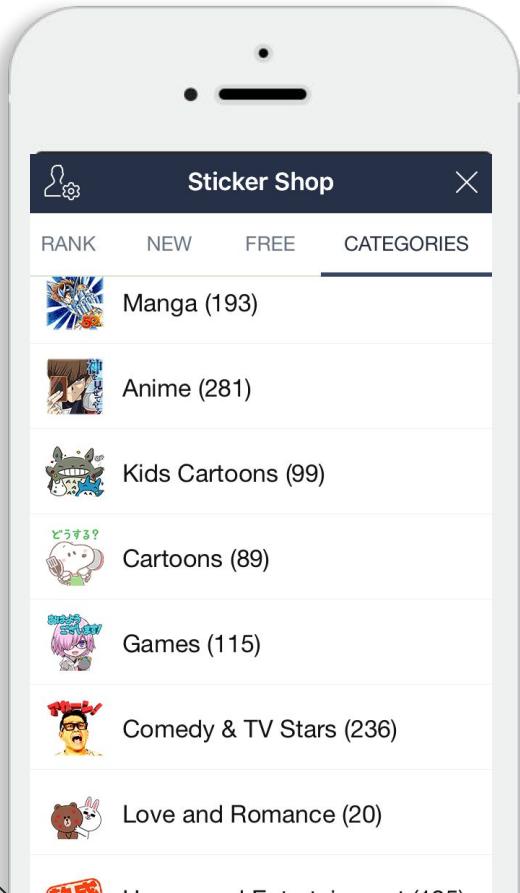
Opening LINE Setting



[Using LINE features with the LINE URL scheme | LINE Developers](#)

With the LINE URL scheme, you can open different settings menu.

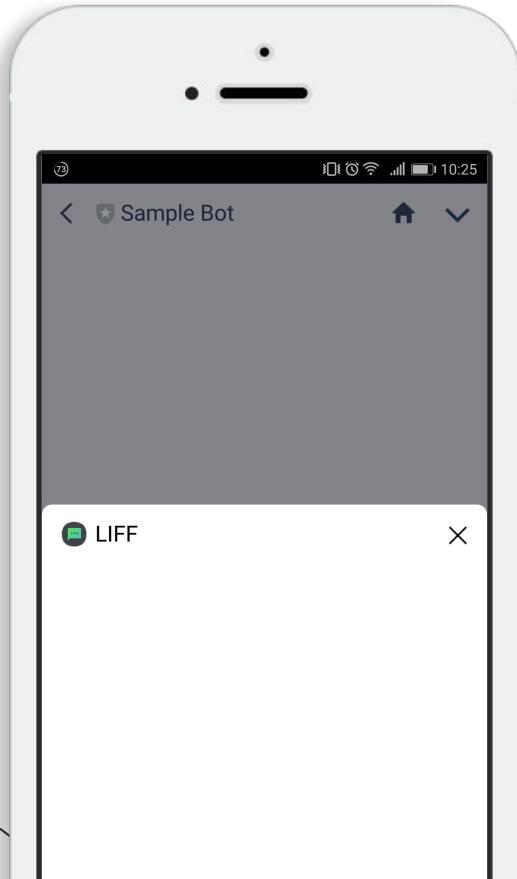
Opening Sticker Shop



[Using LINE features with the LINE URL scheme | LINE Developers](#)

With the **LINE URL** scheme, you can let users open Sticker Shop in **LINE** to encourage purchase of official and creators' sticker sets.

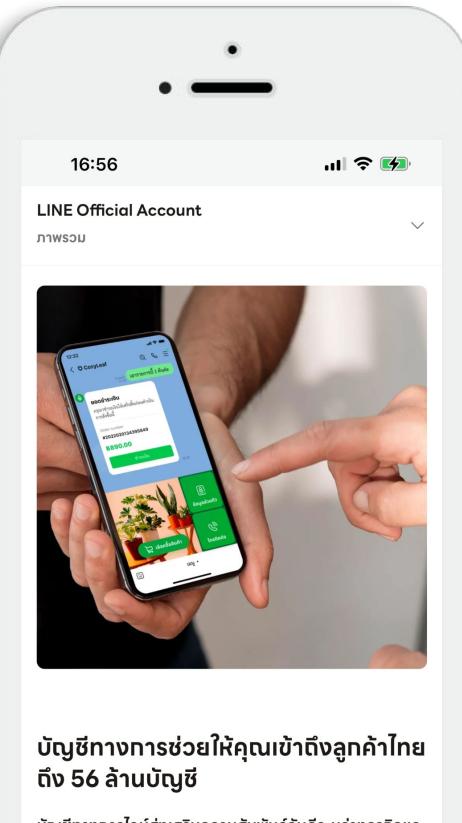
Opening a LIFF app



[Using LINE features with the LINE URL scheme | LINE Developers](#)

With the LINE URL scheme, you can let users open a LIFF app. A LIFF app is a web app built using the [LINE](#) Front-end Framework (LIFF).

Opening a URL in an **external browser**

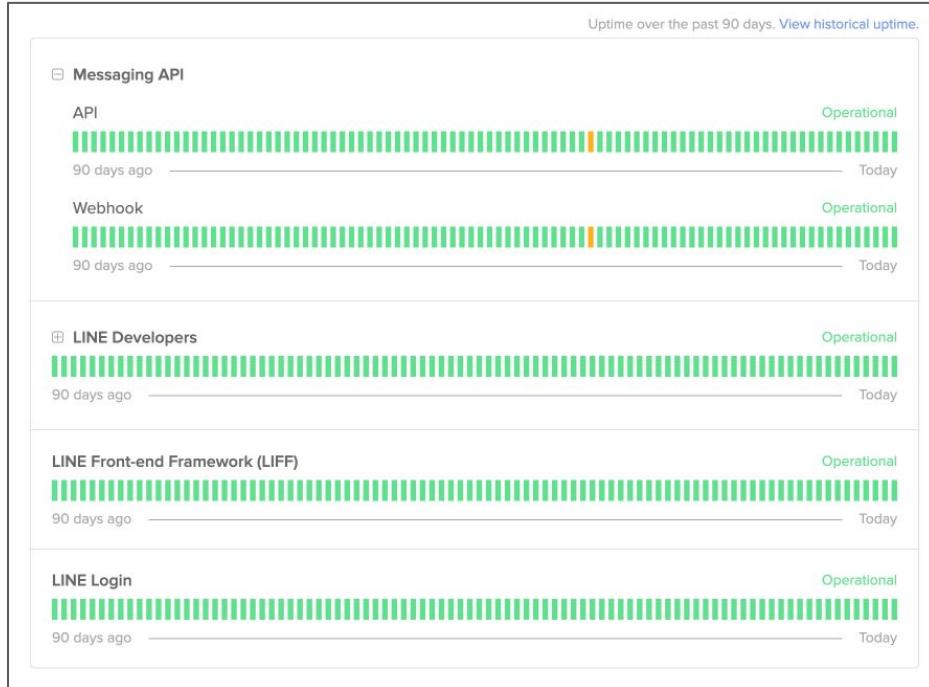


[Using LINE features with the LINE URL scheme | LINE Developers](#)

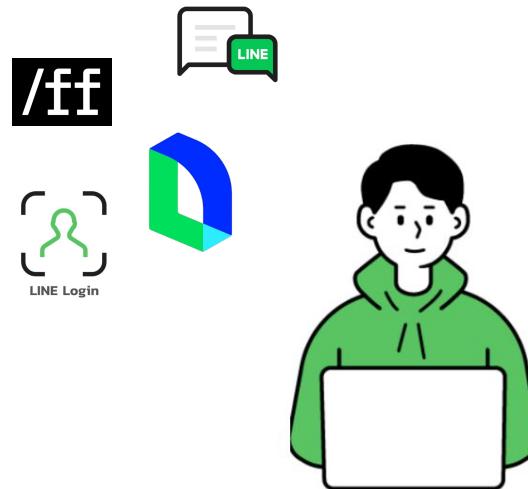
With the query parameters, you can let users open a URL in an **external browser**

LINE API Status

LINE API Status

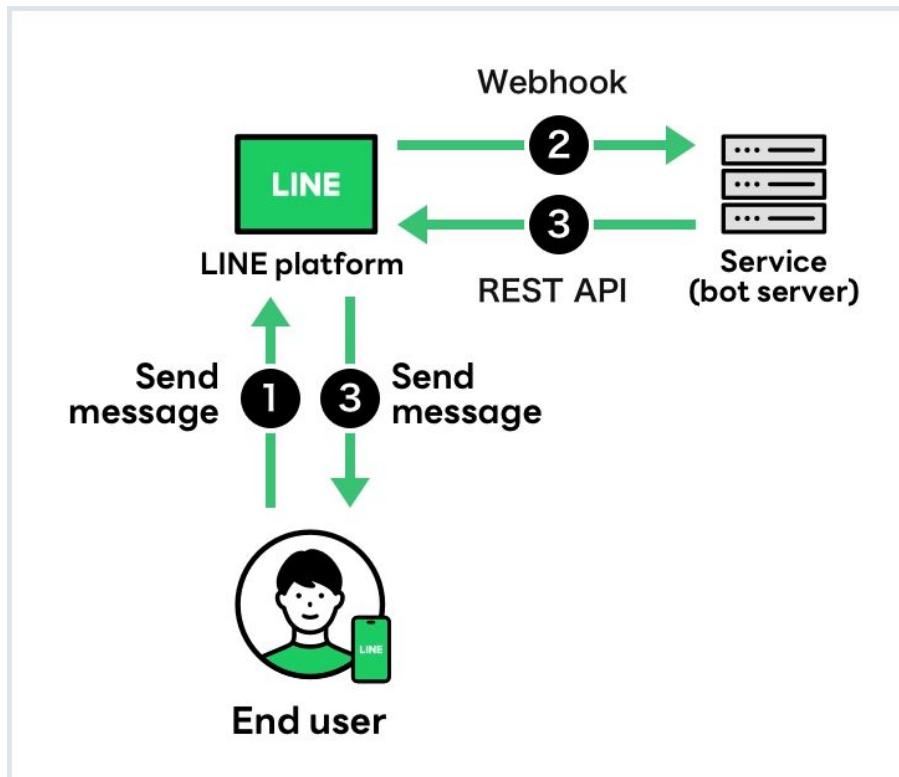


- Messaging API (API / Webhook)
- LINE Developers (Website / Console)
- LINE Front-end Framework (LIFF)
- LINE Login



LINE Messaging API

LINE Messaging API



Create LINE Official Account

[LINE Official Account Manager \(manager.line.biz\)](#)

LINE Business ID

[Log in with LINE account](#)

or

[Log in with business account](#)

【Notice】Enabling two-step verification for LINE Business ID (Effective Sep 3, 2024)

[Create an account](#)

By logging in to LINE Business ID, you agree to the [Terms of Use](#).

[② About LINE Business ID](#)

