

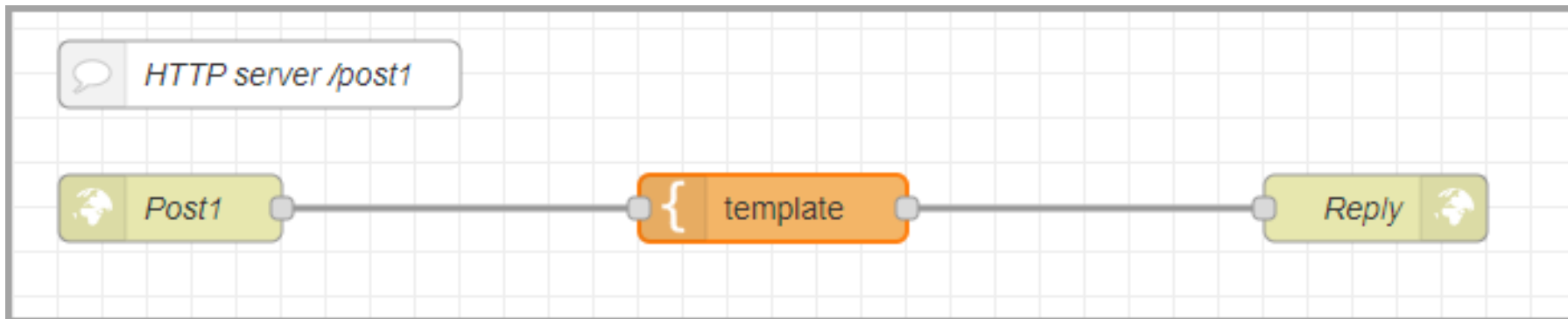
# **Production Supporting Systems in Factories**

**ระบบสนับสนุนการผลิตในโรงงานอุตสาหกรรม**

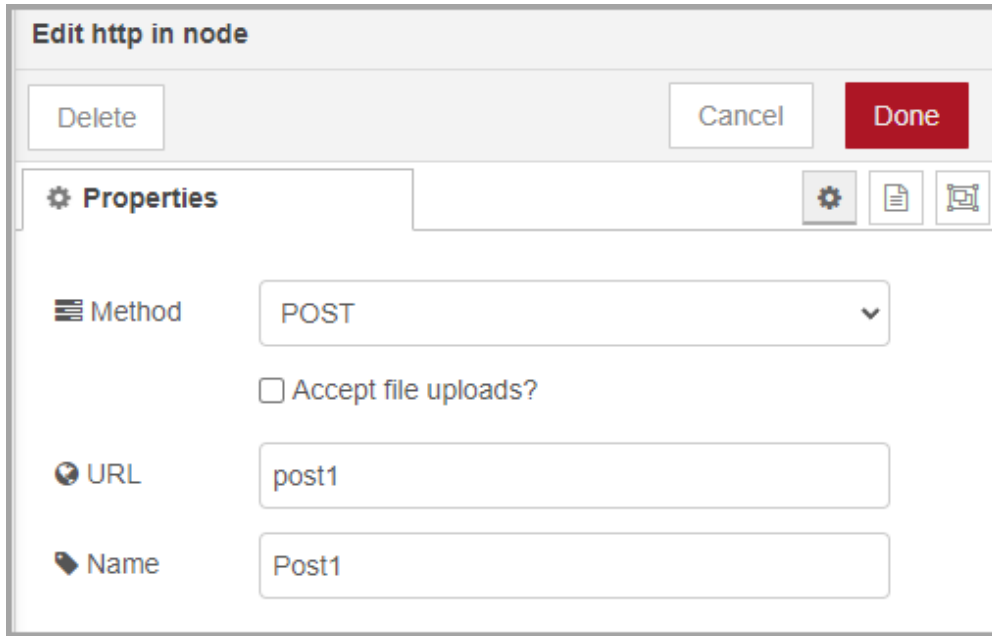
# **Module 2-1: HTTP POST Server**

# Server listening to **POST** requests

- Create a server that receives **POST** requests.
  - Flow



- http in node



The screenshot shows a dialog box titled "Edit http in node". At the top, there are three buttons: "Delete", "Cancel", and "Done". Below the buttons is a tabbed interface with a "Properties" tab selected. The "Properties" tab contains the following fields:

- Method:** A dropdown menu currently showing "POST".
- Accept file uploads?:** An unchecked checkbox.
- URL:** A text input field containing "post1".
- Name:** A text input field containing "Post1".

