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# 🎨 AI Meme & Poster Creator

# built using Streamlit + Gemini AI

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import streamlit as st

from PIL import Image, ImageDraw, ImageFont

import google.generativeai as genai

import textwrap

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# 🔑 Configure Gemini API

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genai.configure(api\_key=st.secrets["GEMINI\_API\_KEY"]

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# 🤖 Function to generate meme caption

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def generate\_caption(topic):

model = genai.GenerativeModel("gemini-1.5-flash")

prompt = f"Write a short, funny and creative meme caption about: {topic}. Keep it under 15 words."

response = model.generate\_content(prompt)

return response.text.strip()

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# 🖼️ Function to add caption on image

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def add\_caption(image, caption):

img = image.convert("RGB")

draw = ImageDraw.Draw(img)

width, height = img.size

try:

font = ImageFont.truetype("arial.ttf", size=int(height / 18))

except:

font = ImageFont.load\_default()

wrapper = textwrap.TextWrapper(width=30)

caption\_lines = wrapper.wrap(text=caption)

caption\_text = "\n".join(caption\_lines)

text\_w, text\_h = draw.textsize(caption\_text, font=font)

x = (width - text\_w) / 2

y = height - text\_h - 40

draw.rectangle(((x - 10, y - 10), (x + text\_w + 10, y + text\_h + 10)), fill="black")

draw.text((x, y), caption\_text, fill="white", font=font, align="center")

return img

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# 🌐 Streamlit UI

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st.set\_page\_config(page\_title="AI Meme & Poster Creator", page\_icon="😂", layout="centered")

st.title("😂 AI Meme & Poster Creator")

st.write("Upload an image and enter a topic — Gemini AI will generate a funny caption!")

topic = st.text\_input("👉 Enter a meme topic (e.g., exam stress, friendship, college life):")

uploaded\_file = st.file\_uploader("📸 Upload an image", type=["jpg", "png", "jpeg"])

if uploaded\_file and topic:

image = Image.open(uploaded\_file)

caption = generate\_caption(topic)

meme = add\_caption(image, caption)

st.image(meme, caption="Generated Meme", use\_container\_width=True)

st.success("✅ Caption Generated Successfully!")

st.write("\*\*AI Caption:\*\*", caption)

meme.save("generated\_meme.jpg")

with open("generated\_meme.jpg", "rb") as file:

st.download\_button("📥 Download Meme", data=file, file\_name="meme.jpg", mime="image/jpeg")

st.markdown("---")

st.caption("Created by Vishnu Priya | Powered by Streamlit + Gemini AI")