English ▾

Help [Terms of Use](#) © LY Corporation

สร้าง LINE ออฟฟิเชียลแอคเคาท์

• ต้องระบุ

ชื่อผู้ใช้ thepnatee ออกจากระบบ

ประเภทที่ใช้บริการ ไทย คุณสามารถเลือกใช้เพียงภาษาเดียวหรือภาษาไทย

ชื่อบัญชี *

ต.ช. Brown คำเพี้ย 0/20
คุณจะได้รับส่วนลดสำหรับ LINE และบนหน้าจอแยก

อีเมล *

thepnatee.workshop@gmail.com 28/240

ประเภทที่ตั้งบริษัท & ธุรกิจ • ②

ไทย
ประเภทที่ตั้งค่าไว้จะแสดงในหน้าจอที่คุณใช้ในการดำเนินการ

ชื่อบริษัท/ธุรกิจ

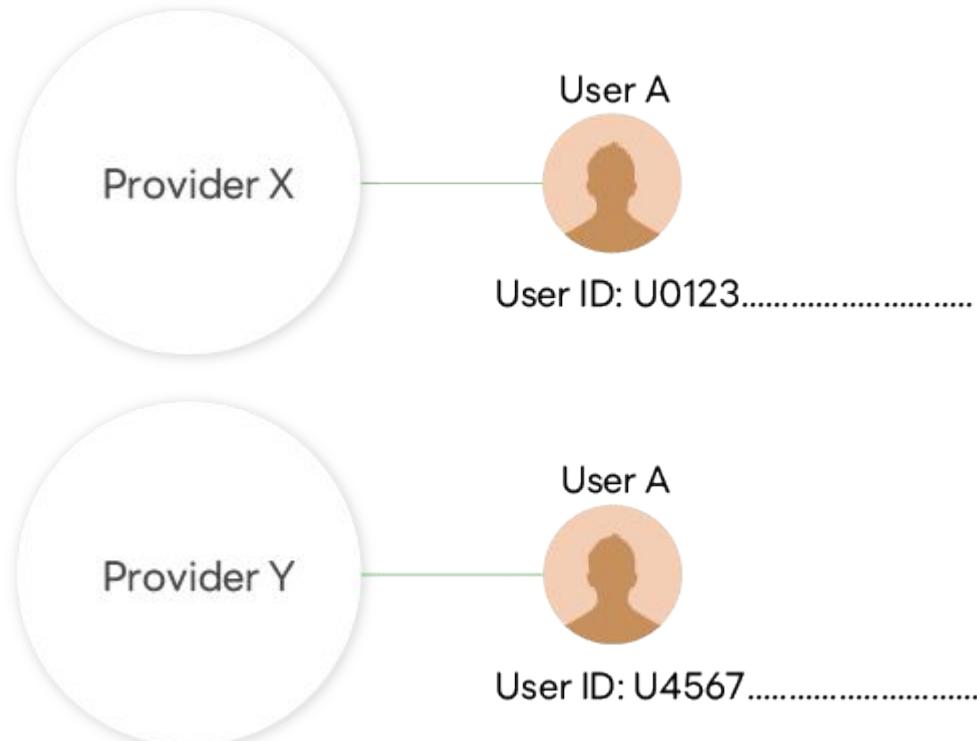
0/100

ประเภทธุรกิจ *

เลือกประเภทหลัก เลือกประเภทอื่น

Create Chanel

LINE Developers



Postman Collection API



POSTMAN



LINE MESSAGING API

<https://medium.com/linedevth/70fc89afe2c3>

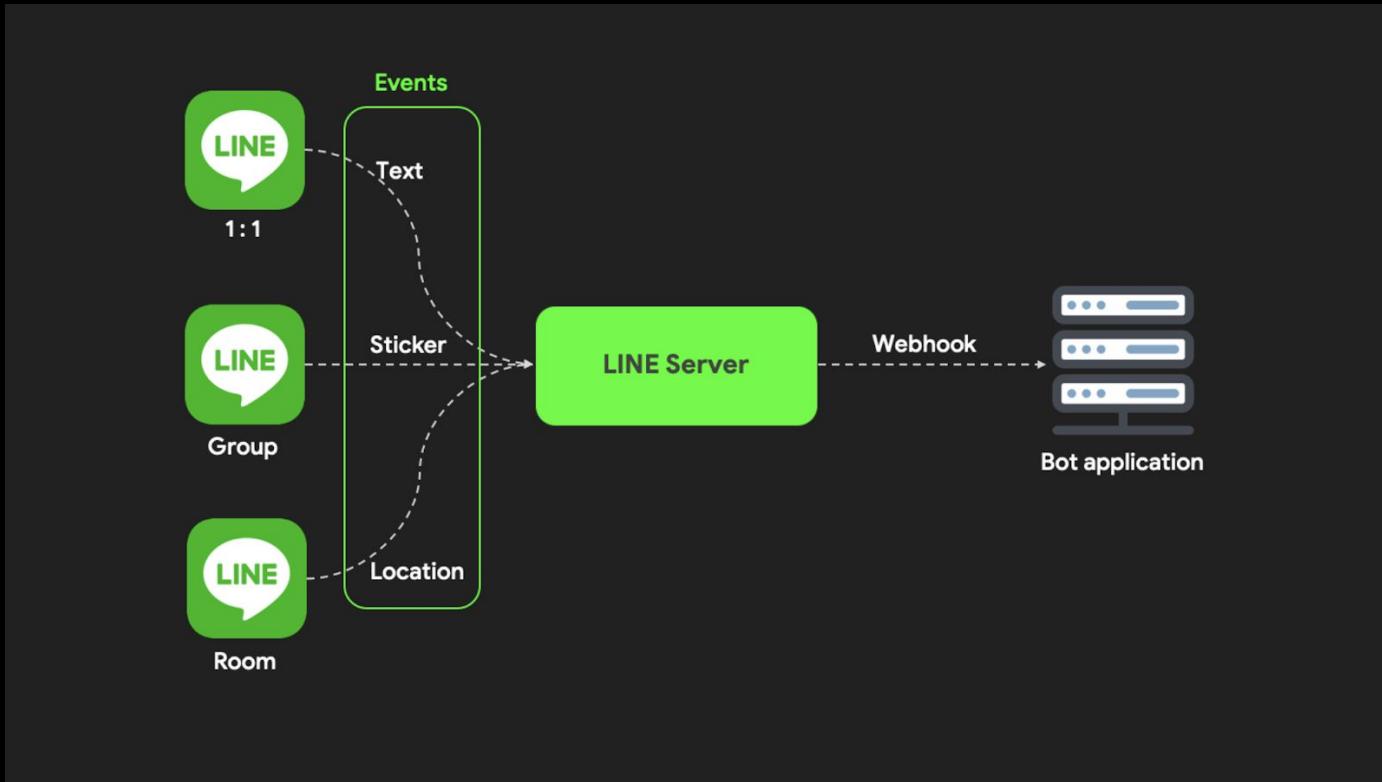
Import

https://raw.githubusercontent.com/thepnatee/line-api-collection-postman/main/CLASS%20LINE%20API%20Example.postman_collection.json

Webhook

Events

Webhook Events



Message

Text

Image

Sticker

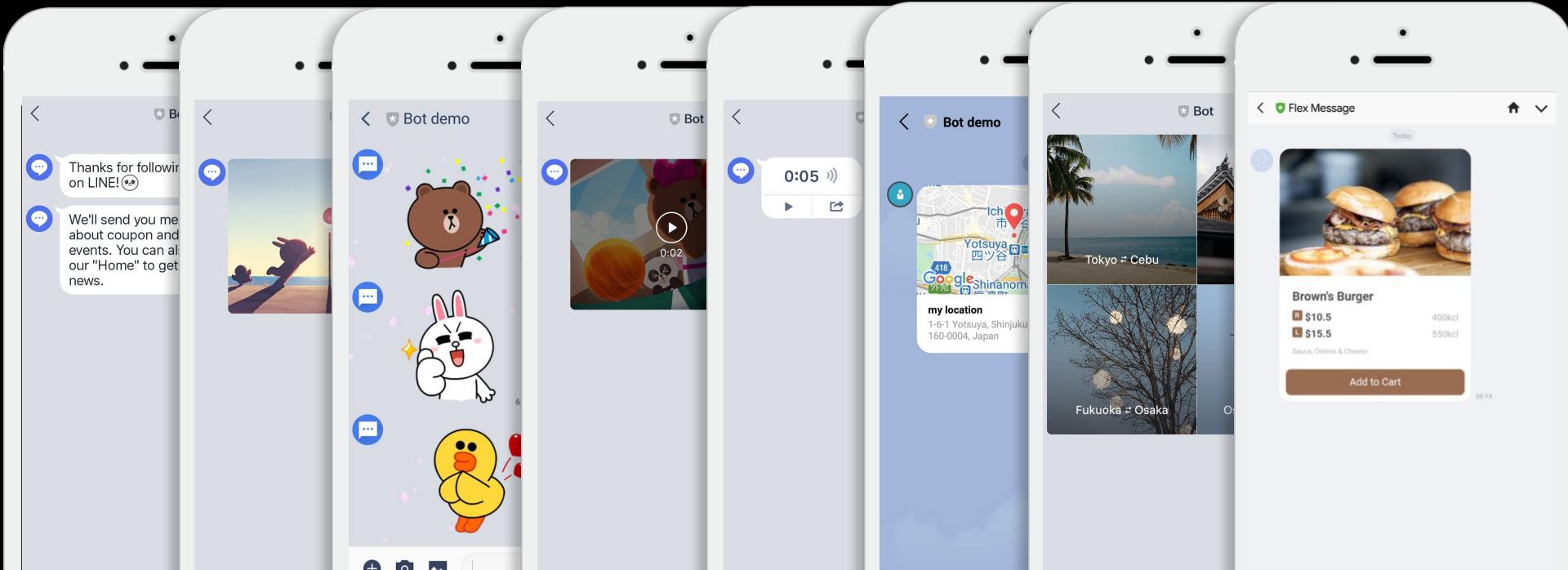
Video

Audio

Location

Imagemap

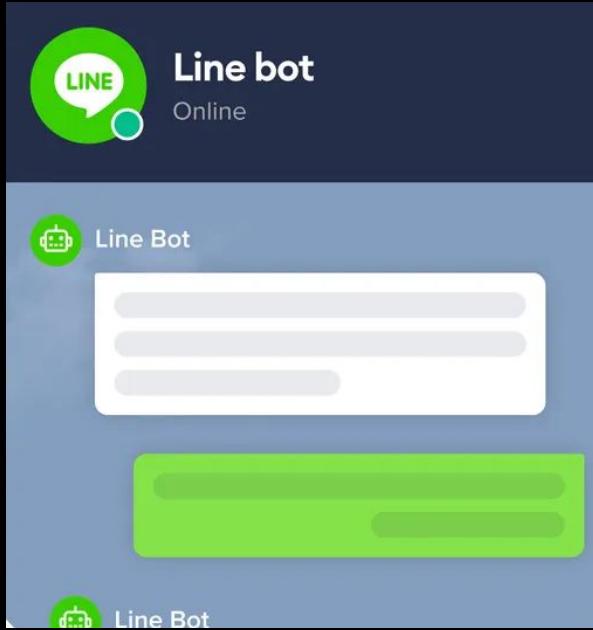
Flex



Webhook Events for Chats

Webhook event	one-on-one chats	Group chats and multi-person chats
Message event	✓	✓
Unsend event	✓	✓
Follow event	✓	✗
Unfollow event	✓	✗
Join event	✗	✓
Leave event	✗	✓
Member join event	✗	✓
Member leave event	✗	✓
Postback event	✓	✓
Video viewing complete event	✓	✗

Message Events



- **Text**
เมื่อผู้ใช้ส่งข้อความตัวอักษร
- **Image**
เมื่อผู้ใช้ส่งรูปภาพ
- **Video**
เมื่อผู้ใช้ส่งวีดีโอ
- **Audio**
เมื่อผู้ใช้ส่งเสียง
- **Location**
เมื่อผู้ใช้แชร์ตำแหน่ง

Get content

ดึงข้อมูลเนื้อหาหรือไฟล์ที่ส่งผ่านทาง LINE Messaging API โดยเฉพาะไฟล์ที่เป็นภาพ, วิดีโอ, เสียง, หรือไฟล์อื่น ๆ ที่ถูกส่งมาผ่านทาง LINE Bot

Endpoint : **GET**

```
https://api-data.line.me/v2/bot/message/{messageld}/content
```

Parameter:

- {messageld} : ID ของข้อความที่ต้องการดึงเนื้อหา

Workshop Time



Create LINE Chatbot with **Firebase**



Firebase



Realtime Database

Store and sync data between your users in near-realtime, on or offline, with strong user-based security.



Authentication

Easily add user authentication for sign-in and onboarding from a variety of providers.



Hosting

Deploy fast-loading, static web apps backed by a global CDN in seconds.



Cloud Functions

Write and run app logic server-side without setting up your own server.



Cloud Firestore

Build responsive apps with a NoSQL document database that lets you structure data the way you like and retrieve it with expressive queries.

Prepare for firebase

1. สร้างบัญชี LINE Developer

- เข้าสู่ [LINE Developer Console](#) และลงชื่อเข้าใช้
- สร้าง Provider ใหม่และสร้าง Channel ใหม่สำหรับ LINE Messaging API

2. ตั้งค่า Firebase Project

- ไปที่ [Firebase Console](#)
- คลิก "Add project" และทำตามขั้นตอนเพื่อสร้าง Firebase Project ใหม่
- ตั้งค่า Firebase Cloud Functions และ Firebase Firestore

การตั้งค่า LINE Messaging API

1. ลงทะเบียน LINE Bot

- ไปที่ [LINE Developers Console](#)
- เลือก Channel ที่สร้างขึ้นและบันทึก Channel ID, Channel Secret และ Access Token

2. ตั้งค่า Webhook

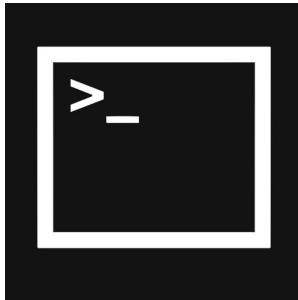
- ใน [LINE Developers Console](#), ไปที่การตั้งค่า Webhook ของ Channel และเปิดใช้งาน Webhook URL
- Webhook URL นี้จะเป็นที่อยู่ที่ **Firebase Cloud Functions** ของคุณจะตอบกลับ

Create Firebase Cloud Function



Terminal
on Mac

or



Command Prompt
on Windows

1. ติดตั้ง Firebase CLI
2. เข้าสู่ระบบ Firebase
3. สร้างโปรเจกต์ Firebase.
4. ติดตั้ง dependencies
5. เขียน Cloud Function

- `npm install -g firebase-tools`
- `firebase login`
- `firebase init`
- (Select Function && Emulator Function)
- `cd functions`

```
~ /De/line-workshop-2024
```

```
firebase init
```

```
(node:18426) [DEP0040] DeprecationWarning: The `punycode` module is deprecated. Please use a userland a  
(Use `node --trace-deprecation ...` to show where the warning was created)
```

```
##### #### ##### #### ##### #### ####### ###### #######  
## ## ## ## ## ## ## ## ## ## ## ## ## ## ## ## ##  
##### ## ##### ##### ##### ##### ##### ##### #####  
## ## ## ## ## ## ## ## ## ## ## ## ## ## ## ## ##  
## ##### ## ## ## ##### ##### ##### ## ## ## #####
```

You're about to initialize a Firebase project in this directory:

```
/Users/thepnatee/Desktop/line-workshop-2024
```

? Which Firebase features do you want to set up for this directory? Press Space to select features, then select, <a> to toggle all, <i> to invert selection, and <enter> to proceed)

- Genkit: Setup a new Genkit project with Firebase
- Realtime Database: Configure a security rules file for Realtime Database and (optionally) provision
- Firestore: Configure security rules and indexes files for Firestore
- Functions: Configure a Cloud Functions directory and its files
- Hosting: Configure files for Firebase Hosting and (optionally) set up GitHub Action deploys
- Storage: Configure a security rules file for Cloud Storage
- Emulators: Set up local emulators for Firebase products

(Move up and down to reveal more choices)

Profile Name

== Project Setup

First, let's associate this project directory with a Firebase project. You can create multiple project aliases by running `firebase use --add`, but for now we'll just set up a default project.

