1 System 2: Content Creation AI Assistant

1.1 Objective

The objective of System 2 is to assist users in creating professional social media content for platforms such as LinkedIn and Facebook. The system generates AI-based post text, simulates image generation, stores results in Google Sheets, and sends the final content back to the user via WhatsApp. The workflow is conversational and optimized for future integration with real AI services.

1.2 Workflow Architecture

The workflow is implemented in n8n and consists of the following nodes:

1. **WhatsApp Trigger:** Receives user messages such as "Create a LinkedIn post about AI in healthcare".
2. **Extract Topic (Set Node):** Extracts the topic or task description from the WhatsApp message.
3. **Mock AI Content Generator (Set Node):** Simulates AI-generated social media post text based on the topic.
4. **Mock Image Generator (Set Node):** Simulates image generation by creating a placeholder image URL.
5. **Google Sheets (Append Row Node):** Saves generated content into Google Sheets.
6. **WhatsApp Response (Webhook Response Node):** Sends the generated post text and image link back to the user.

1.3 Node Details and Configuration

- **WhatsApp Trigger:** HTTP POST Webhook node used to simulate WhatsApp input. Example input:

```
{
  "from": "+123456789",
  "message": "Create a LinkedIn post about AI in healthcare"
}
```

- **Extract Topic:** Set node with the following expression:

  ```
  {{$json["message"]}}
  ```

- **Mock AI Content Generator:** Set node generating example content:

  ```
  post_text =
  "Artificial Intelligence is transforming healthcare by improving
  diagnostics, patient monitoring, and clinical decision-making.
  Organizations that adopt AI gain efficiency and accuracy."

  topic =
  {{$json["message"]}}
  ```

- **Mock Image Generator:** Set node simulating image generation:

  ```
  image_url =
  "https://via.placeholder.com/1024x1024.png?text=AI+Healthcare"
  ```

- **Google Sheets Append Row:** Data is saved with the following column mapping:
  - Date $\rightarrow$ *now*
  - `Platform` $\rightarrow$ `LinkedIn`
  - `Topic` $\rightarrow$ $json[\text{"}topic\text{"}]$
  - `Post Text` $\rightarrow$ $json[\text{"}post_text\text{"}]$
  - `Image URL` $\rightarrow$ $json[\text{"}image_url\text{"}]$
  - `Sources` $\rightarrow$ `Mock AI content`

- **WhatsApp Response:** Sends the generated content back to the user:
  - Post text
  - Image URL
  - Confirmation message

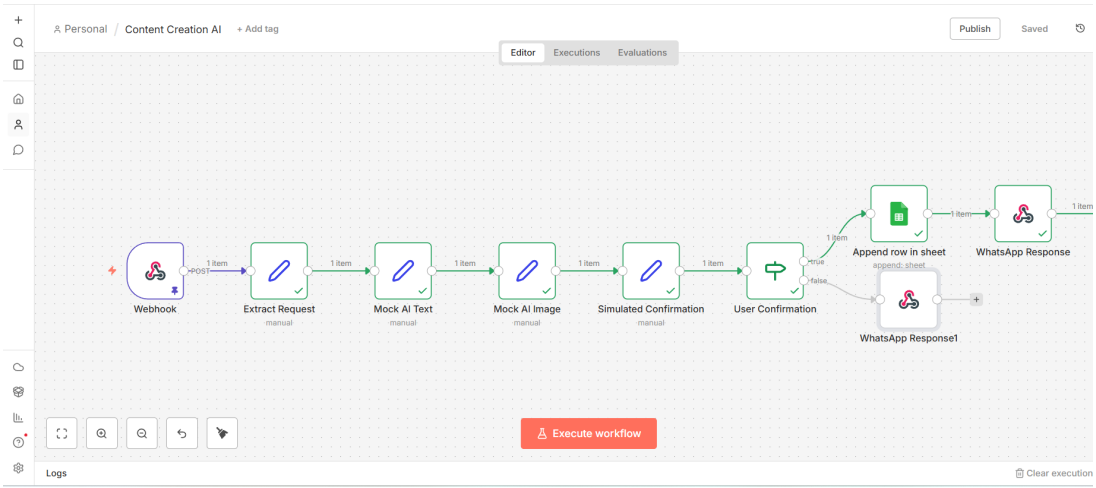
1.4 Testing and Verification

The system was tested using the following steps:

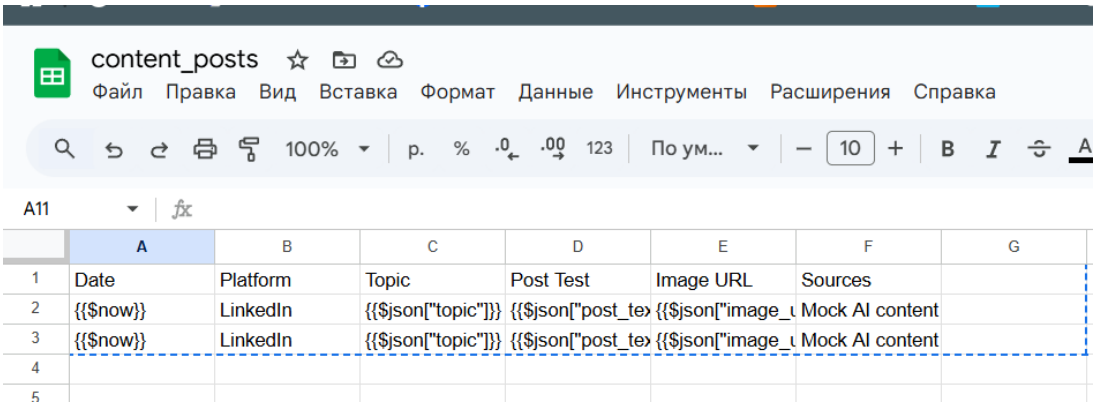
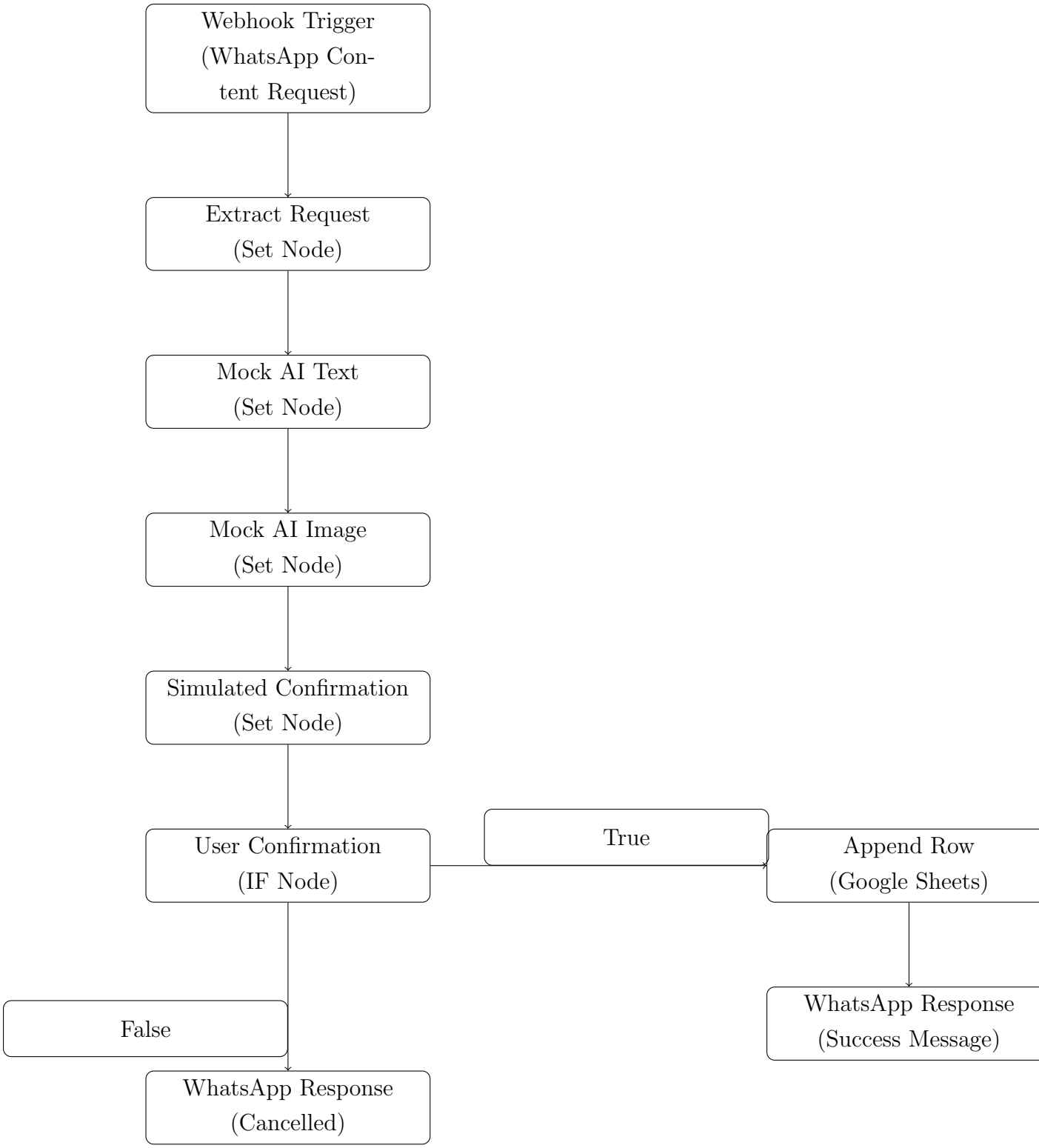
1. WhatsApp input was simulated via the Webhook Trigger.
2. Topic extraction was verified in the Set node.
3. Mock AI content and image URL were generated successfully.
4. Data was appended correctly to Google Sheets.
5. The generated content was returned to the user via WhatsApp.

1.5 Screenshots

1. n8n Workflow Screenshot



2. Google Sheets Result



1.6 Workflow Diagram