On the right side of the "Properties" tab, there are three icons: a gear (settings), a document (file), and a monitor (preview).

- Send the transformed message back.
- Try sending the post requests to your friends public address.

- **template** node

**Edit template node**

Delete

Cancel

Done

**Properties**

Name

Property

▼ msg. payload

Template

Syntax Highlight: 

mustache

1

I got your message: `{{payload}}` !

- http response node

**Edit http response node**

Delete Cancel Done

⚙️ **Properties** ⚙️ 📄 🔄

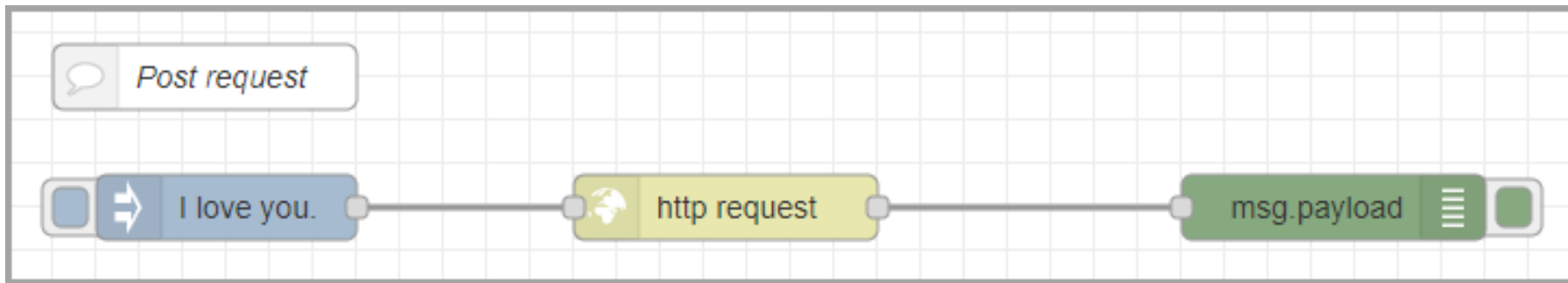
🏷️ Name Reply

← Status code msg.statusCode

☰ Headers

**Send POST request from node-red**

- Create a **post** request
  - Flow





- inject node

**Edit inject node**

Delete Cancel Done

⚙ Properties

🏷 Name

≡ msg. payload = ▼ a<sub>z</sub> I love you. ✕

≡ msg. topic = ▼ a<sub>z</sub> ✕

≡ msg. url = ▼ a<sub>z</sub> http://localhost:1880/post1 ✕

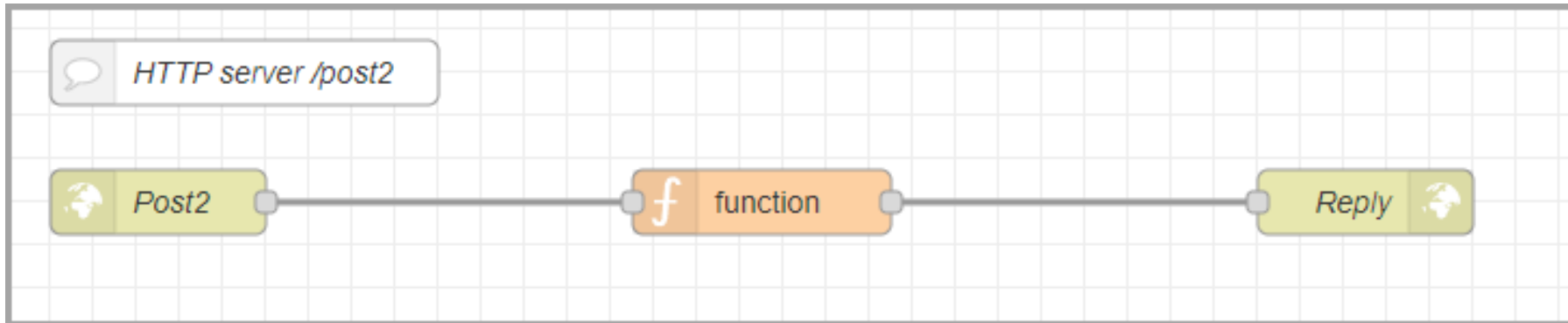