? Please select an option: (Use arrow keys)

› Use an existing project

Create a new project

Add Firebase to an existing Google Cloud Platform project

Don't set up a default project

== Project Setup

First, let's associate this project directory with a Firebase project. You can create multiple project aliases by running `firebase use --add`, but for now we'll just set up a default project.

```
? Please select an option: Use an existing project
? Select a default Firebase project for this directory:
  lab-chatbot-disc (lab-chatbot-disc)
  line-rock-paper-scissors (line-rock-paper-scissors)
  line-workshop-game (line-workshop-game)
> workshop-line-develoepr (workshop-line-develoepr)
```

Functions can be deployed with `firebase deploy`.

```
? What language would you like to use to write Cloud Functions? JavaScript
? Do you want to use ESLint to catch probable bugs and enforce style? No
✓ Wrote functions/package.json
✓ Wrote functions/index.js
✓ Wrote functions/.gitignore
? Do you want to install dependencies with npm now? Yes
npm warn EBADENGINE Unsupported engine {
npm warn EBADENGINE   package: undefined,
```

```
== Emulators Setup
? Which Firebase emulators do you want to set up? Press Space to select emulators, then Enter to confirm
? Which port do you want to use for the functions emulator? 5001
? Would you like to enable the Emulator UI? Yes
? Which port do you want to use for the Emulator UI (leave empty to use any available port)?
? Would you like to download the emulators now? Yes

i Writing configuration info to firebase.json...
i Writing project information to .firebaserc...
i Writing gitignore file to .gitignore...

✓ Firebase initialization complete!
▶ ➔ ~/Desktop/line-workshop-2024
```

- Firebase emulators:start (Using <http://127.0.0.1:4000> Logs)

```
✓ All emulators ready! It is now safe to connect your app.  
ℹ View Emulator UI at http://127.0.0.1:4000/
```

Emulator	Host:Port	View in Emulator UI
Functions	127.0.0.1:5001	http://127.0.0.1:4000/functions
Firestore	127.0.0.1:8080	http://127.0.0.1:4000/firestore
Pub/Sub	127.0.0.1:8085	n/a

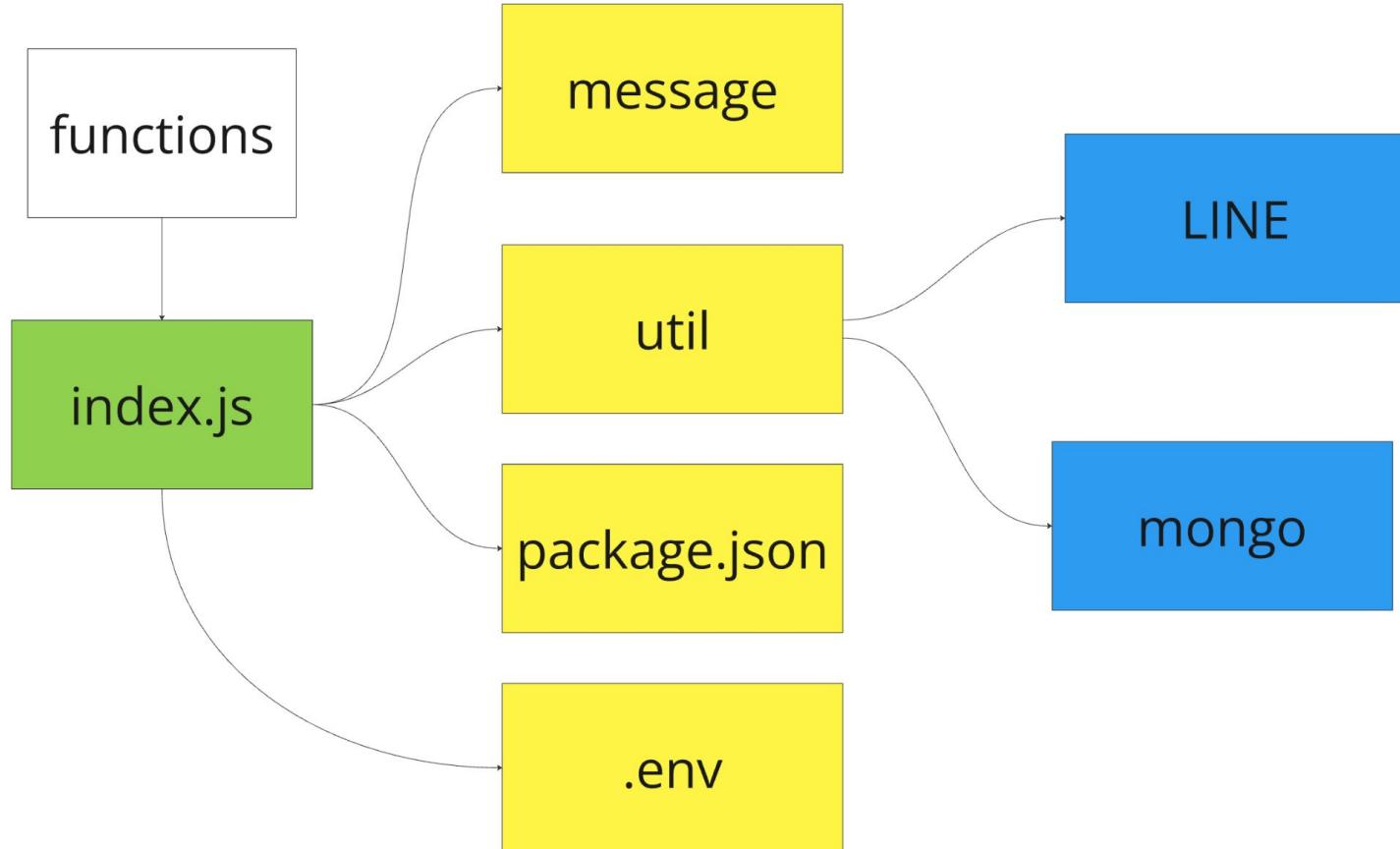
Emulator Hub running at 127.0.0.1:4400

Other reserved ports: 4500, 9150

Issues? Report them at <https://github.com/firebase/firebase-tools/issues> and attach the *-debug.log files.

- Ngrok http 5001 (Using Https://)

Version	2.3.40												
Region	United States (us)												
Web Interface	http://127.0.0.1:4040												
Forwarding	http://cc3a-49-228-74-204.ngrok.io -> http://localhost:5001												
Forwarding	https://cc3a-49-228-74-204.ngrok.io -> http://localhost:5001												
Connections	<table><thead><tr><th>ttl</th><th>opn</th><th>rt1</th><th>rt5</th><th>p50</th><th>p90</th></tr></thead><tbody><tr><td>5</td><td>0</td><td>0.00</td><td>0.00</td><td>0.91</td><td>0.99</td></tr></tbody></table>	ttl	opn	rt1	rt5	p50	p90	5	0	0.00	0.00	0.91	0.99
ttl	opn	rt1	rt5	p50	p90								
5	0	0.00	0.00	0.91	0.99								
HTTP Requests													





Emulator overview

Authentication emulator

Status

Off

Port number

N/A

[Go to emulator](#)

Firestore emulator

Status

On

Port number

8080

[Go to emulator](#)

Realtime Database emulator

Status

Off

Port number

N/A

[Go to emulator](#)

Functions emulator

Status

On

Port number

5001

[View logs](#)

Storage emulator

Status

Off

Port number

N/A

[Storage](#)

Hosting emulator

Status

Off

Port number

N/A

PubSub emulator

Status

On

Port number

8085

Extensions emulator

Status

Off

Port number

N/A

Firebase Emulator

แสดง URL ที่ Local Emulator ของ **Cloud Functions** สำหรับใช้ในการทดสอบ

```
firebase emulators:start
```



Filter or search logs...

```
20:57:30 I ui Emulator UI logging to ui-debug.log
20:57:30 I functions Watching "/Users/thepnatee/Desktop/LAE/class_line_chatbot/functions" for Cloud Functions...
20:57:31 I functions Loaded functions definitions from source: Webhook.
20:57:31 I functions http function initialized (http://127.0.0.1:5001/line-chat-bot101/us-central1/Webhook).
20:57:31 I
```

✓ All emulators ready! It is now safe to connect your app.
i View Emulator UI at <http://127.0.0.1:4000>

Emulator	Host:Port	View in Emulator UI
Functions	127.0.0.1:5001	http://127.0.0.1:4000/functions
Firestore	127.0.0.1:8080	http://127.0.0.1:4000/firestore
Pub/Sub	127.0.0.1:8085	n/a

Emulator Hub running at 127.0.0.1:4400
Other reserved ports: 4500, 9150

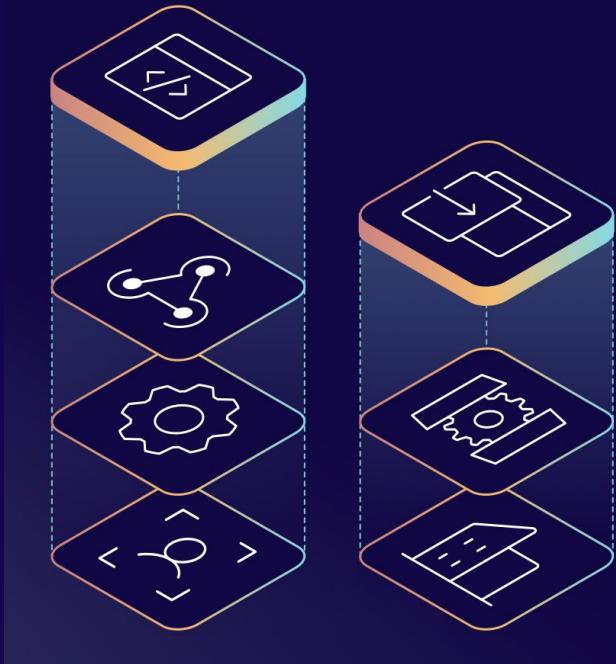
Issues? Report them at <https://github.com/firebase/firebase-tools/issues> and attach the *-debug.log files.

