**Overview of What This System Does**

* Takes topic and audience inputs via a web form
* Researches the topic with real-time data
* Creates a professional LinkedIn post
* Generates a matching visual graphic
* Automatically posts everything to LinkedIn

**Step-by-Step Workflow Breakdown**

**Step 1: Form Trigger (On form submission)**

**What it does**: Creates a web form that captures user inputs

**Form Fields**:

* **Email**: User's email address (required)
* **Topic of Post**: What the post should be about (required)
* **Target Audience**: Who the post is aimed at (required)

**Example Input** (from the test data):

* Email: muaazuu@gmail.com
* Topic: Cricket
* Target Audience: Young Sportsmen

**Technical**: Uses webhook b109b7df-de68-4e57-8c77-1f1c47b34cac to receive form submissions

**Step 2: LinkedIn Post Generator (AI Agent)**

**What it does**: The main AI brain that creates the LinkedIn post content

**Process**:

1. Receives the topic ("Cricket") and audience ("Young Sportsmen")
2. Uses Tavily tool to research current, up-to-date information about cricket
3. Analyzes the research data
4. Crafts a professional LinkedIn post

**AI Instructions Include**:

* Start with an engaging hook
* Keep it professional and educational
* 100-300 words optimal length
* Minimal emojis (only when relevant)
* Include proper source attribution
* Add relevant hashtags
* End with a call-to-action

**Expected Output**: A complete LinkedIn post like:

🏏 The mental game in cricket is just as important as physical skills...

According to recent studies from the International Cricket Council, players who practice mindfulness techniques show 23% better performance under pressure.

For young athletes, developing mental resilience can be the difference between good and great.

Key strategies:

- Visualization before batting

- Breathing techniques between overs

- Post-game reflection routines

What mental training techniques have helped your game? Share below! 👇

#Cricket #MentalHealth #SportsPerformance #YoungAthletes

**Step 3: Tavily Research Tool**

**What it does**: Conducts real-time internet research on the topic

**API Configuration**:

* **Search Query**: Uses the "Topic of Post" (e.g., "Cricket")
* **Search Depth**: Advanced (thorough research)
* **Results**: Maximum 5 sources
* **Time Range**: Last 30 days (current information)
* **Content**: Includes detailed content chunks
* **Exclusions**: Filters out Reddit and Quora for quality

**What it provides**: Current statistics, recent studies, trends, and factual information that the AI can use to create an informed, credible post.

**Step 4: Visual Prompt Generator (AI Agent #2)**

**What it does**: Converts the LinkedIn post into a visual design prompt

**Process**:

1. Analyzes the generated LinkedIn post
2. Identifies key visual elements and themes
3. Creates a detailed prompt for image generation

**Example Transformation**:

* **LinkedIn Post**: About cricket mental training
* **Visual Prompt**: "Modern sports infographic showing a cricket player in batting stance with brain imagery overlay, representing mental focus. Clean design with cricket ball icons, performance statistics (23% improvement), minimalist color scheme with cricket greens and whites, space for text overlay"

**Design Guidelines**:

* Professional marketing-style graphics
* Modern, clean aesthetics
* Suitable for LinkedIn's professional environment
* Includes specific layout suggestions

**Step 5: DALL-E Image Generation**

**What it does**: Creates a custom image using OpenAI's DALL-E 3

**API Configuration**:

* **Model**: DALL-E 3 (highest quality)
* **Size**: 1024x1024 (square format, perfect for LinkedIn)
* **Quality**: Standard
* **Style**: Vivid (more engaging colors)
* **Format**: Base64 JSON (for easy processing)

**Output**: A unique, AI-generated image that visually represents the post content

**Step 6: File Conversion (Convert to File)**

**What it does**: Converts the base64 image data into a proper image file

**Technical Process**:

* Takes the base64 encoded image from DALL-E
* Converts it to a binary file format
* Prepares it for upload to LinkedIn

**Step 7: LinkedIn Publication (Create a post)**

**What it does**: Automatically publishes the complete post to LinkedIn

**What gets posted**:

* The AI-generated text content
* The custom AI-generated image
* All hashtags and formatting intact

**Complete Workflow Example**

**Input**:

* Topic: "Cricket"
* Audience: "Young Sportsmen"

**Step-by-step execution**:

1. **Form submitted** → Triggers the workflow
2. **Research phase** → Tavily searches for current cricket information, training techniques, statistics
3. **Content creation** → AI writes: "🏏 The mental game in cricket is just as important as physical skills... According to recent ICC studies, players practicing mindfulness show 23% better performance..."
4. **Visual design** → Second AI creates prompt: "Modern sports infographic with cricket player, brain imagery overlay, performance stats, green and white color scheme"
5. **Image generation** → DALL-E creates a professional graphic matching the description
6. **File processing** → Image converted to uploadable format
7. **Publication** → Complete post with text and image published to LinkedIn

**Key Features & Benefits**

**Automation**: Complete hands-off process after form submission **Research-Based**: Always uses current, factual information **Brand Consistent**: Professional tone and visual style **Audience-Targeted**: Content tailored to specified audience **Visual Appeal**: Custom graphics for each post **SEO Optimized**: Relevant hashtags for maximum reach

**Time Savings**: What normally takes 2-3 hours of research, writing, design, and posting is completed in under 5 minutes automatically.

This system essentially gives you a **personal LinkedIn marketing team** that works 24/7, creating professional, research-backed content with custom visuals for any topic you specify.