

# System 1: LinkedIn Outreach Assistant

Sapargul Ordobaeva

## 1 Objective

The purpose of System 1 is to automate LinkedIn lead generation and create personalized connection messages based on an audience description provided by the user. This system is designed to be triggered via WhatsApp, extract audience information, generate mock AI output, request user confirmation before saving leads, store the results in a Google Sheet, and notify the user upon completion.

## 2 Workflow Architecture

The workflow consists of the following nodes in n8n:

1. **WhatsApp Trigger:** Receives the user command in the form of `/outreach [audience]` and triggers the workflow.
2. **Extract Audience (Set Node):** Extracts the audience description from the WhatsApp message by removing the command.
3. **Mock AI Output (Set Node):** Simulates AI-generated leads and personalized LinkedIn messages. Hard-coded due to API quota limitations.
4. **Simulated Confirmation (Set Node):** Simulates user confirmation for saving leads. Value is set to true for testing.
5. **User Confirmation (IF Node):** Checks if the user confirmed the action. True → save leads, False → stop and send cancellation message.
6. **Google Sheets (Append Row Node):** Saves data to a Google Sheet with columns: Date, Audience, Lead 1, Lead 2, Lead 3, Message.
7. **WhatsApp Response (Webhook Response Node):** Sends confirmation message back to the user.

### 3 Node Details and Configuration

#### WhatsApp Trigger

HTTP POST Webhook node with path `whatsapp-outreach`. Example input JSON for testing:

```
{  
  "from": "+123456789",  
  "message": "/outreach CEO marketing agencies USA"  
}
```

#### Extract Audience

Set node with expression:

```
{$json["message"].replace("/outreach","").trim()}
```

#### Mock AI Output

Set node with field `ai_output` containing:

```
Lead search description: {$json["audience"]}
```

- 1) Jan Kowalski, CEO, Creative Agency X
- 2) Anna Nowak, CEO, Marketing Agency Y
- 3) Piotr Zieliński, CEO, Design Studio Z

Personalized message:

Cześć [Name], chciałbym Cię zaprosić do sieci na LinkedIn...

#### Simulated Confirmation

Set node with field `confirmed = true` (for testing purposes).

#### User Confirmation (IF Node)

- True → Save Leads
- False → WhatsApp Response ("Operation cancelled")

## Google Sheets Mapping

- Date → *now*
- Audience → *json["audience"]*
- Lead 1 → Jan Kowalski, CEO, Creative Agency X
- Lead 2 → Anna Nowak, CEO, Marketing Agency Y
- Lead 3 → Piotr Zieliński, CEO, Design Studio Z
- Message → "Cześć [Name], chciałbym Cie zaprosić do sieci na LinkedIn..."

