

```

import gradio as gr
import torch
from transformers import AutoTokenizer, AutoModelForCausalLM

# Load model and tokenizer
model_name = "ibm-granite/granite-3.2-2b-instruct"
tokenizer = AutoTokenizer.from_pretrained(model_name)
model = AutoModelForCausalLM.from_pretrained(
    model_name,
    torch_dtype=torch.float16 if torch.cuda.is_available() else torch.float32,
    device_map="auto" if torch.cuda.is_available() else None
)

if tokenizer.pad_token is None:
    tokenizer.pad_token = tokenizer.eos_token

def generate_response(prompt, max_length=1024):
    inputs = tokenizer(prompt, return_tensors="pt", truncation=True, max_length=512)

    if torch.cuda.is_available():
        inputs = {k: v.to(model.device) for k, v in inputs.items()}

    with torch.no_grad():
        outputs = model.generate(
            **inputs,
            max_length=max_length,
            temperature=0.7,
            do_sample=True,
            pad_token_id=tokenizer.eos_token_id
        )

    response = tokenizer.decode(outputs[0], skip_special_tokens=True)
    response = response.replace(prompt, "").strip()
    return response

def disease_prediction(symptoms):
    prompt = f"Based on the following symptoms, provide possible medical conditions: {symptoms}"
    return generate_response(prompt, max_length=1200)

def treatment_plan(condition, age, gender, medical_history):
    prompt = f"Generate personalized treatment suggestions for the following patient: {condition}, {age}, {gender}, {medical_history}"
    return generate_response(prompt, max_length=1200)

# Create Gradio interface
with gr.Blocks() as app:
    gr.Markdown("# Medical AI Assistant")
    gr.Markdown("***Disclaimer: This is for informational purposes only. Always consult a doctor for medical advice.")

    with gr.Tabs():
        with gr.TabItem("Disease Prediction"):
            with gr.Row():
                with gr.Column():
                    symptoms_input = gr.Textbox(
                        label="Enter Symptoms",
                        placeholder="e.g., fever, headache, cough, fatigue...",
                        lines=4
                    )
                with gr.Column():
                    predict_btn = gr.Button("Analyze Symptoms")

```

```

        with gr.Column():
            prediction_output = gr.Textbox(label="Possible Conditions & R

predict_btn.click(disease_prediction, inputs=symptoms_input, outputs=

with gr.TabItem("Treatment Plans"):
    with gr.Row():
        with gr.Column():
            condition_input = gr.Textbox(
                label="Medical Condition",
                placeholder="e.g., diabetes, hypertension, migraine...",
                lines=2
            )
            age_input = gr.Number(label="Age", value=30)
            gender_input = gr.Dropdown(
                choices=["Male", "Female", "Other"],
                label="Gender",
                value="Male"
            )
            history_input = gr.Textbox(
                label="Medical History",
                placeholder="Previous conditions, allergies, medications",
                lines=3
            )
            plan_btn = gr.Button("Generate Treatment Plan")

        with gr.Column():
            plan_output = gr.Textbox(label="Personalized Treatment Plan",

plan_btn.click(treatment_plan, inputs=[condition_input, age_input, ge

app.launch(share=True)

```

```
/usr/local/lib/python3.12/dist-packages/huggingface_hub/utils/_auth.py:94: l
The secret `HF_TOKEN` does not exist in your Colab secrets.
To authenticate with the Hugging Face Hub, create a token in your settings t
You will be able to reuse this secret in all of your notebooks.
Please note that authentication is recommended but still optional to access
  warnings.warn(
`torch_dtype` is deprecated! Use `dtype` instead!

Loading checkpoint shards: 100% 2/2 [01:12<00:00, 30.07s/it]

Colab notebook detected. To show errors in colab notebook, set debug=True in
* Running on public URL: https://e59db31aad6e7194f9.gradio.live

This share link expires in 1 week. For free permanent hosting and GPU upgrad
```



No interface is running right now