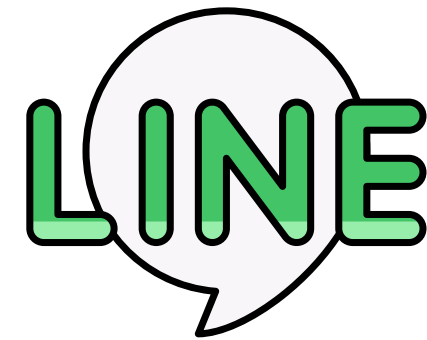


# Stock Inventory Line Bot



Answer stock questions via  
LINE and update stock via  
Google Sheets.

# Objective

1

Quick stock checks without backend access

2

User-friendly via LINE — familiar and widely adopted

3

Perfect for small retailers and fast-moving sales teams

# Technology

## Free and scalable technologies

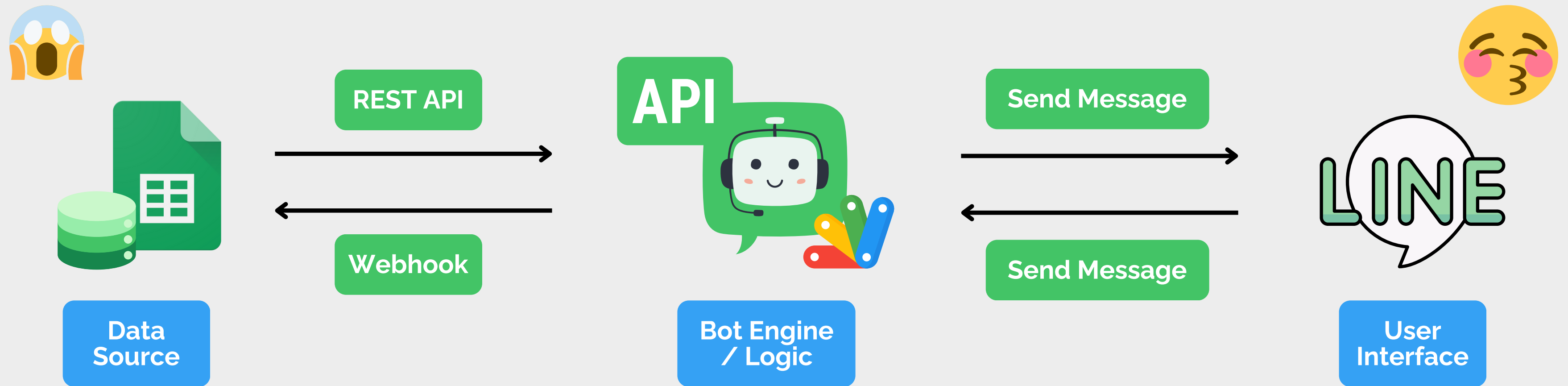
The goal of our project is to make technology accessible and practical for small businesses. By using free tools like **LINE Messaging API**, **Google Apps Script**, and **Google Sheets**, we enable users to access essential business information quickly — without the need for complex systems or additional costs.



# Workflow Diagram

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May 14, 2025

Simple and practical — ready-to-use with minimal coding required.



## System Components

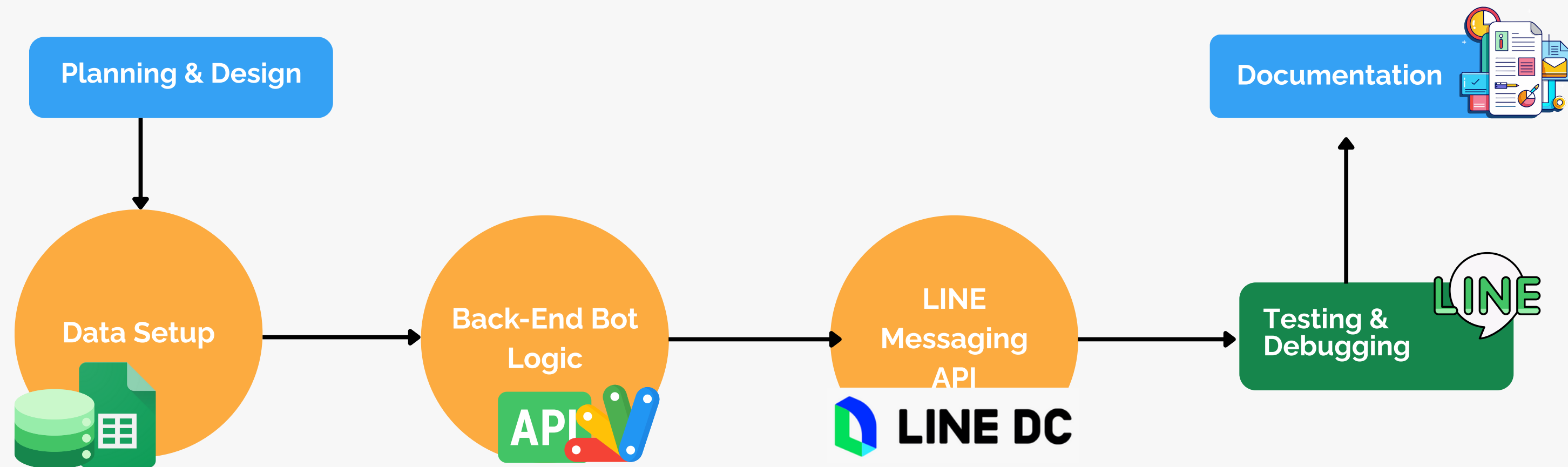
- **Google Sheets** – Acts as the product stock database
- **Google Apps Script** – Connects LINE with Sheets, processes messages, and fetches data
- **LINE Platform** – User interface for typing and receiving stock information

