



Custom AI Cake Creator

Build Viral, Personalized Birthday Content in 30 Minutes

Transform generic birthday wishes into personalized experiences using AI-powered automation. A complete N8N workflow guide for developers.

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The Personalization Opportunity

Why It Works

Generic birthday messages get lost in the noise. Personalized cake images with custom names create memorable moments that people want to share.

This workflow generates unique, AI-created cake images featuring any name — perfect for friends sending heartfelt wishes or businesses creating targeted marketing campaigns.

The viral potential is significant: personalization drives engagement, and visual content spreads faster than text.



HAPPY
誕生日

Target Markets & Monetization



Personal Use

Friends and family sending unique, memorable birthday wishes that stand out from generic messages



Business Marketing

Restaurants, bakeries, and retail stores using personalized images for customer birthday campaigns



Revenue Strategy

Monetize through advertising similar to content blogs — high traffic volume makes this viable

Workflow Architecture Overview

01

Form Input Capture

User submits name via web form

02

AI Prompt Generation

Create detailed image instructions

03

Image Generation API

Replicate processes the request

04

Binary Retrieval

Fetch the generated image file

05

Frontend Display

Show and enable download

The entire pipeline runs through N8N, with a Lovable.dev frontend handling user interaction. Total setup time: approximately 30 minutes.

Step 1-2: Input & AI Agent Configuration

Form Trigger Node

Configure a simple form trigger in N8N to capture user input. The form should include a single text field for the name.

- Node type: Form Trigger
- Trigger event: On form submission
- Field: Text input for name

AI Agent Configuration

This is the most critical step. The AI agent generates the detailed prompt that will create your cake image.

Setup Instructions:

- Use OpenAI's GPT-4.1 Nano or similar model
- Prompt: "Act as an expert in creating AI cake images. Randomize cake design and place the name {{name}} on the cake"
- Debug tip: Ensure output is plain text with no quotes around names

Step 3-4: Image Generation & Retrieval



1

HTTP Request to Replicate

Send the AI-generated prompt to Replicate's flux-schenll model using their API.

Import the cURL command directly into N8N's HTTP Request node.

- Service: Replicate.com
- Authorization: API token required
- Note: Credit card needed for service



2

Binary Image Fetch

Use a second HTTP Request node to retrieve the actual image from the URL returned by Replicate.

- Set Content-Type header to image/webp
- Configure to handle binary data
- Output: Downloadable image file



Step 5-6: Webhook Integration

1

Webhook Configuration

Wrap your workflow in a Webhook node to create the bridge between your frontend and N8N backend.