<http://127.0.0.1:5001/line-chat-bot101/us-central1/Webhook>

<https://cc3a-49-228-74-204.ngrok.io/line-chat-bot101/us-central1/Webhook>

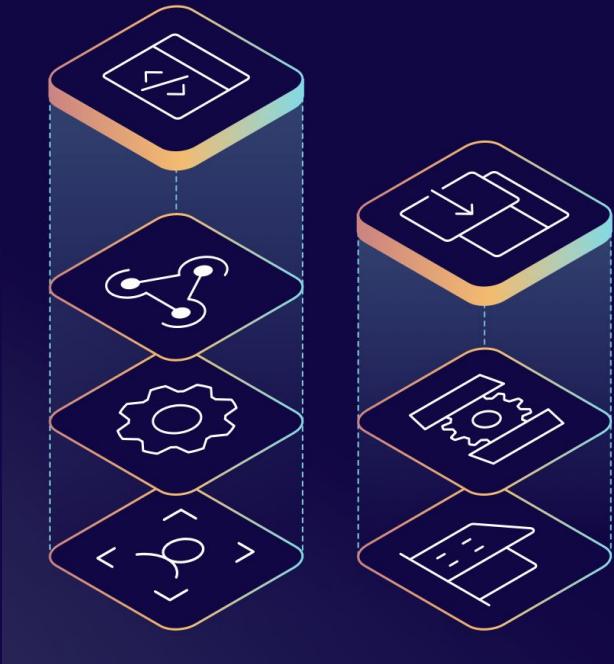
ngrok

ngrok



- **HTTP Tunneling**
สร้างท่อเชื่อมต่อสำหรับ HTTP และ HTTPS
- **TCP Tunneling**
สร้างท่อเชื่อมต่อสำหรับโปรโตคอล TCP
- **Custom Subdomains**
ใช้โดเมนย่อยที่กำหนดเอง
- **Web Interface**
มือถือเตอร์เฟชเว็บเพื่อดูการร้องขอและการตอบสนองต่างๆ
- **Access Control**
ควบคุมการเข้าถึงด้วยการใช้รหัสผ่าน

Install ngrok



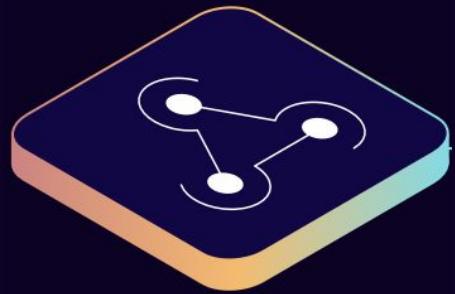
1. ดาวน์โหลด [เว็บไซต์ ngrok](#) สำหรับระบบปฏิบัติการของคุณ (Windows, macOS, Linux)
2. แตกไฟล์ที่ดาวน์โหลดมาและย้ายไปยังตำแหน่งที่ต้องการ
3. เปิด terminal หรือ command prompt และเปลี่ยน directory ไปยังตำแหน่งที่เก็บไฟล์ ngrok
4. Run คำสั่งต่อไปนี้เพื่อติดตั้ง ngrok:

```
ngrok authtoken YOUR_AUTH_TOKEN
```

Start ngrok

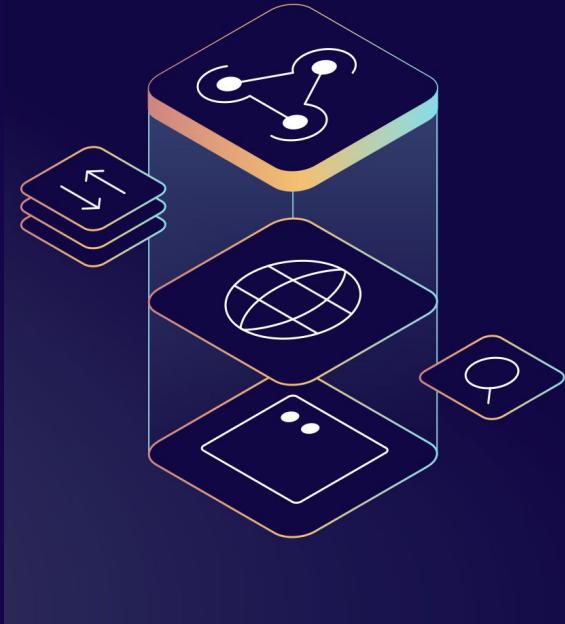


ngrok http 5001



Setup Webhook

Webhook



- **Step 1: HTTP Tunneling**

Channel settings > Messaging API > กรอก URL > Update

- **Step 2: เปิดใช้งาน Webhook**

Messaging API > Webhook settings > Enabled > Verify

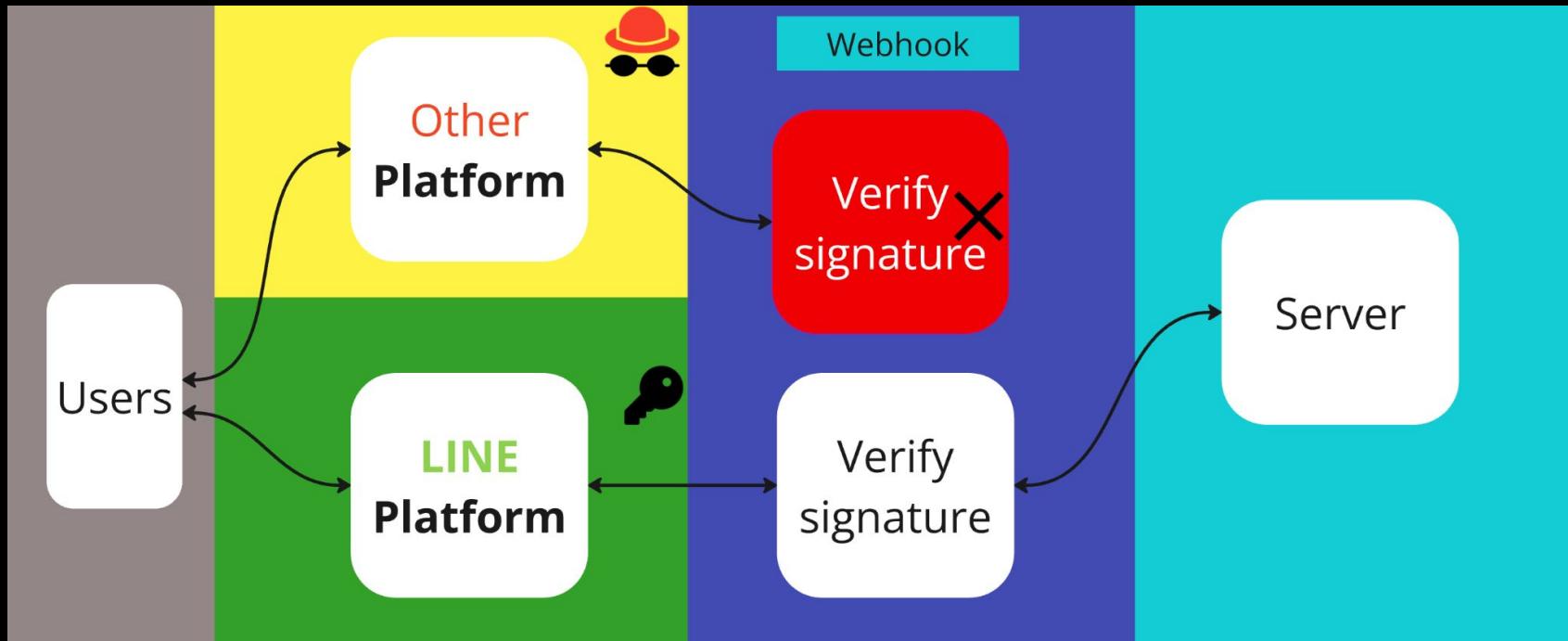
- **Step 3: ตั้งค่าและทดสอบ Webhook**

ตรวจสอบ Webhook

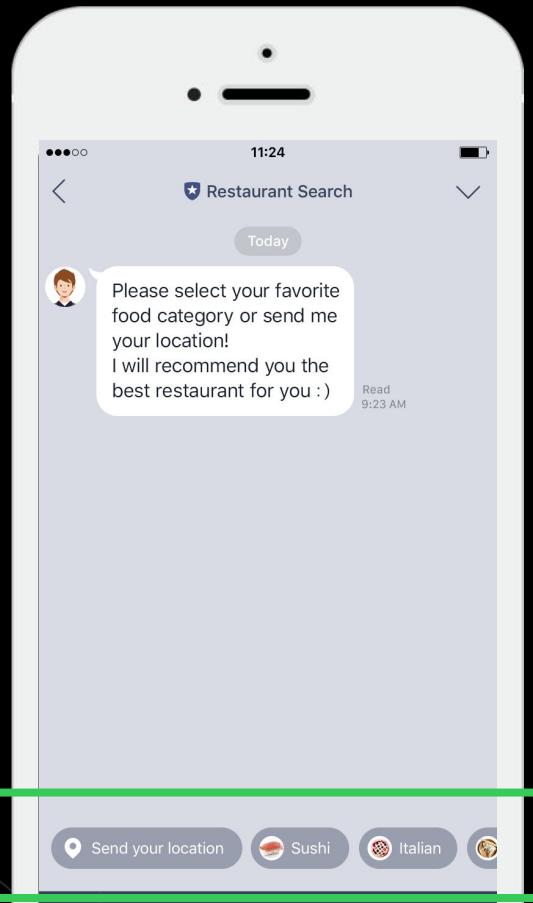
- **Step 4: Test Webhook**

LINE app หรือ LINE Developers Console ส่งข้อความ

Verify signature



Quick Replies



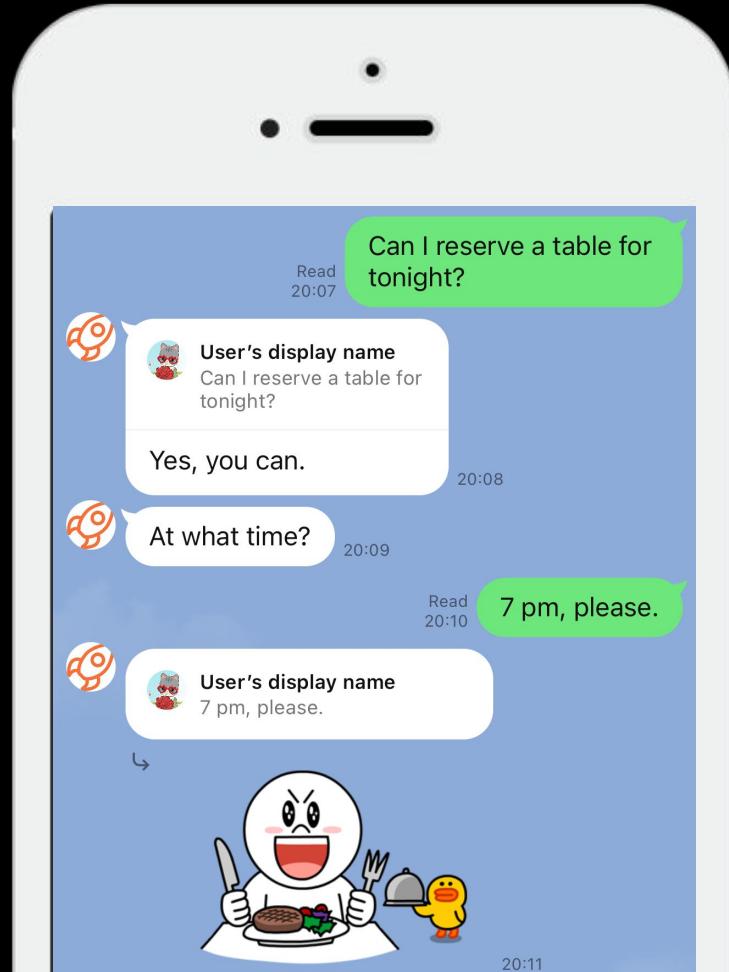
Quick Replies



Action

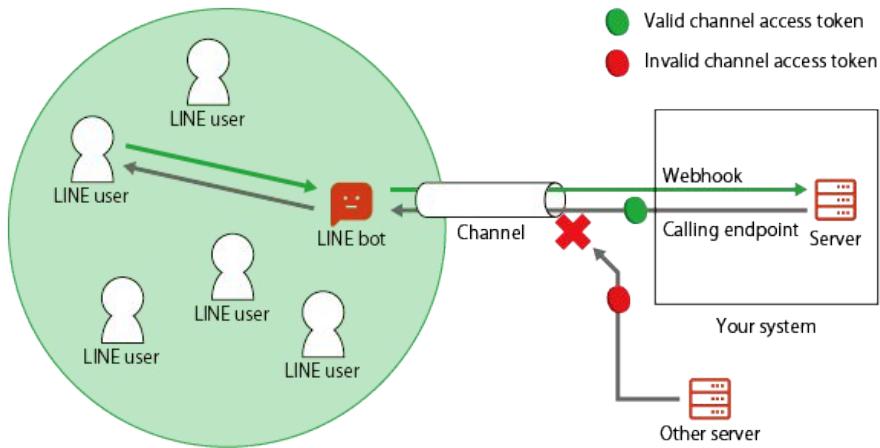
- Camera
- Location
- Postback
- Message
- URI action
- Datetime picker
- Clipboard