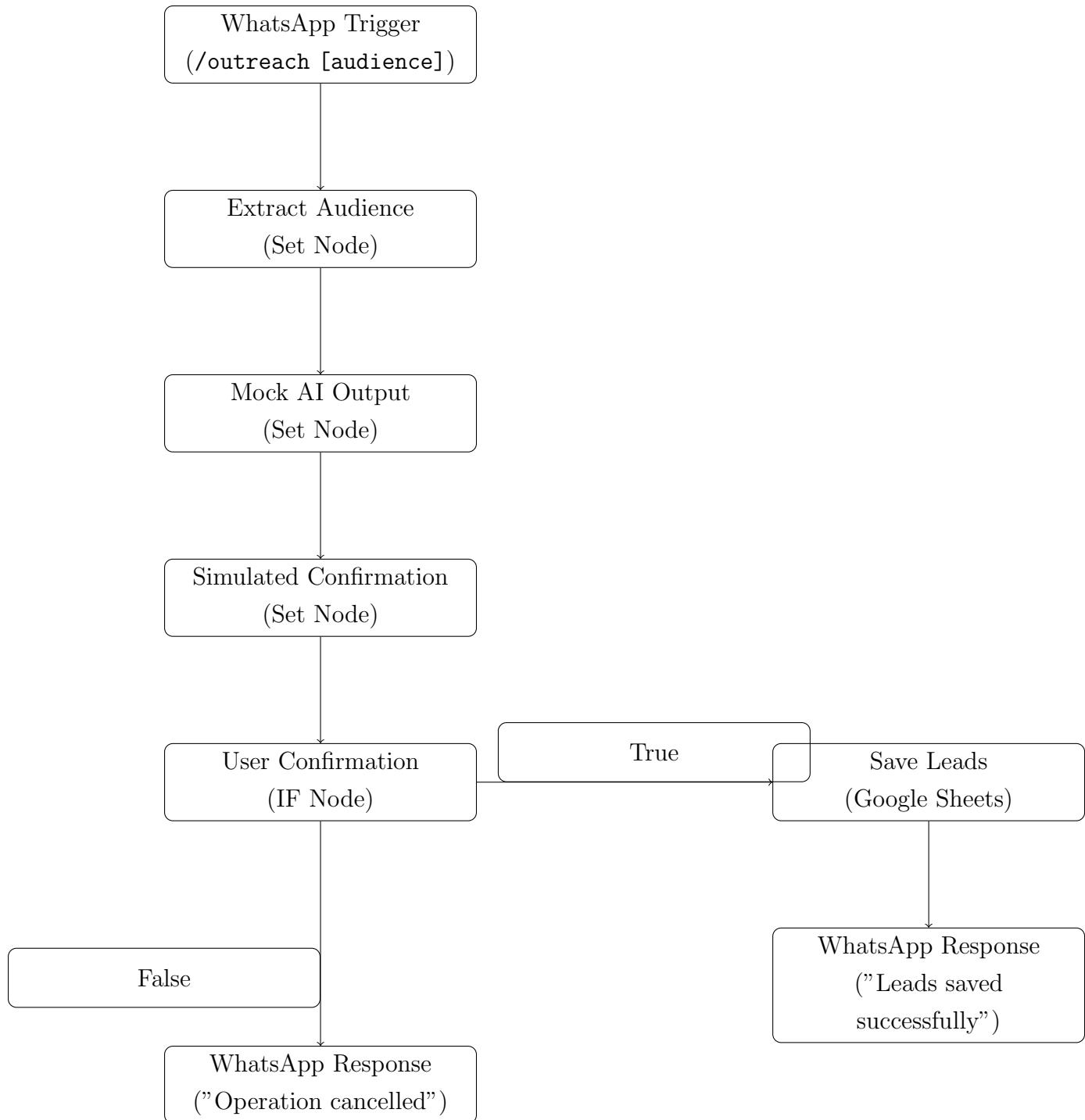
## WhatsApp Response Messages

- Success: "Lead(s) generated and saved successfully! → Check your Google Sheet for details."
- Cancelled: "Operation cancelled"

## 4 Testing and Verification

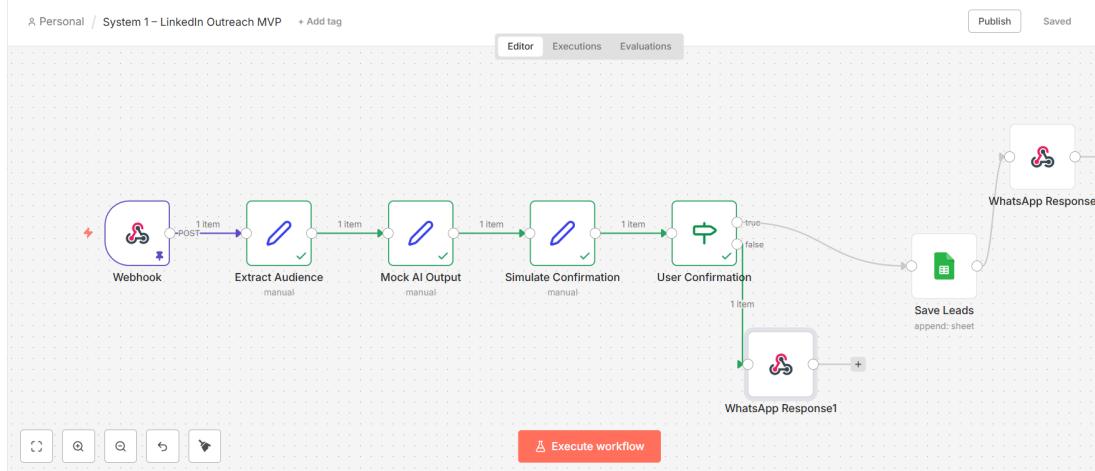
1. Simulate WhatsApp input using the Webhook node.
2. Verify that Extract Audience node parses the audience correctly.
3. Confirm Mock AI Output generates example leads and messages.
4. Test confirmation logic: True → data saved, False → workflow stops.
5. Check that new rows appear in Google Sheet with columns: Date, Audience, Lead 1, Lead 2, Lead 3, Message.
6. Ensure WhatsApp Response messages are sent for success and cancellation scenarios.

## 5 Workflow Diagram



## 6 Screenshots

### 1. n8n Workflow Screenshot:



### 2. Google Sheet Result:

The screenshot shows a Google Sheet titled 'LinkedIn Leads'. The sheet has six columns labeled A through F. Column A is 'Date', column B is 'Audience', column C is 'Lead 1', column D is 'Lead 2', column E is 'Lead 3', and column F is 'Message'. Row 1 contains the column headers. Row 2 contains data: 'Date' ({{Show}}), 'Audience' ({{\$json["audience"]}}), 'Lead 1' (Jan Kowalski, CEO, Creative Agency X), 'Lead 2' (Anna Nowak, CEO, Marketing Agency Y), 'Lead 3' (Piotr Zieliński, CEO, Design Studio Z), and 'Message' (Cześć [Name], chciałbym Cię zaprosić do sieci na LinkedIn...). Rows 3 through 13 are empty.

A1	B	C	D	E	F
1	Date	Audience	Lead 1	Lead 2	Lead 3
2	{{Show}}	{{\$json["audience"]}}	Jan Kowalski, CEO, Creative Agency X	Anna Nowak, CEO, Marketing Agency Y	Piotr Zieliński, CEO, Design Studio Z
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					

The first screenshot shows the n8n workflow with all nodes connected. The second screenshot shows a Google Sheet with appended lead data.