



Weavy AI - Visual AI Workflow Builder

WEAVY AI – VISUAL AI WORKFLOW BUILDER

Present by

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IDEA

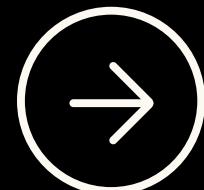
Weavy AI is a visual AI workflow builder that allows users to create and run AI pipelines using a drag-and-drop interface. Users can upload images or videos, process them through different nodes, and generate AI-based marketing content automatically. The platform simplifies complex AI operations into an easy, no-code experience.

- Visual drag-and-drop workflow canvas
- Supports image, video, and text processing
- AI content generation using Gemini
- Secure user authentication
- Workflow saving and history





TECH STACK



Frontend

- Next.js (React)
- Tailwind CSS
- React Flow (workflow builder UI)

Backend

- Next.js API Routes (server-side logic)

Database

- PostgreSQL (Supabase)

ORM

- Prisma

Authentication

- Clerk

AI Integration

- Google Gemini API

Media Handling

- Image upload & processing
- Video frame extraction



What I Did (Frontend & Features)

UI & WORKFLOW BUILDER

- Built drag-and-drop workflow canvas using React Flow
- Created nodes: Upload Image, Upload Video, Crop, Extract Frame, Run LLM
- Designed responsive UI with Tailwind CSS
- Added workflow controls: Run, Save, Export, Import

USER EXPERIENCE

- Implemented real-time preview for images and video frames
- Connected nodes to pass data between steps
- Handled loading states and error messages
- Organized layout with sidebar, canvas, and history panel

Your paragraph text





What I Did (Backend & Integrations)

BACKEND LOGIC & AI INTEGRATION

- Developed Next.js API routes for workflow execution
- Implemented video frame extraction using FFmpeg
- Managed file storage in public folders
- Connected Google Gemini API for content generation
- Added error handling for quota and failures