Quote Token



Channel Access Token

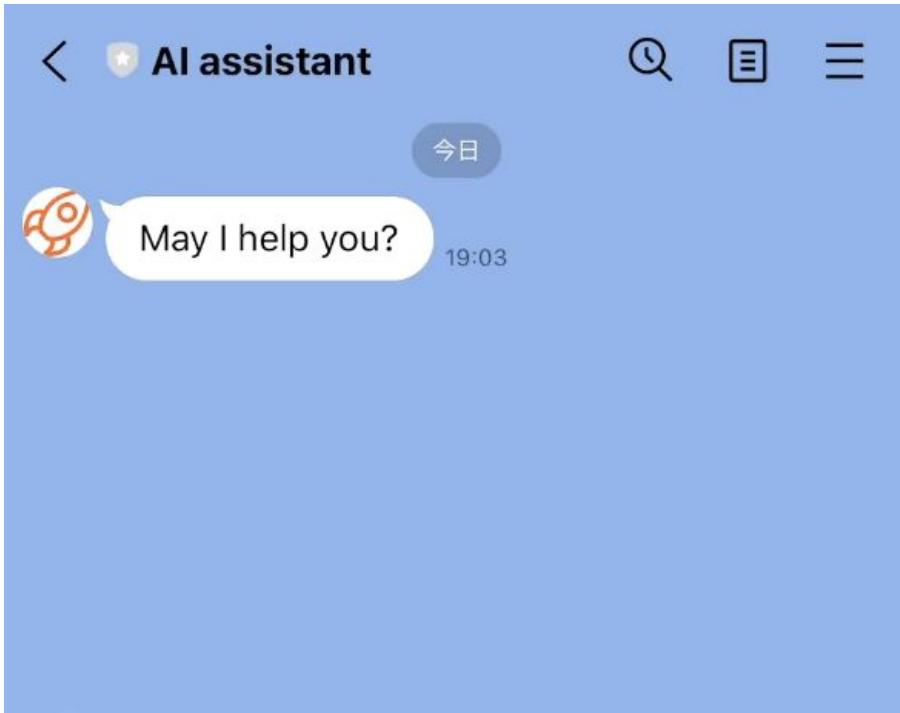
Channel Access Token



- **User-Specified Expiration (v2.1)**
มีอายุสูงสุด 30 วัน ออกได้สูงสุด 30 โทเค็นต่อช่องทาง
- **Stateless**
มีอายุ 15 นาที ออกได้ไม่จำกัด
- **Short-Lived**
มีอายุ 30 วัน ออกได้สูงสุด 30 โทเค็นต่อช่องทาง
- **Long-Lived**
ไม่มีวันหมดอายุ ออกได้หนึ่งโทเค็นต่อช่องทาง

Loading Animation

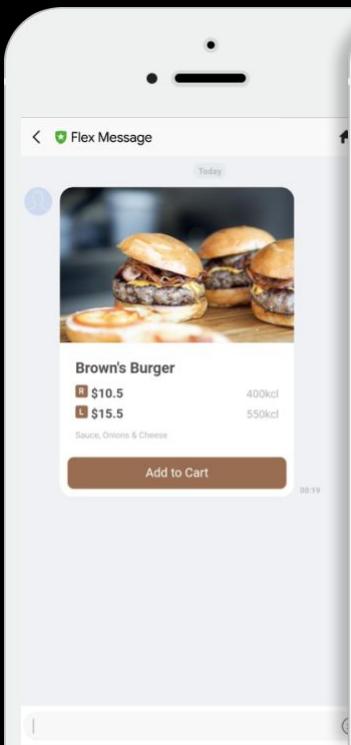
Loading Animation



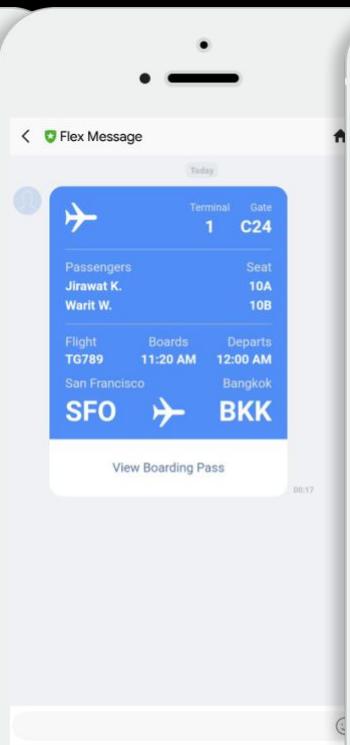
แสดงผลได้ในห้องแชทแบบ one-on-one
ระหว่าง ผู้ใช้งาน และ LINE Chatbot เท่านั้น

Flex Message

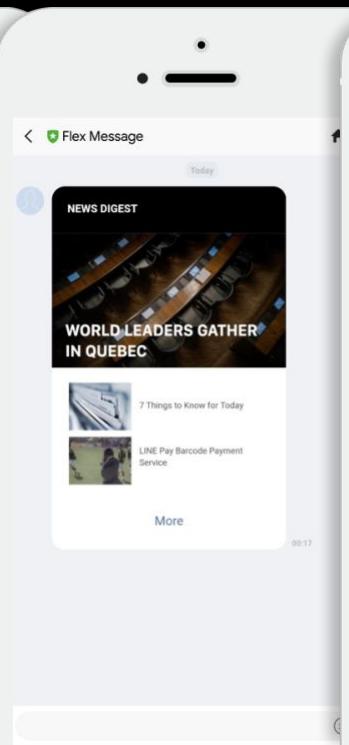
Menu



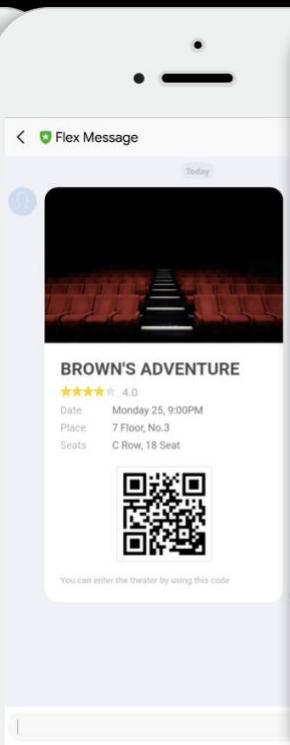
Flight



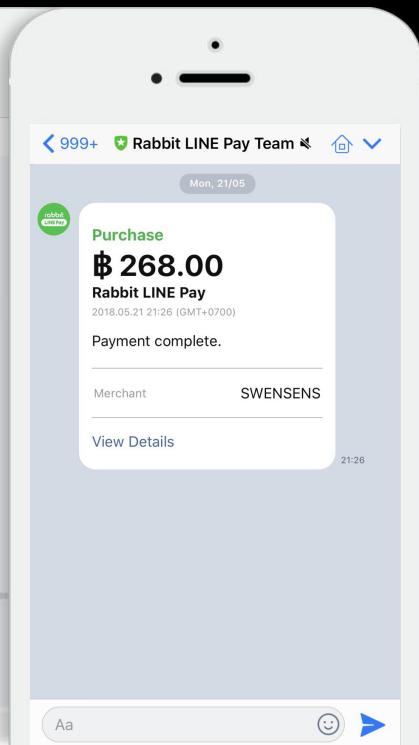
News



Ticket



Payment



2025

Let's Start Create Flex Simulator

<https://developers.line.biz/flex-simulator/>

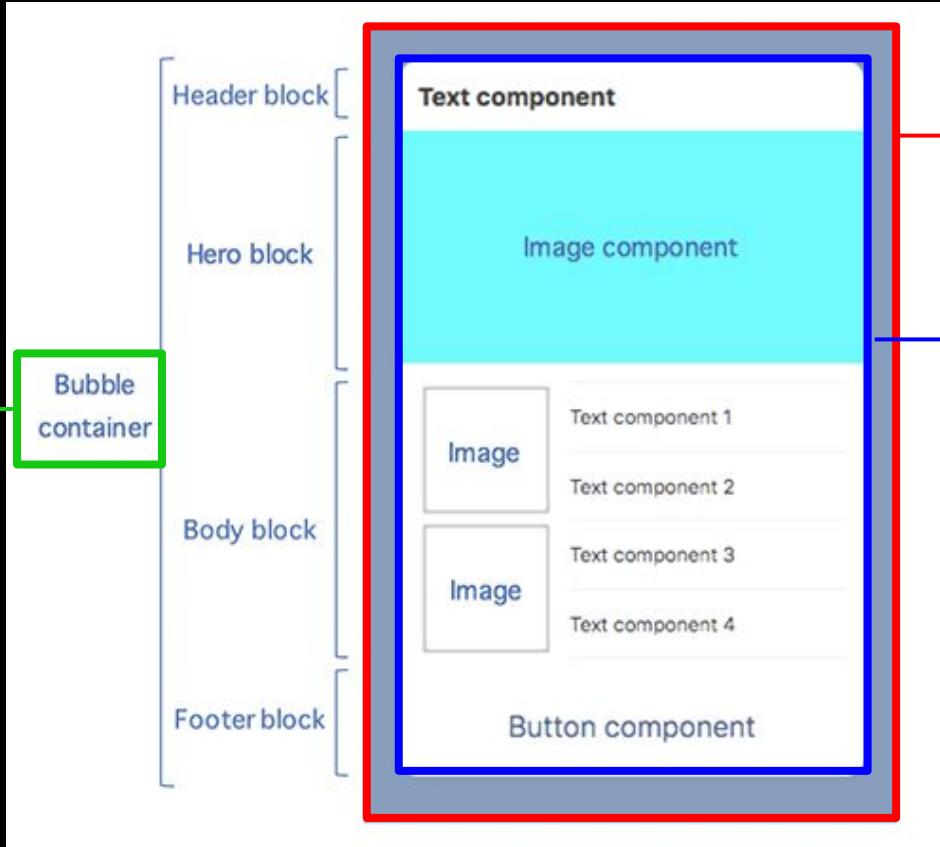
Flex Message JSON Format

```
{  
  "type": "flex",  
  "altText": "This is a Flex message",  
  "contents": {  
    ...  
  }  
}
```