**Send POST request from another program**

# Software

- Postman Desktop
- Chrome
  - Advancd REST Client
- Firefox
  - RESTClient

# **Serving dynamic content**

- Create another url that response with dynamic content.
  - Flow



- `http in node`
  - `url = post2`

- function node



(code on the next page)

```
const message = msg.payload;  
const date = new Date();  
const time = date.toLocaleTimeString();  
  
msg.payload = `I got your message "${message}" at ${time} !`;  
return msg;
```

- Try send in a post message to `.../post2`.
- Also try sending a post message to your friend's public address.



# **Class Attendance**

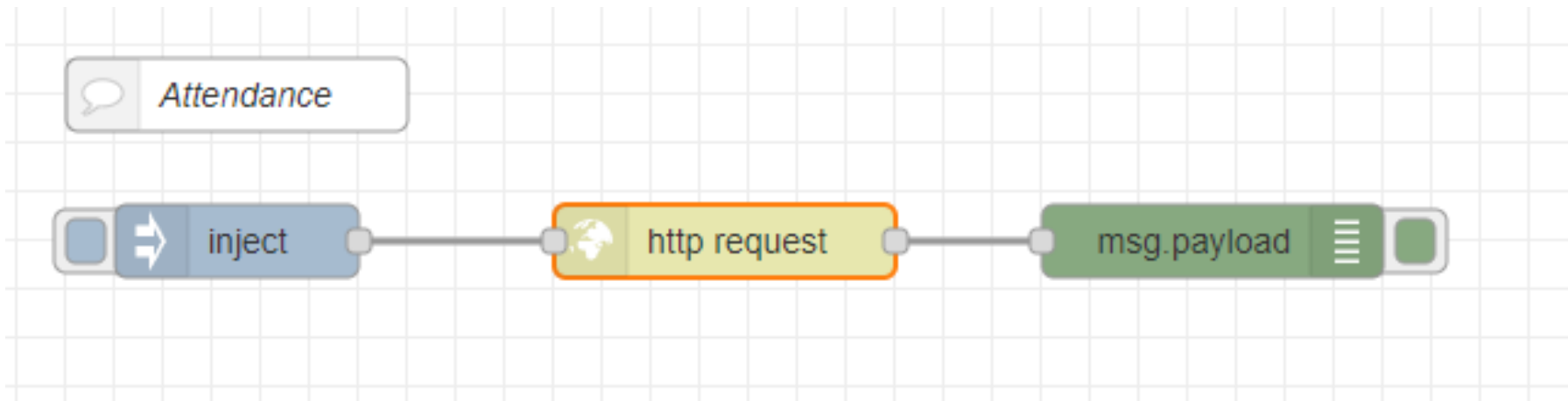
**การทำเรื่องง่ายๆให้มันยาก**

# วิธีการเช็คชื่อ

- Send `Post` request to <https://materials-line.herokuapp.com/prodsup>
- Payload
  - `cmu_id`: your 9-digit student id
  - `code`: 4-character code from the screen (ไม่เอา `CODE:` )

```
{  
  "cmu_id": "111222333",  
  "code": "xxxx"  
}
```