# Process

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The development of this project involves 6 key steps as follows:



## Development Process

### 1. System Planning

Define objectives and map the flow: LINE → Apps Script → Google Sheets

### 2. Database Setup

Create a Google Sheet to store product names and stock quantities

### 3. Coding with Apps Script

Receive message from LINE → Search data → Send reply message

### 4. LINE API Integration

Configure Webhook to connect LINE with Apps Script Web App

### 5. System Testing

Test both successful and unsuccessful search responses

### 6. Documentation & Portfolio

Create workflow diagrams and publish a summary article on personal website

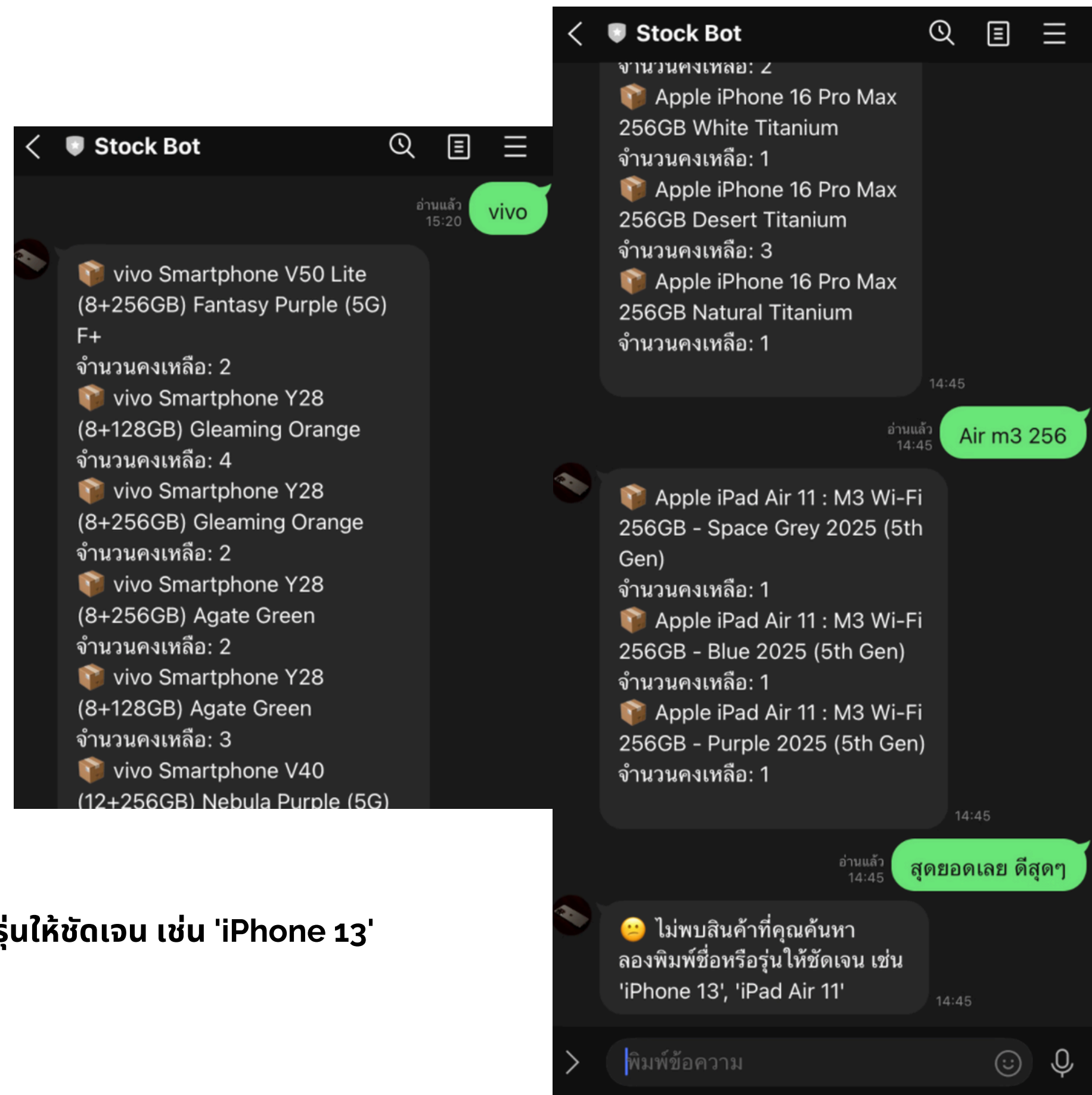
# Demo Showcase

See how it works — in just a few seconds.

## Step-by-step User Flow :

1. 🗣️ User types: "กาแฟ" or "iPhone 13" in the LINE chat
2. 🤖 Bot processes the message
  - Cleans and matches keywords using RegEx
  - Searches stock in Google Sheets
3. 📦 Bot replies with stock info
  - makefile : 📦 **iPhone 13** จำนวนคงเหลือ: 10
  - ❌ If no match found: 😞 ไม่พบสินค้าที่คุณค้นหา ลองพิมพ์ชื่อหรือรุ่นให้ชัดเจน เช่น 'iPhone 13'

From typing to answer — all within 3 seconds.



# Future Improvements

The goal is not just to check stock — but to evolve this bot into a smart business assistant.

In the future, it can connect with real databases (MySQL, Firebase, AWS), support multi-user environments, and integrate AI or OpenAI API to understand user intent, recommend products, or summarize insights.

This intelligence can go beyond LINE — expanding to web apps, mobile apps, or custom dashboards.

This project is just the beginning — built to grow with real business needs.

## Let's Begin!



Are you ready?

**Great things are not done by impulse, but by a series of small things brought together."**

Vincent Van Gogh



Have a great  
day.

# Thank you!