

Block 1: Data Collection & AI Model Training

◆ **Icons/Images:** Social media logos (Facebook, Twitter, Instagram, etc.), AI model icon

◆ **Flow:**

- 1 **Scrape** social media data 📄
- 2 **Annotate & preprocess** data 🔍
- 3 **Feature extraction** for meme templates 📊



Block 2: User Input Handling

◆ **Icons/Images:** User form icon, chatbot icon

◆ **Flow:**

- 1 User **enters structured/free-form input** 🗨️
- 2 **Extract keywords** from free text 🔑
- 3 User **Chooses** to generate textual post or memes

Block 3-A: Template Matching Algorithm

◆ **Icons/Images:** Database icon, AI model icon

◆ **Flow:**

- 1 Compare **user input** with meme dataset 📊
- 2 Match **structured data** ✅
- 3 Match **keywords** 🔍
- 4 **Score & rank** top 10 meme templates 🏆

Block 3-B: Meme Creation

◆ **Icons/Images:** Meme generator API icon, image file icon

- 1 **Generate meme text** using OpenAI API 🗨️
- 2 Apply generated text to the selected template via **Meme Generator API** 🖼️
- 3 **Create final meme image** (JPEG/PNG)

Block 4-A: AI Model Finetuning

Flow:

- 1 **Scrape social media data** 📄
- 2 **Prepare Finetuning Dataset** 📊
- 3 **Finetune AI Model** 🤖 → Train on marketing-focused text for improved **caption** and meme text generation

Block 4-B: Text Generation

◆ **Icons/Images:** ChatGPT logo, speech bubble, document icon

Flow:

- 1 **Generate textual posts or captions** using our model



Block 5: User Approval & Storage

◆ **Icons/Images:** Thumbs-up/down icons, cloud storage icon, scheduling icon

Flow:

- 1 User **reviews generated memes** 👁️
- 2 If **approved**, store meme in user's database 💾
- 3 **Next Step:** User can proceed to the Campaign Management Module to schedule & automate posting 📅🚀