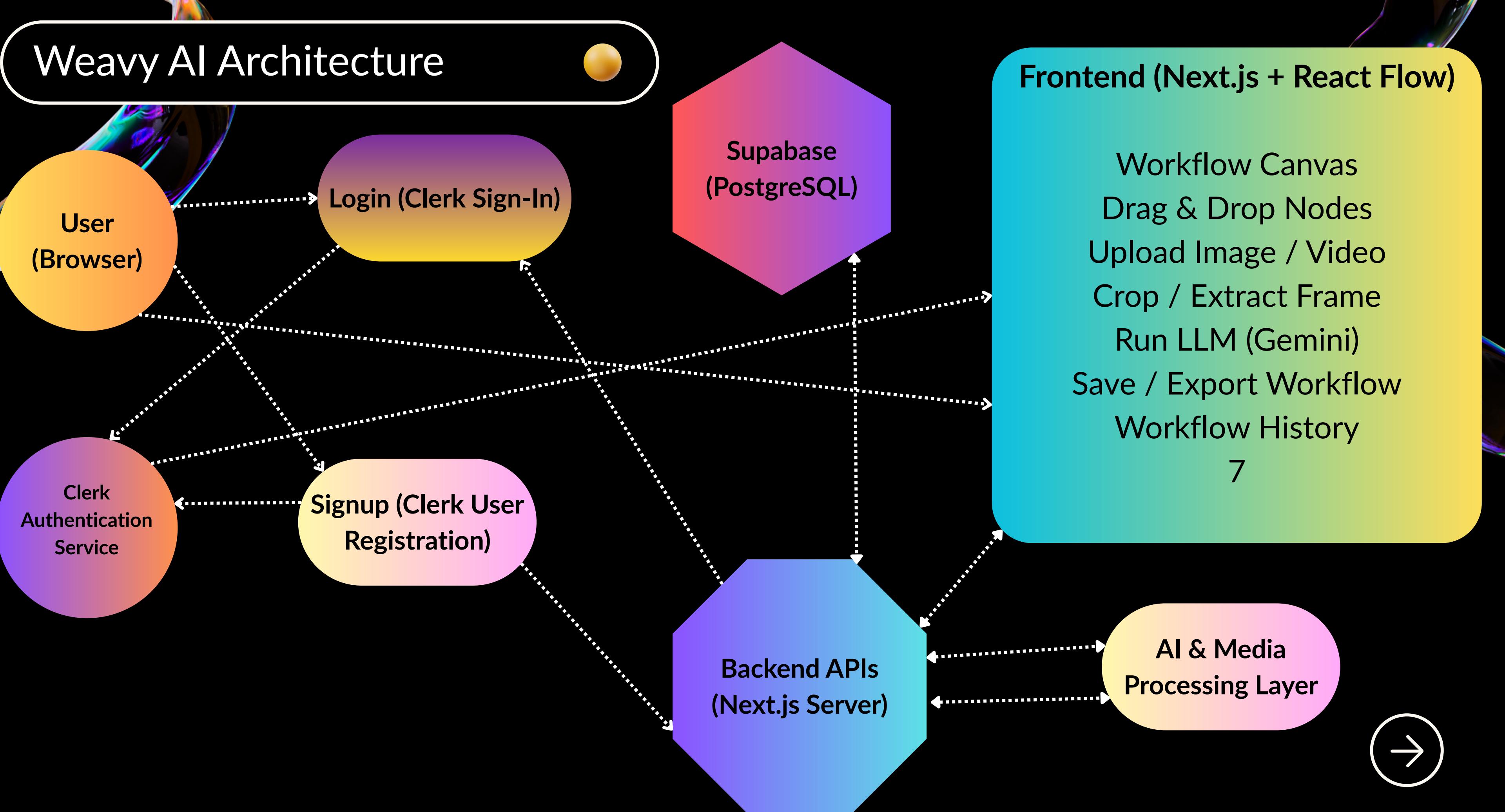


DATABASE & AUTH

- Integrated Supabase PostgreSQL using Prisma
- Stored workflows
- Implemented secure authentication using Clerk
- Added login/logout and user session handling



Weavy AI Architecture



Some screen shots from our website

The screenshot shows the Weavy AI platform's workflow editor. On the left, a sidebar titled "Node Types" lists "Text", "Upload Image", "Upload Video", "Run Any LLM", "Crop Image", and "Extract Frame from Video". The main workspace displays a workflow graph with several nodes connected by arrows. Nodes include "Image: Connected" (with coordinates X: 10, Y: 10, Width: 80, Height: 80), "Video: Connected" (Timestamp: 50%), "System Prompt" (You are a professional marketing copywriter. Generate a compelling one-paragraph product description.), "Product Details" (Product: Wireless Bluetooth Headphones. Features: Noise cancellation, 30-hour battery, foldable design.), "LLM Node #1" (Model: gemini-2.5-flash, System Prompt (Connected)), "User Message (Connected)" (Enter user message...), "Marketing System Prompt" (You are a social media manager. Create a tweet-length marketing post based on the product image and video frame.), and "LLM Node #2" (Model: gemini-2.5-flash, System Prompt (Connected)). Top navigation includes "Run Full Workflow", "Run Selected (0)", "Run Single Node", "Save", "Export", "Import", and "Light" mode. The top right shows the user "kesh Kesava" (kesava9347@gmail.com) and a "Logout" button.

Home Page

Login/Sign Up page

Welcome! Please fill in the details to get started.

Create your account

First name Optional Last name Optional

First name Last name

Email address
Enter your email address

Password
Enter your password

Continue ►

Already have an account? [Sign in](#)

Some screen shots from website

The screenshot shows a workflow editor interface with the following components:

- Node Types:** A sidebar on the left containing a search bar and a list of quick access nodes: Text, Upload Image, Upload Video, Run Any LLM, Crop Image, and Extract Frame from Video.
- Tool Buttons:** At the top right are buttons for Run Full Workflow (purple), Run Selected (1) (blue), Run Single Node (green), Save, Export, Import, and Light mode.
- Workflow Area:** The main workspace contains several nodes connected by lines:
 - A **Crop Image** node (pink border) with coordinates X%: 40, Y%: 10, Width%: 80, Height%: 80, connected to an **Untitled design.png** image node.
 - An **Upload Image** node (grey border) connected to the same image node.
 - A **System Prompt** node with the text: "You are a professional marketing copywriter. Generate a compelling one-paragraph product description." connected to an **LLM Node #1** node.
 - The **LLM Node #1** node has a dropdown for Model set to "gemini-2.5-flash" and a System Prompt (Connected).
 - An **Extract Frame** node (blue border) with a timestamp of 50% connected to a video frame node.
 - A **Upload Video** node (orange border) connected to the video frame node.
 - A **Product Details** node with the text: "Product: Wireless Bluetooth Headphones. Features: Noise cancellation, 30-hour battery, foldable design." connected to the **Extract Frame** node.
 - A **Figure** node (grey border) connected to the **Extract Frame** node.

upload image/video

Some screen shots from website

The screenshot shows a workflow editor interface with the following components:

- Node Types:** A sidebar on the left containing a search bar and a list of quick access nodes:
 - Text
 - Upload Image
 - Upload Video
 - Run Any LLM
 - Crop Image
 - Extract Frame from Video
- Workflow Area:** The main workspace where a workflow is being built. It includes:
 - A central canvas with a grid.
 - Three prominent buttons at the top: "Run Full Workflow" (purple), "Run Selected (1)" (blue), and "Run Single Node" (green).
 - Toolbars for "Save", "Export", and "Import".
 - A "Dark" mode toggle.
 - A preview window showing a video frame.
 - A "Marketing System Prompt" section with a text input field.
 - An "LLM Node #2" configuration panel with fields for "Model" (gemini-2.5-flash), "System Prompt (Connected)", "User Message (Connected)", and "Images: Connected (2)".
 - A "Run LLM" button.
 - An output panel displaying text and a small image.

Extract Frame/ LLM
Working



Some screen shots from website

After Exporting Data



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THANK YOU

for your time and attention

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