- Flow



- inject node
  - msg.payload

Edit inject node > **JSON editor**

Cancel Done

Edit JSON Visual editor

format JSON

```
1 {  
2   "cmu_id": "111222333",  
3   "code": "xxxx"  
4 }
```

- http request node

**Edit http request node**

Delete

Cancel

Done

⚙ Properties

⚙ 📄 🖨

☰ Method

POST

▼

🌐 URL

https://materials-line.herokuapp.com/prodsup

☐ Enable secure (SSL/TLS) connection

☐ Use authentication

☐ Enable connection keep-alive

☐ Use proxy

☐ Only send non-2xx responses to Catch node

← Return

a UTF-8 string

▼

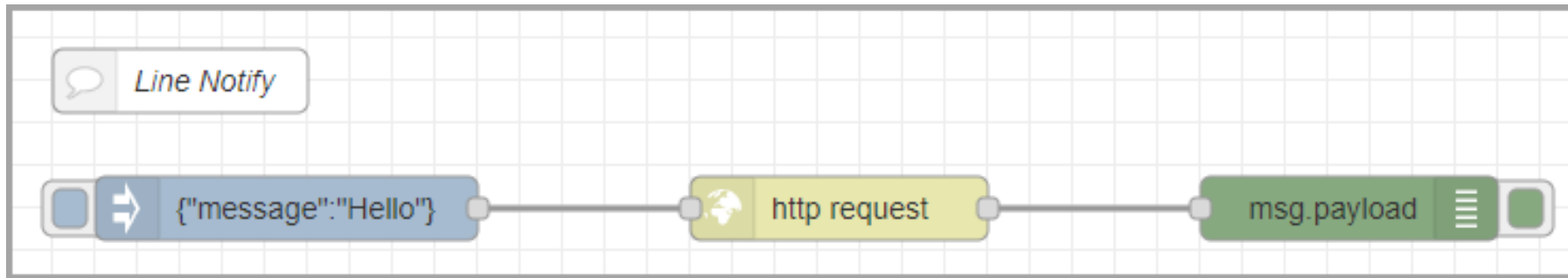
🔖 Name

Name

# **Module 2-2: Line Notify**

- ສ້າງກຸ່ມ LINE ກາຍໃນ Group
- ໄປທີ່ <https://notify-bot.line.me/en/>
  - Login (need to verify number on smart phone)
  - Go to My page
  - Click Generate token
  - Enter Token Name and select a chat room.
  - Copy the token and store it somewhere.

