

Let's now build your **LLaMA 3-powered WhatsApp chatbot** using the **Twilio WhatsApp API** and **n8n**.

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## What This Will Do

1. User sends a WhatsApp message
  2. Twilio forwards the message to your **n8n webhook**
  3. n8n uses **Ollama (LLaMA 3)** to generate a reply
  4. n8n sends the reply back to the user via Twilio's API
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## Required Setup

### You Need:

- [Ollama](#) installed and running `llama3`
  - n8n running locally or on server
  - Twilio account with WhatsApp approved and verified
  - A Twilio **phone number** with WhatsApp sandbox or production access
  - Your **Twilio SID, Auth Token, and WhatsApp number**
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## Setup Twilio Sandbox

1. Go to your Twilio Console → Messaging → Try it Out
2. Join the sandbox by sending the given code to the WhatsApp number
3. Set the webhook URL to:

`http://<your-n8n-host>/webhook/whatsapp`

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1. A **webhook** receiving WhatsApp messages from Twilio.
  2. A **LLaMA 3 model** running locally via the `ollama` API.
  3. A **Twilio API** to reply back to the original WhatsApp user.
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## What this workflow does (step-by-step):

## 1. Webhook - WhatsApp Input

- Waits for a POST request at `/webhook/whatsapp`.
- Extracts the message (Body) and sender (From).

## 2. Ask LLaMA 3

- Sends a POST request to your local Ollama instance (e.g., `localhost:11434`).
- The prompt is set to the incoming message body.
- Response is expected as JSON.

## 3. Prepare Twilio Reply

- Parses the response from LLaMA.
- Creates a new JSON payload: `{ to: ..., body: ... }`.

## 4. Send via Twilio

- Sends the LLaMA-generated message back to the user using Twilio's WhatsApp API.

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### ❑ To get this working:

#### 1. Start Ollama with LLaMA 3

Make sure you're running the LLaMA 3 model locally:

```
ollama run llama3
```

#### 2. Set Up Twilio for WhatsApp

- Enable WhatsApp in your Twilio account
- Get your:
  - TWILIO\_SID
  - TWILIO\_AUTH\_TOKEN
  - WhatsApp sender number (`whatsapp:+...`)
- Create HTTP Basic Auth credentials in n8n named Twilio API:
  - **Username:** TWILIO\_SID
  - **Password:** TWILIO\_AUTH\_TOKEN

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#### 3. ☑ Expose n8n Webhook URL

Use **ngrok** or similar to expose localhost:

```
npx ngrok http 5678
```

Then update your Twilio webhook URL to:

`https://<your-ngrok-id>.ngrok.io/webhook/whatsapp`

You can do this in your Twilio Console under WhatsApp sandbox settings.

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#### 4. [🔗](#) *Activate the Workflow*

Make sure the workflow is **active** in the n8n editor, or run it manually to test.

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#### ☐ **Testing**

Send a message to your Twilio WhatsApp number:

"Hi, who are you?"

You should get a reply generated by your local LLaMA 3 model.