Flex Message Structure

Container

1

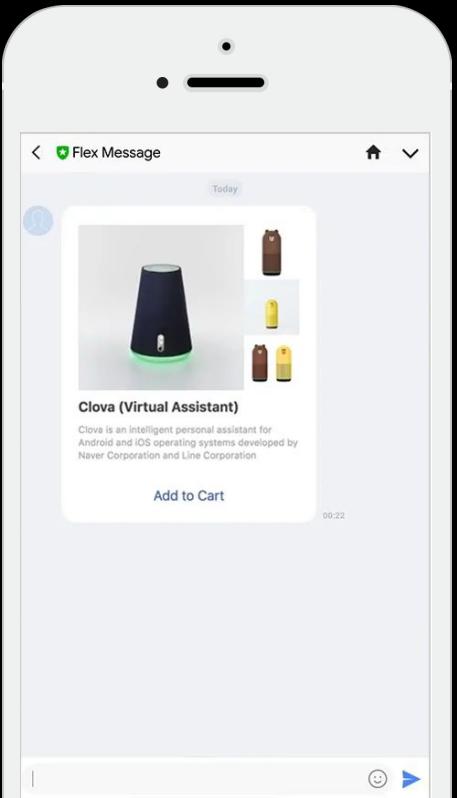


Block

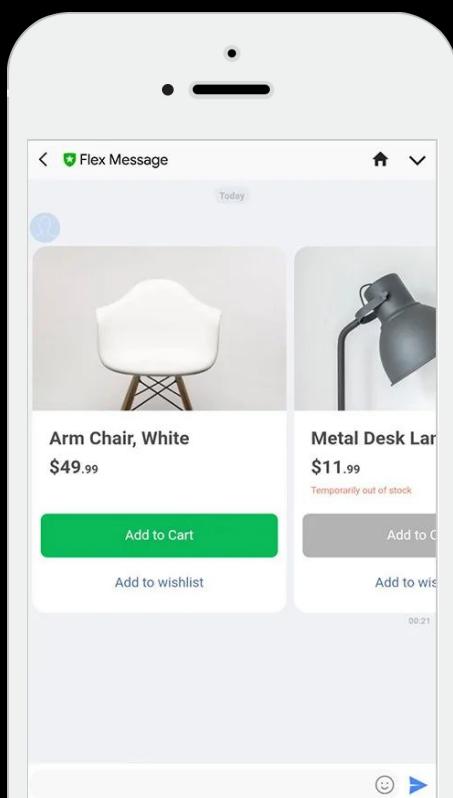
Component

Flex Message - Container

Bubble

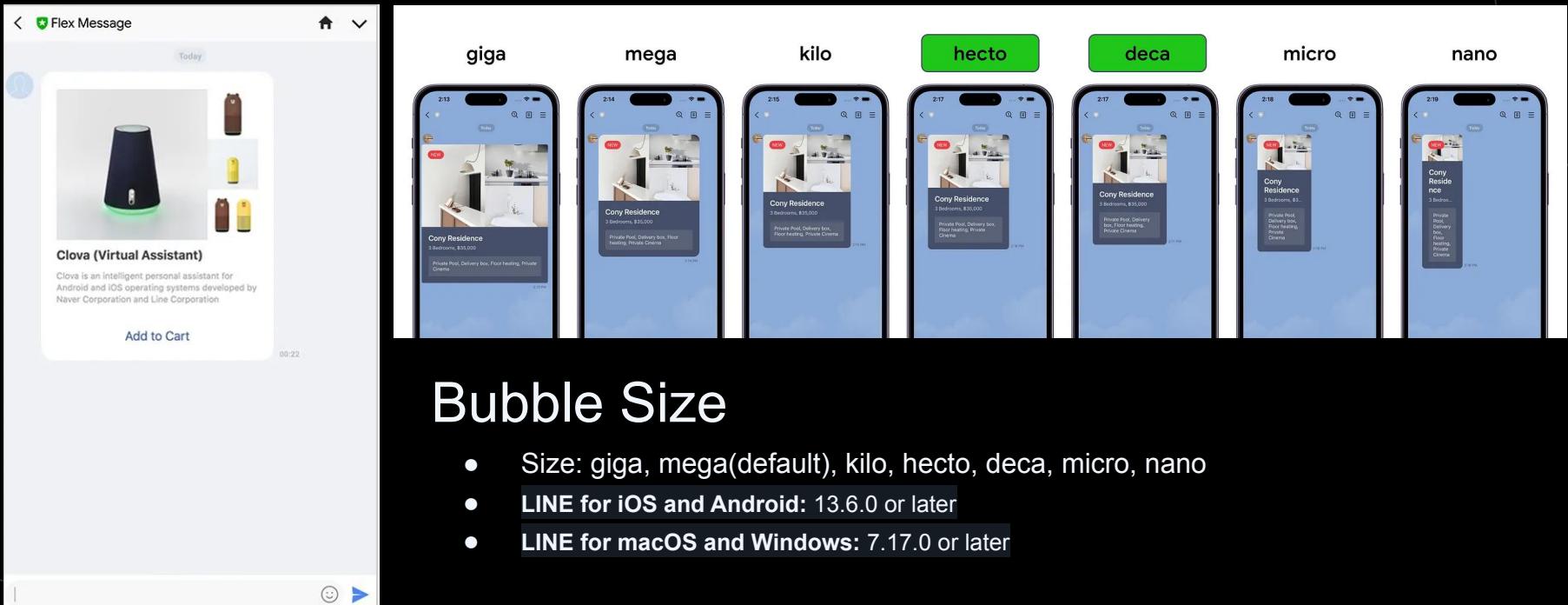


Carousel



Flex Message - Container

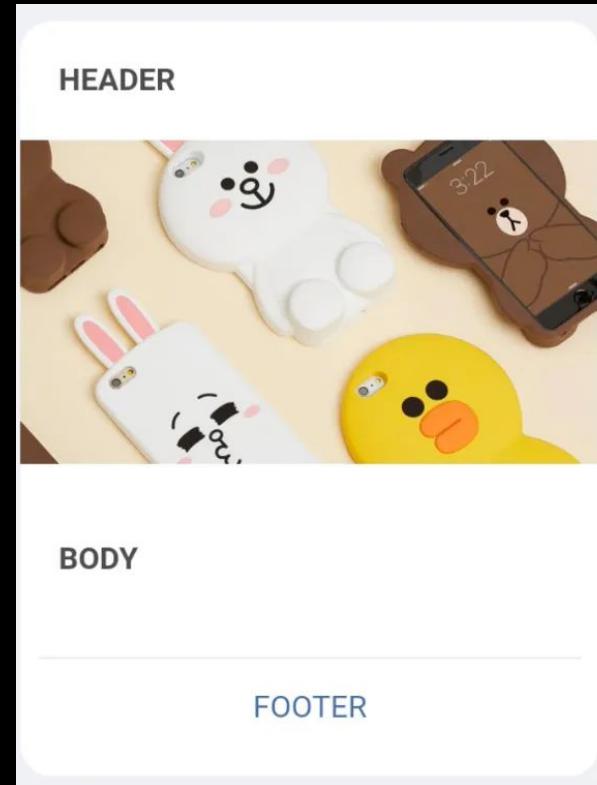
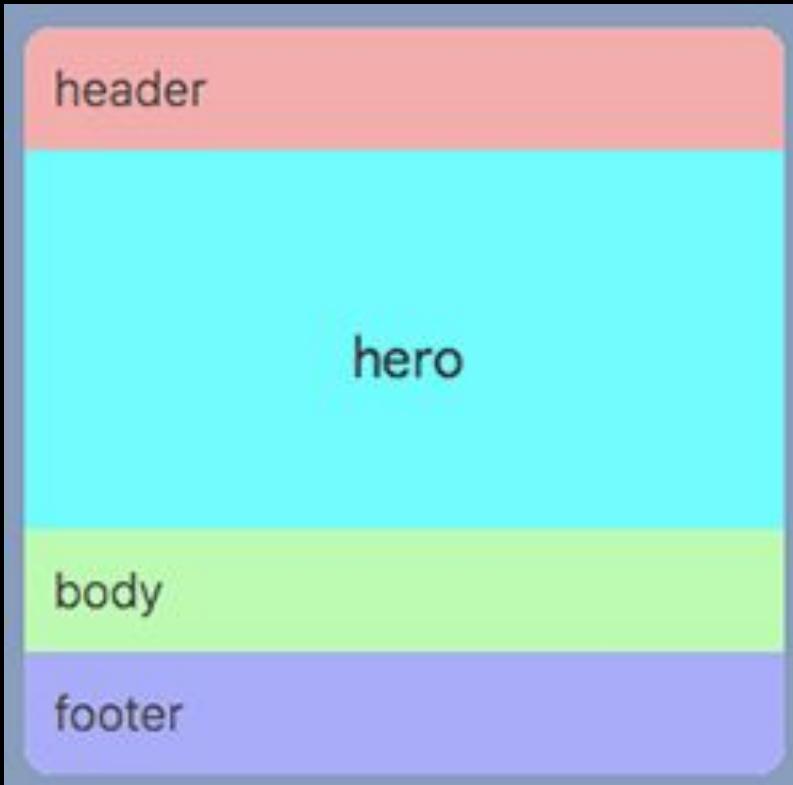
Bubble



Bubble Size

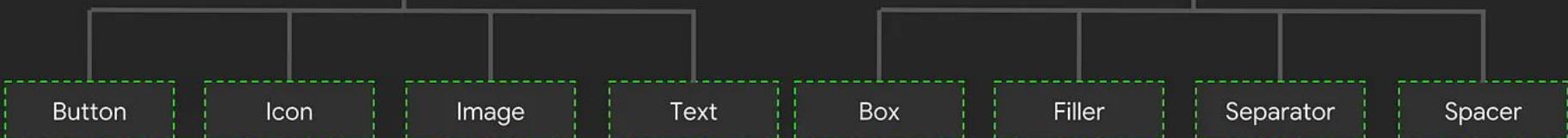
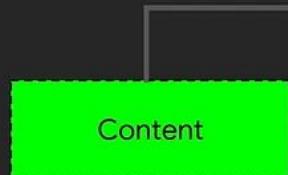
- Size: giga, mega(default), kilo, hecto, deca, micro, nano
- **LINE for iOS and Android:** 13.6.0 or later
- **LINE for macOS and Windows:** 7.17.0 or later

Flex Message - Block



Flex Message - Component

Component



Flex Message - Content

Button

Icon

Image

Text

flex: ค่าน้ำหนักในการแบ่งสัดส่วนสำหรับ component ทั้งแนวตั้งและแนวอนกายนใน box โดยค่า default ในแนวตั้งคือ 0 และค่า default ในแนวอนคือ 1

1:1:1

1:1:2

1:1:0

Horizontal box

11111111 22222222 33333333
11111111 22222222 33333333

Horizontal box

60x60 60x60 33333333
33333333

Horizontal box

111111 222222 333333333333
111111 222222 333
1111 2222

Horizontal box

60x60 60x60 333333333333
333

Horizontal box

11111 22222 33333333333333
11111 22222
11111 22222
1 2

Horizontal box

60x60 60x60 33333333333333
33333333333333

Flex Message - Content



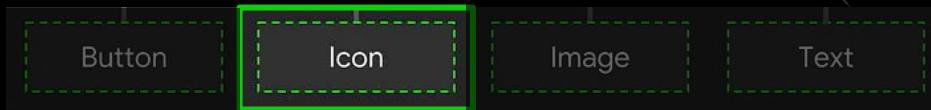
Primary style button

Secondary style button

Link style button

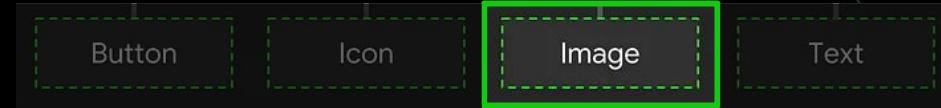
```
"contents": [
  {
    "type": "button",
    "style": "primary", // primary, secondary, link
    "action": {
      "type": "uri",
      "label": "Primary style button",
      "uri": "https://developers.line.me"
    }
  },
  ],
  
```

Flex Message - Content



```
"contents": [
  {
    "type": "icon",
    "size": "sm",
    "url": "https://scdn.line-apps.com/n/channel_devcenter/
img/fx/review_gold_star_28.png"
  },
]
},
```

Flex Message - Content

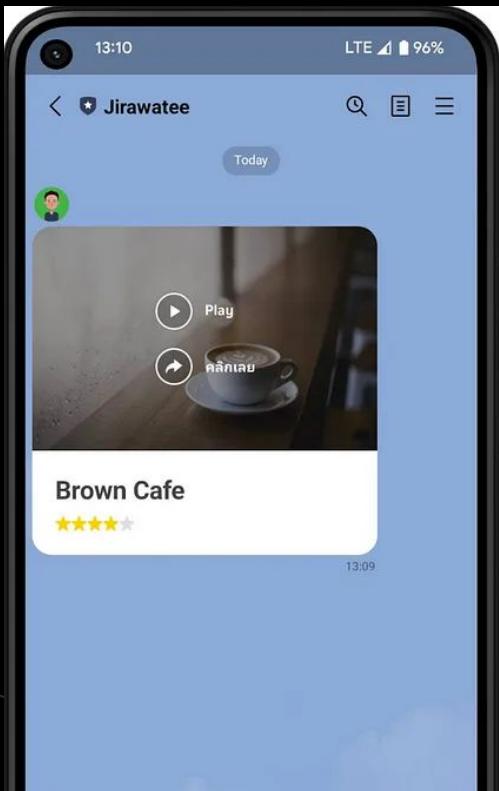


```
"contents": [  
  {  
    "type": "image",  
    "url": "https://www.linefriends.com/content/  
banner/201804/3b5364c97c2d4a26988f85a  
cdc78514e.jpg",  
    "size": "full",  
    "aspectRatio": "16:9",  
    "aspectMode": "cover"  
  }  
]
```



- ไม่สามารถใช้ไฟล์ GIF ในการแสดงภาพเคลื่อนไหวบน Flex Message ได้
- เราต้องเปลี่ยนไปใช้ไฟล์ APNG แทน
- ไฟล์ APNG ต้องมีขนาดไม่เกิน 300KB
- ภาพเคลื่อนไหวจะทำงานก็ต่อเมื่อผู้ใช้งานไม่ได้ disable เม뉴 Auto-play GIFs