- Let send a line notification through Node-Red
  - Flow





- inject node

**Edit inject node**

Delete Cancel Done

**JSON** **Edit**

⚙ Properties

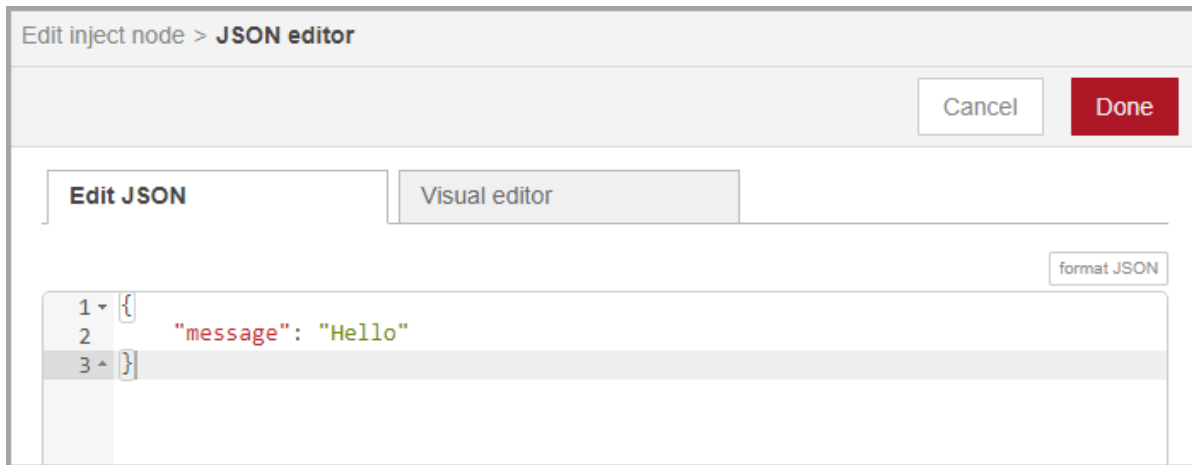
📌 Name Name

msg. payload = {} {"message":"Hello"} ... x

msg. headers = {} {"Content-Type":"application/x-www-..."} ... x

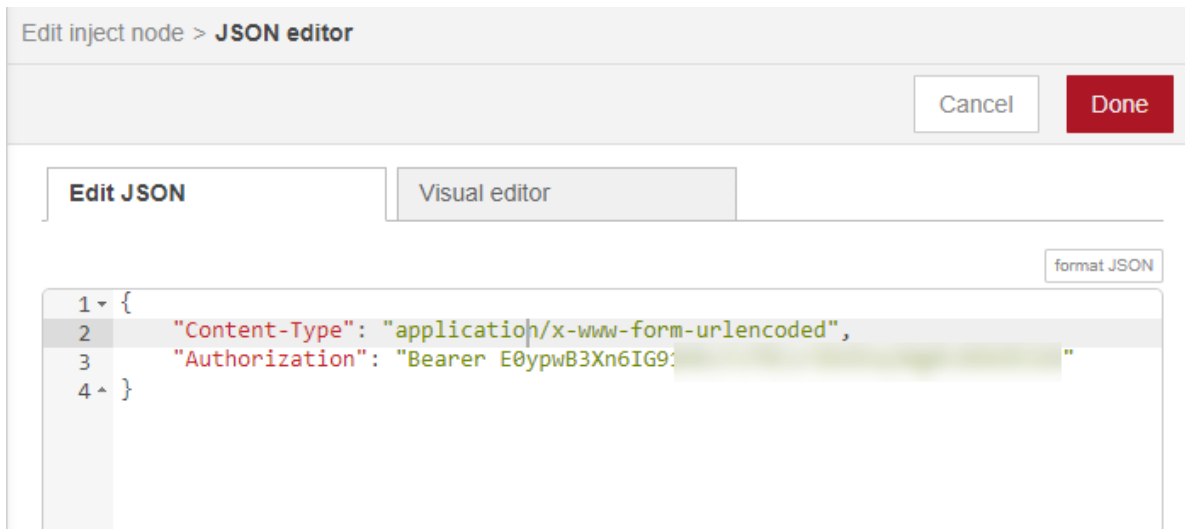
- Set `msg.payload` to (JSON)

```
{  
  "message": "Hello"  
}
```



- Set `msg.headers` to (JSON)

```
{  
  "Content-Type": "application/x-www-form-urlencoded",  
  "Authorization": "Bearer <<YOUR LINE TOKEN>>"  
}
```



- `http request node`
  - **Method:** `POST`
  - **URL:** `https://notify-api.line.me/api/notify`

Edit http request node

Delete

Cancel

Done

⚙️ Properties

⚙️

📄

🔗

☰ Method

POST

▼

🌐 URL

https://notify-api.line.me/api/notify

☐ Enable secure (SSL/TLS) connection

☐ Use authentication

☐ Enable connection keep-alive

☐ Use proxy

☐ Only send non-2xx responses to Catch node

↩️ Return

a UTF-8 string

▼

🔖 Name

Name

- Add `debug` node to see the output.
  - You can inspect the error.
- Try injecting to see if the notification.

## Extra

- Make a server that send the message to `Line`.
  - The message comes from the `POST` request.