- Method: POST
- Path: Custom endpoint URL
- Purpose: Receive frontend requests

2

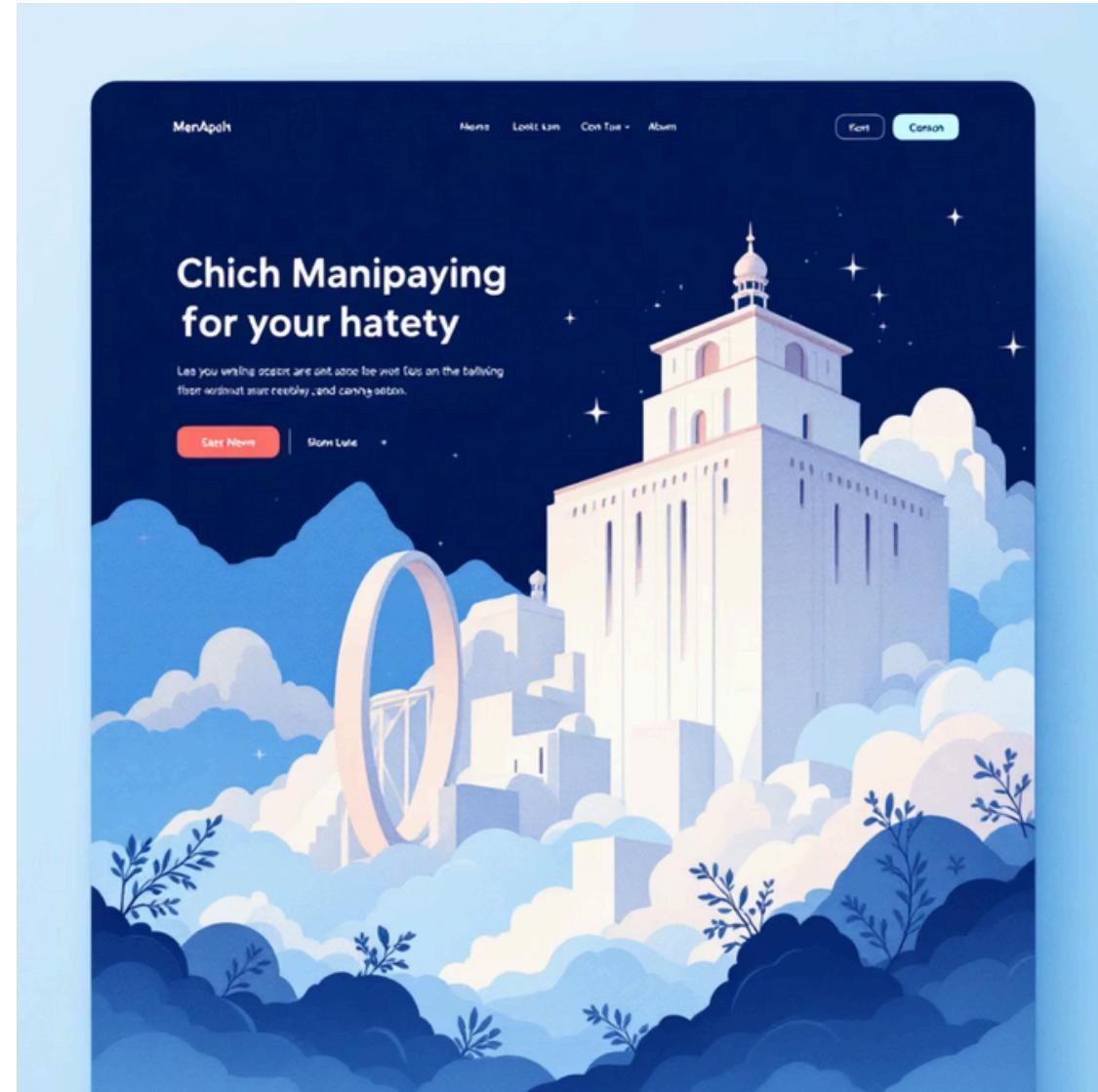
Response Configuration

Configure the "Respond to Webhook" node as your final step to return the generated image.

- Response type: Binary file
- Data source: Image from Step 4
- Format: Direct binary transfer

 **Critical Reminder:** Set your N8N workflow to **Active** and use the **Production URL** when connecting to your live frontend application.

Frontend Implementation with Lovable.dev



Building the User Interface

Lovable.dev enables rapid frontend development with a single prompt containing your N8N webhook URL and UI specifications.

Required Components:

- Text input field for name entry
- Loading indicator during generation
- Image display area
- Download button for the final result

The connection is straightforward: send user input to your N8N production webhook URL, then display the returned binary image with download functionality.

Key Success Factors

Prompt Engineering Precision

The AI agent prompt is your most critical component. Test thoroughly and ensure output formatting is exact — no quotes, clean text only.

API Authentication Setup

Secure your Replicate API token and ensure your credit card is connected. API failures are often authentication issues.

Production Configuration

Always use production URLs and set workflows to Active before deployment. Test the complete end-to-end flow multiple times.

User Experience Polish

Add clear loading states, error handling, and smooth download functionality. Small UX details drive viral sharing.

Success Checklist

Planning Strategy



Goal setting, was a orginsing adysu your soalver all your suness.



Research Planning and eny le sue part to conoucole ween hake.



Execution ouis a hor a where sticking in turters and bs your best reore there.



Execution or mew lies tave cusing mont very simear learning oot of our, stayng you to your er advicing ores hat riecy.

Connect & Continue Learning



Join the Journey

I'm sharing my AI learning journey daily and would love to connect with fellow developers building automated content pipelines.

Follow along on:

- 📸 [Instagram](#) — Daily AI updates
- 💻 [GitHub](#) — Code repositories
- 🌐 [LinkedIn](#) — Professional network
- 🐦 [X \(Twitter\)](#) — Quick thoughts

Questions? Reach out anytime. Let's build something amazing together! 🚀