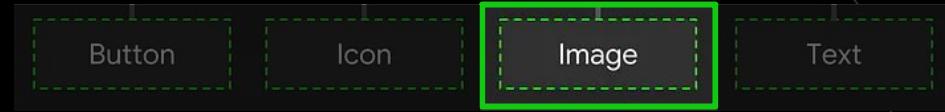
Flex Message - Content



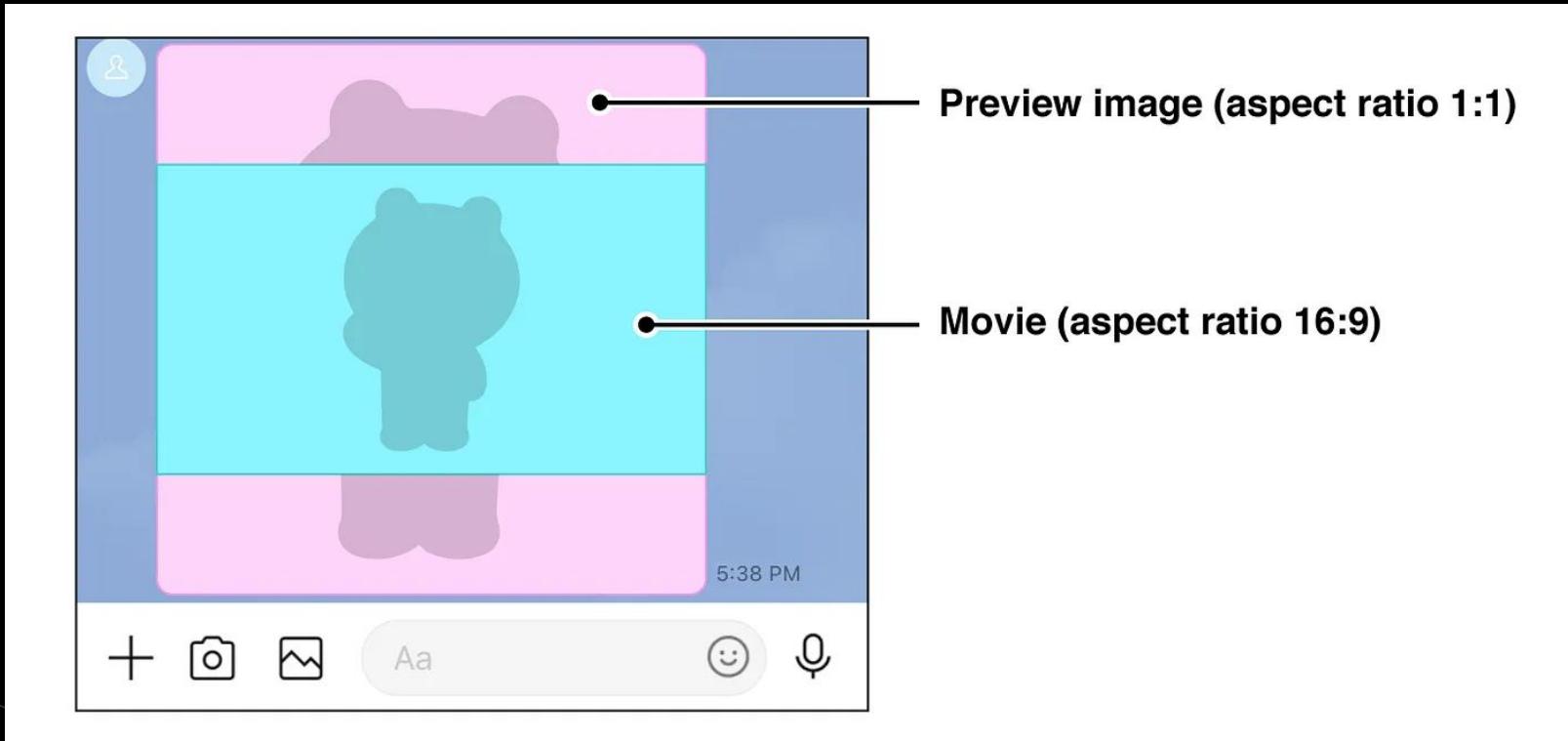
Video

```
{
  "type": "bubble",
  "hero": {
    "type": "video",
    "url": "https://mokmoon.com/videos/Brown.mp4",
    "previewUrl": "https://scdn.line-apps.com/n/channel_devcenter/img/fx/01_1_cafe.png",
    "altContent": {
      "type": "image",
      "size": "full",
      "aspectRatio": "20:13",
      "aspectMode": "cover",
      "url": "https://scdn.line-apps.com/n/channel_devcenter/img/fx/01_1_cafe.png"
    },
    "action": {
      "type": "uri",
      "label": "คลิปเลย",
      "uri": "https://line.me/"
    },
    "aspectRatio": "16:9"
  }
}
```

Flex Message - Content



Video



Flex Message - Content



Closing the distance

Closing the distance

Closing the distance

```
{
  "type": "bubble",
  "body": {
    "type": "box",
    "layout": "vertical",
    "contents": [
      {
        "type": "text",
        "text": "Closing the distance",
        "weight": "bold"
      },
      {
        "type": "text",
        "text": "Closing the distance",
        "size": "lg",
        "align": "center",
        "color": "#00ff00"
      },
      {
        "type": "text",
        "text": "Closing the distance",
        "size": "xl",
        "align": "end",
        "color": "#0000ff"
      }
    ]
  }
}
```

Flex Message - Layout



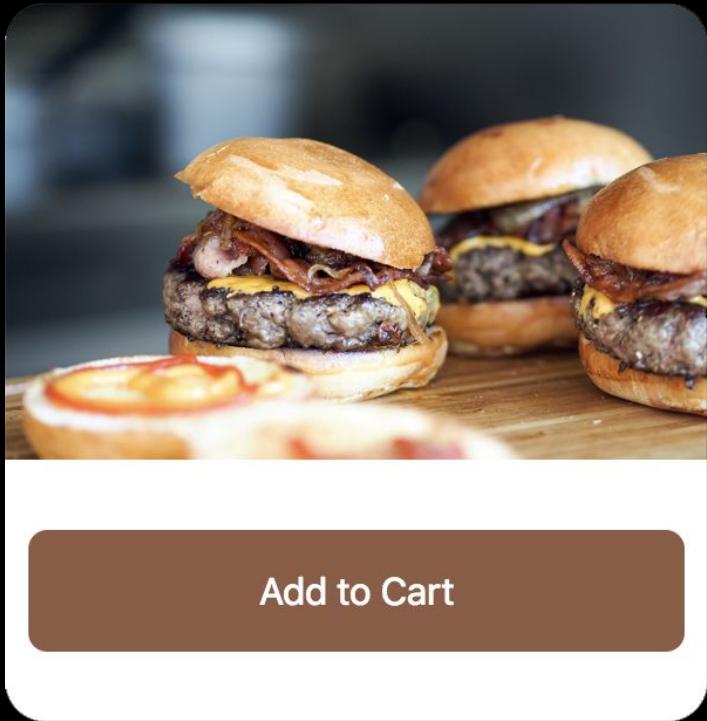
```
"contents": [
  {
    "type": "box",
    "layout": "vertical",
    "contents": [
      {
        "type": "image",
        "url": "https://media1.giphy.com/media/v1.Y2lkPTc5MGI3NjExZWYze[",
        "aspectRatio": "1:2",
        "aspectMode": "cover"
      }
    ]
  },
]
```

Flex Message - Layout



```
"contents": [
  {
    "type": "box",
    "layout": "horizontal",
    "spacing": "md",
    "contents": [
      {
        "type": "text",
        "text": "orange"
      },
      {
        "type": "separator"
      },
      {
        "type": "text",
        "text": "apple"
      }
    ]
  },
  {
    "type": "separator"
  }
]
```

Flex Message - Layout



```
"contents": [
  {
    "type": "spacer",
    "size": "xxl"
  },
  {
    "type": "button",
    "style": "primary",
    "color": "#905c44",
    "action": {
      "type": "uri",
      "label": "Add to Cart",
      "uri": "https://linecorp.com"
    }
  },
  {
    "type": "spacer",
    "size": "xxl"
  }
]
```

Rich Menu

Rich menu API lets you display different rich menus to different users.
You can create, link, and manage your rich menus programmatically.



Create Rich Menu

Rich Menu
LINE OA Manager
(no code)

Or

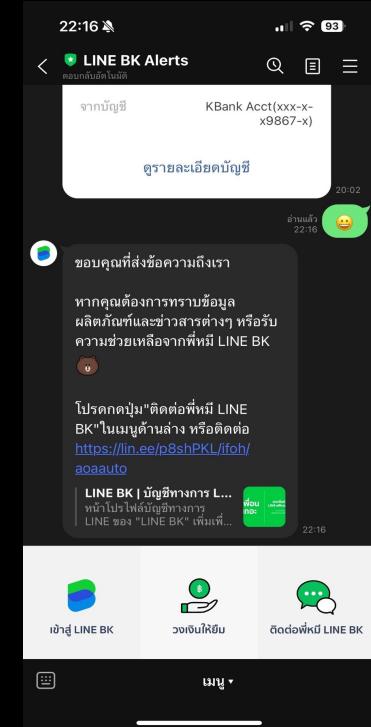
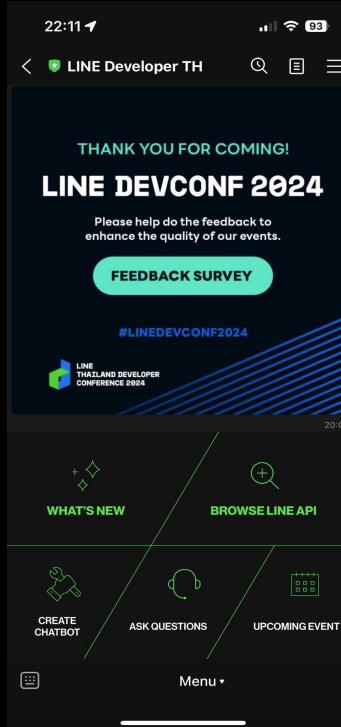
Rich Menu
Messaging API

Workshop

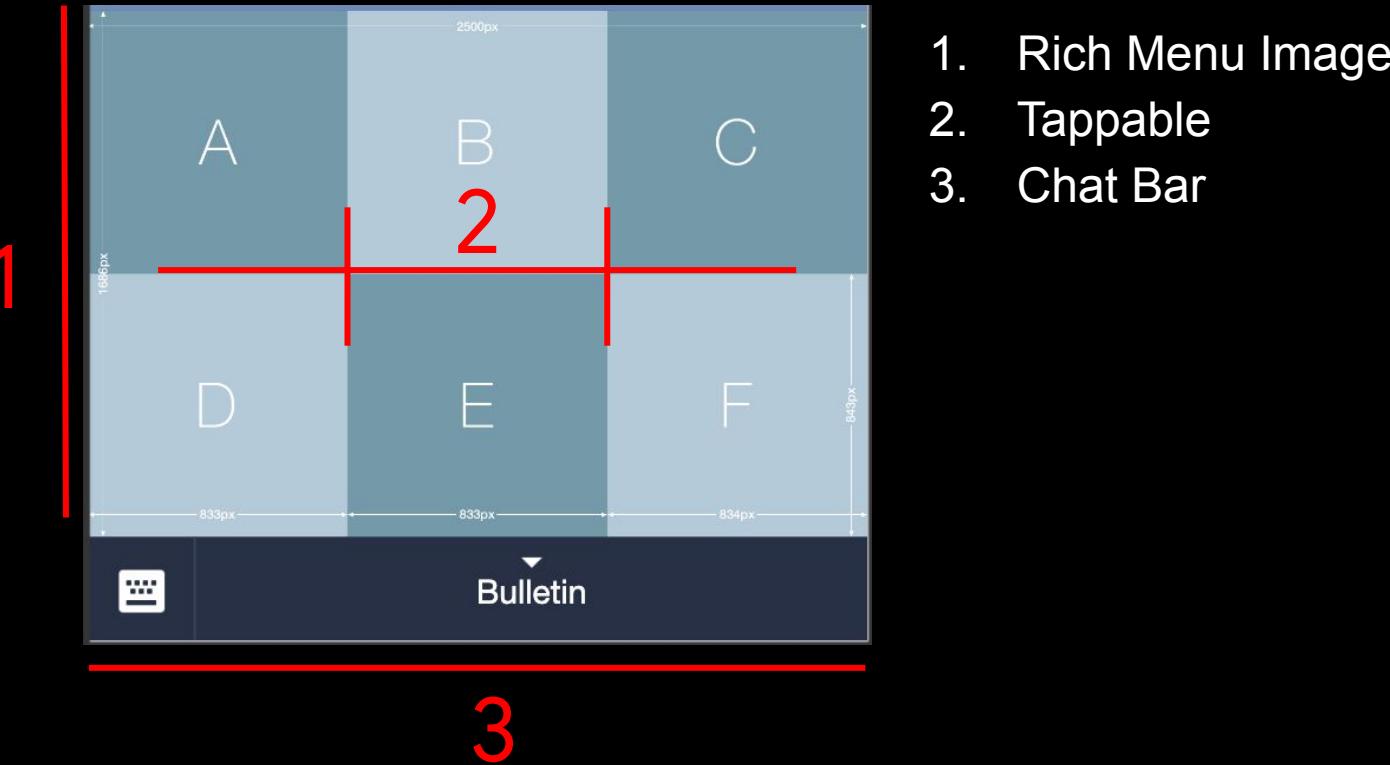
Rich Menu

Rich Menu Overview

Rich menus are the menus displayed at the bottom of a chat room with a LINE Official Account. Set rich menus with links to external sites, reservation pages, and LINE Official Account features to make your user experience more "rich"