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**Import following twilio.json file :-**

```
{
  "name": "WhatsApp LLaMA 3 Chatbot (Twilio)",
  "nodes": [
    {
      "parameters": {
        "path": "whatsapp",
        "method": "POST",
        "responseMode": "lastNode"
      },
      "id": "1",
      "name": "Webhook - WhatsApp Input",
      "type": "n8n-nodes-base.webhook",
      "typeVersion": 1,
      "position": [200, 300]
    },
    {
      "parameters": {
        "requestMethod": "POST",
        "url": "http://localhost:11434/api/generate",
        "jsonParameters": true,
        "options": {},
        "bodyParametersJson": "={\n  \"model\": \"llama3\",\n  \"prompt\": \"{{ $json[\"Body\"] }}\", \n  \"stream\": false\n}"
      }
    }
  ]
}
```

```

    },
    "id": "2",
    "name": "Ask LLaMA 3",
    "type": "n8n-nodes-base.httpRequest",
    "typeVersion": 2,
    "position": [400, 300]
  },
  {
    "parameters": {
      "functionCode": "const res = JSON.parse(items[0].json.body);\nreturn [{\n  json: {\n    to:\n$json[\"From\"],\n    body: res.response.trim()\n  } }];"
    },
    "id": "3",
    "name": "Prepare Twilio Reply",
    "type": "n8n-nodes-base.function",
    "typeVersion": 1,
    "position": [600, 300]
  },
  {
    "parameters": {
      "authentication": "predefinedCredentialType",
      "url": "https://api.twilio.com/2010-04-01/Accounts={{ $env.TWILIO_SID }}/Messages.json",
      "options": {},
      "bodyParameters": {
        "body": "{{ $json[\"body\"] }}",
        "from": "whatsapp:{{ $env.TWILIO_NUMBER }}",
        "to": "{{ $json[\"to\"] }}"
      }
    },
    "id": "4",
    "name": "Send via Twilio",
    "type": "n8n-nodes-base.httpRequest",
    "typeVersion": 2,
    "position": [800, 300],
    "credentials": {
      "httpBasicAuth": {
        "id": "twilio-auth",
        "name": "Twilio API"
      }
    }
  }
],
"connections": {
  "Webhook - WhatsApp Input": {
    "main": [

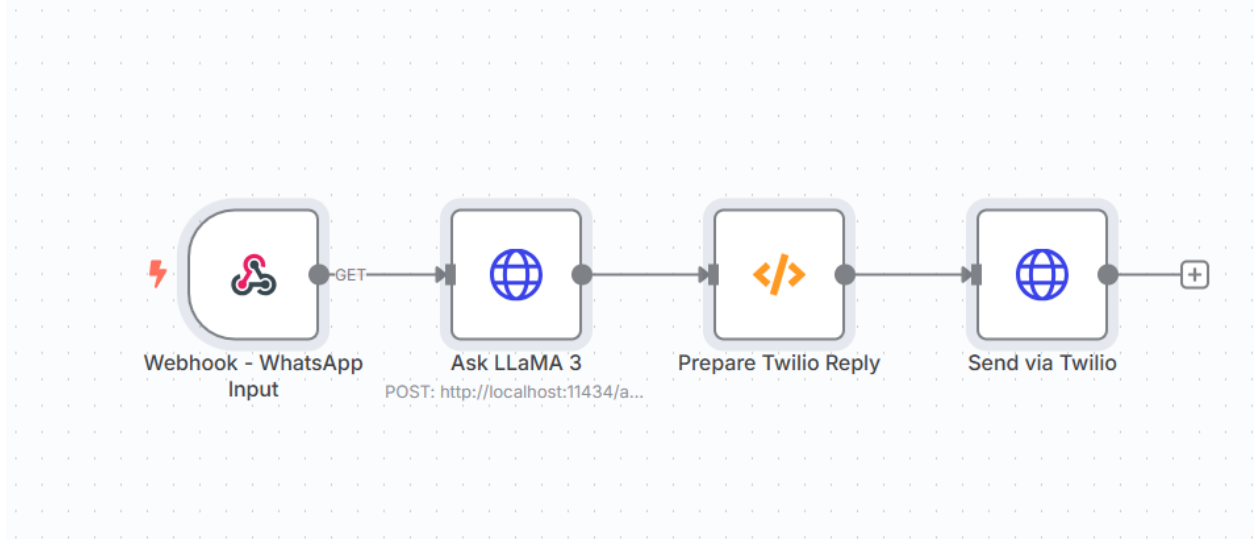
```

```

    [
      {
        "node": "Ask LLaMA 3",
        "type": "main",
        "index": 0
      }
    ]
  ],
  "Ask LLaMA 3": {
    "main": [
      [
        {
          "node": "Prepare Twilio Reply",
          "type": "main",
          "index": 0
        }
      ]
    ]
  },
  "Prepare Twilio Reply": {
    "main": [
      [
        {
          "node": "Send via Twilio",
          "type": "main",
          "index": 0
        }
      ]
    ]
  },
  "active": true,
  "settings": {},
  "version": 1
}

```

After importing you will see following workflow :-



## Final Notes:

- Set your environment variables in `n8n` or `.env` file:

```
TWILIO_SID=your_twilio_sid  
TWILIO_NUMBER=whatsapp:+14155238886  
TWILIO_AUTH_TOKEN=your_auth_token
```

- Make sure you created **credentials** in `n8n` named `Twilio API` under "HTTP Basic Auth"