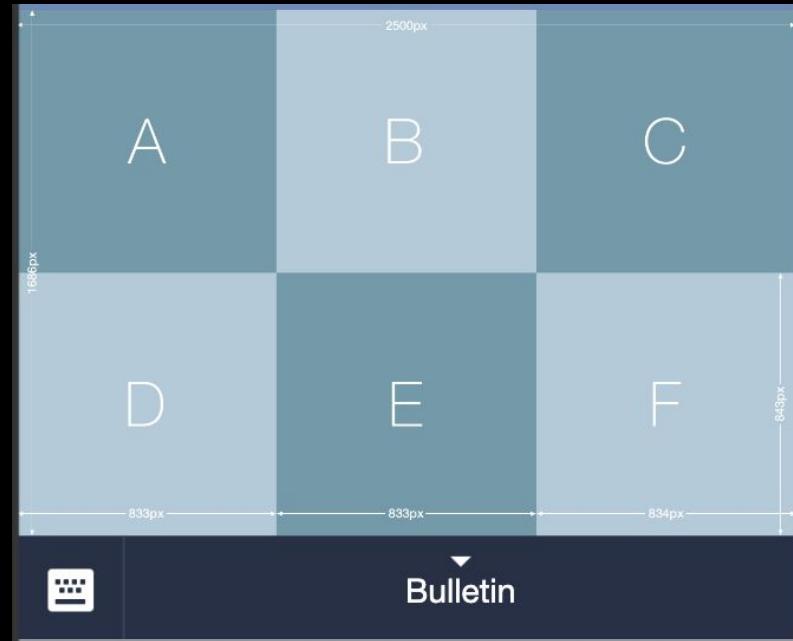


Rich Menu Structure



Rich Menu Structure

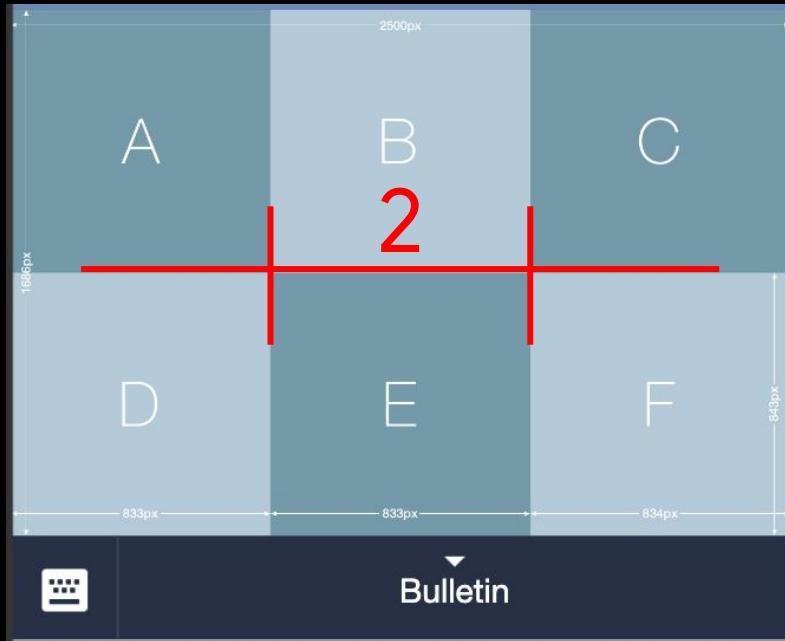
1



Rich menu image: A single JPEG or PNG image file that has menu items

- Image format: JPEG or PNG
- Image width: 800 to 2500 pixels
- Image height: 250 pixels or more
- Image aspect ratio (width / height): 1.45 or more
- Max file size: 1 MB

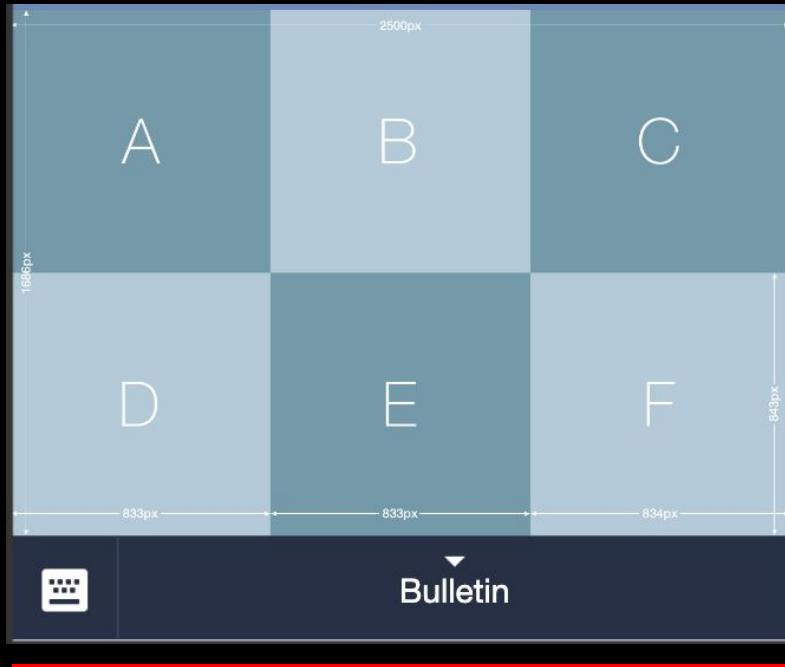
Rich Menu Structure



Tappable areas: Areas you divide as menu items. Assign an action on each menu item, such as getting a postback event and opening a URL

- Postback action
- Message action
- URI action
- Datetime picker action
- Camera action
- Camera roll action
- Location action
- Richmenu Switch Action
- Clipboard action

Rich Menu Structure



Chat bar: A menu that opens and closes the rich menu. You can customize the text of this menu.

Tools for setting rich menus



LINE Official Account Manager



LINE Messaging API

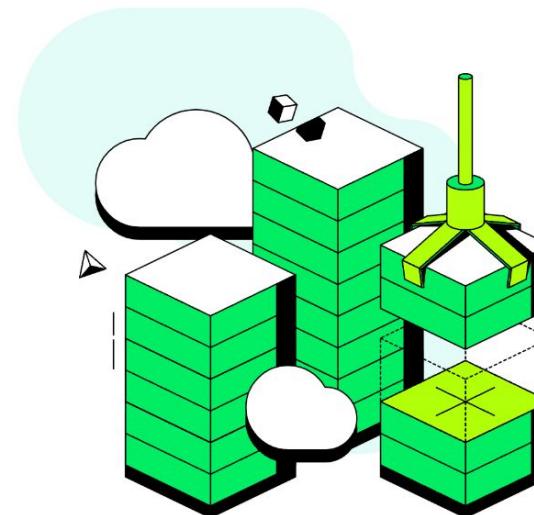
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MONGODB ATLAS

MongoDB Atlas.

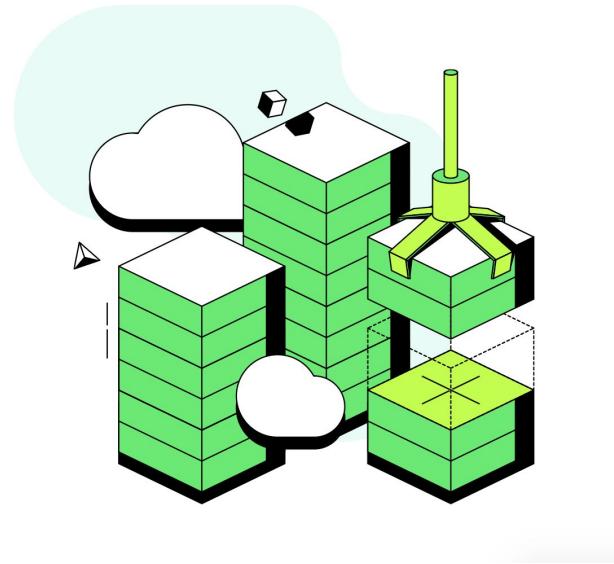
The multi-cloud developer data platform.

An integrated suite of cloud database and data services to accelerate and simplify how you build with data.

[Try Free](#)[Document model benefits](#) →

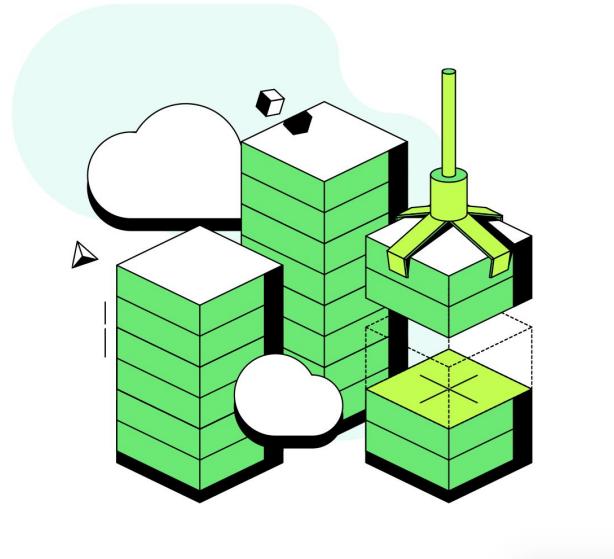
MongoDB Atlas. The multi-cloud developer data platform.

An integrated suite of cloud database and data services to
accelerate and simplify how you build with data.



Register & Setting

MongoDB Atlas





CONNECTING TO A MONGODB ATLAS CLUSTER FROM AN APPLICATION

```
mongodb+srv://<username>:<password>@cluster0.usqsf.mongodb.net/  
?retryWrites=true&w=majority
```

Workshop

Upsert and Get User

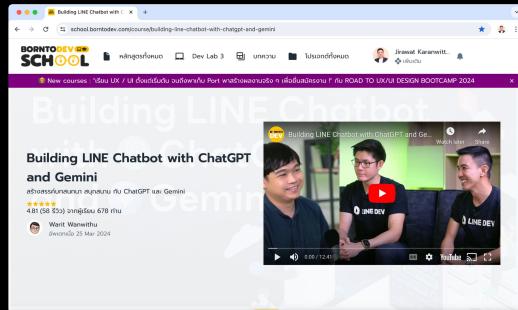
LINE Developers Codelabs

<https://codelab.line.me>

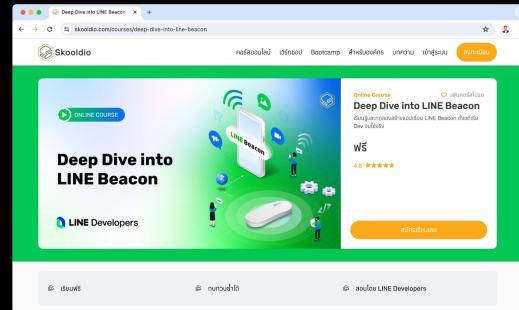
The screenshot displays the LINE Developers Codelabs landing page. At the top, there's a navigation bar with the LINE Developers logo and a search bar. Below the header, the title "LINE Developers Codelabs" is centered. A brief description follows: "LINE Developers Codelabs provide a guided, tutorial, hands-on coding experience. Most codelabs will step you through the process of building a small application, or adding a new feature to an existing application." The main content area features a grid of 12 codelab cards, each with a thumbnail, title, duration, last updated date, and a "Start" button.

Card Index	Title	Duration	Last Updated	Action
1	Building GenAI Chatbot using Gemini and Firebase	50 min	Updated Feb 15, 2024	Start
2	Building GenAI Chatbot using PaLM API and Firebase	50 min	Updated Aug 21, 2023	Start
3	Building Gold Reporter Chatbot using Firebase and Web Scraping technique	54 min	Updated Mar 20, 2023	Start
4	Building Image Resizer Chatbot using Firebase	60 min	Updated May 4, 2021	Start
5	Building LIFF app without caching	45 min	Updated May 29, 2020	Start
6	Building LINE Chatbot using Dialogflow	50 min	Updated May 26, 2020	Start
7	Building Package Tracking Chatbot with ThailandPost API	60 min	Updated Jun 22, 2021	Start
8	Building Shorten URL Chatbot using Dialogflow and Bitly API	60 min	Updated Apr 1, 2021	Start
9	ChatGPT bot in LINE Group to answer all of your questions!	60 min	Updated Aug 03, 2023	Start
10	Create Digital Business Cards without Writing Code using Flex Simulator	25 min	Updated Jul 14, 2020	Start
11	Create LINE Chatbot to extract audio files in Thai with Google Speech-to-Text API	24 min	Updated Aug 10, 2023	Start
12	Create a Remove background Chatbot and travel the world in 1 second!	40 min	Updated Aug 15, 2022	Start

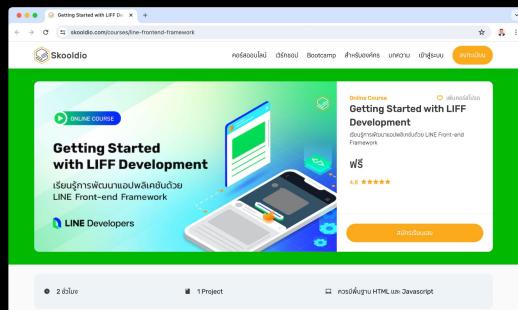
LINE Developers Online Courses



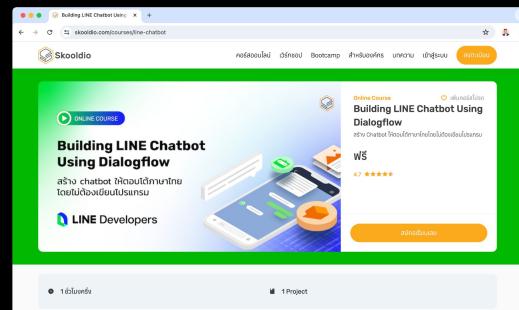
<https://bit.ly/LCHATGPTGEMINI>



<https://skooldio.com/courses/deep-dive-into-line-beacon>



<https://skooldio.com/courses/line-frontend-framework>



<https://skooldio.com/courses/line-chatbot>