

01/03/2025

CalmConnect

Chat Bot Development

AI-powered mental health support

The Problem-Mental Health Challenges

Why is this important?

- 1 in 4 people globally have experienced mental health disorders.
- 50% of mental illnesses begin by the age of 14 (WHO).
- Lack of mental health professionals to meet demand.
- High costs may restrict people from seeking therapy.
- Open conversations about mental health discouraged by social stigma.





The Solution: CalmConnect

What is CalmConnect?



- AI-powered chatbot for mental well-being.
- Provides emotional support, mood tracking, and personalized coping strategies.
- Available 24/7 for users to talk to.

How does it help?



- Help reduce anxiety and stress through **guided responses**.
- Offers **self-care strategies** tailored to user emotions.
- Encourages early intervention before problems escalate.

Mental Health Support Agent

How can I help you today?

Give me a positive Affirmation

Give me a guided meditation

Step 1

User interacts with the chatbot & it analyses the user's mood & concerns

Step 2

Provides responses based on therapeutic models

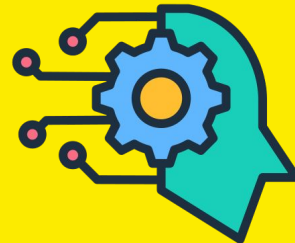
Step 3

Suggests mindfulness exercises, journaling or professional help

AI & tech our bot uses!!

AI model used: Meta llama-3.1-8B

Behavioral insights: This chatbot stores the conversation history and can analyze mood trends according to what the user is inputting.



Inferring the outputs (a)



Mental Health Support Agent

You: I'm feeling stressed today

AI: Stress can be overwhelming. Would you like to talk about what's causing your stress? Sometimes sharing what's on your mind can help you feel a bit better.

If you'd rather not talk about it, I can offer some suggestions for relaxation techniques or activities that might help calm you down:

1. **Deep breathing exercises:** Take slow, deep breaths in through your nose and out through your mouth.
2. **Progressive muscle relaxation:** Tense and then relax different muscle groups in your body, starting with your toes and moving up to your head.
3. **Mindfulness meditation:** Focus on the present moment and let go of worries about the past or future.
4. **Physical activity:** Engage in some gentle exercise, like a short walk or yoga pose, to release endorphins and calm your mind.
5. **Listen to soothing music:** Put on your favorite calming playlist or find some relaxing instrumental tracks online.

Which one (or two) of these options sounds appealing to you? Or do you have something else in mind that helps you relax?

Let's chat more about how I can support you today!

Here in this output we can see that the user has input that they are **feeling stressed**, and the AI model analyzes the text and mood and comes up with an **appropriate response** acting like a mental health companion.

Inferring the outputs (b)



Give me a positive Affirmation

Affirmation: Here's a powerful and uplifting affirmation that can help:

"I am capable, strong, and resilient. I can handle whatever comes my way, and I will emerge even stronger on the other side."

Repeat this affirmation to yourself whenever you're feeling stressed or overwhelmed, and remember:

- You are in control of your thoughts and emotions.
- You have the power to choose how you respond to challenging situations.
- You've navigated tough times before and come out even more capable and confident.

Take a deep breath, feel the words resonate within you, and remind yourself that you're strong, capable, and resilient.

Give me a guided meditation

Here in this output, the user had clicked the **"Give me a positive affirmation"** button, which is then responded to by the AI model with an affirmation and additional support through a more intricate explanation.

Inferring the outputs!! (c)

Mental Health Support Agent

How can I help you today?

Give me a positive Affirmation

Give me a guided meditation

Guided Meditation: Here is a 5-minute guided meditation script to help someone relax and reduce stress:

Title: "Breathe, Let Go, and Relax"

[0:00 - Introduction] (Speak in a calm and gentle tone) Welcome to this 5-minute guided meditation. Find a quiet and comfortable place to sit or lie down, close your eyes, and take a deep breath in through your nose and out through your mouth.

[0:15 - Grounding and Relaxation] Begin by bringing your attention to your breath. Feel the sensation of the air moving in and out of your body. As you inhale, imagine fresh energy entering your body. As you exhale, imagine any tension or stress leaving your body.

Now, bring your awareness to your feet. Imagine roots growing from the soles of your feet, deep into the earth below. Feel the solidity and stability of the ground supporting you.

As you breathe in, repeat the phrase "I am calm" to yourself. As you breathe out, repeat "I let go." Allow any tension or stress to melt away with each exhalation.

[1:30 - Body Scan] Now, bring your attention to different parts of your body, starting at the crown of your head. Begin to release any remaining tension or stress in this area. As you inhale, imagine fresh energy entering your body. As you exhale, imagine any discomfort or pain leaving.

Slowly make your way down through your face, jaw, neck, and shoulders. Release any tightness or strain as you breathe out.

Continue scanning down to your arms, hands, chest, abdomen, lower back, hips, legs, and finally, your feet.

Here in this output, the user had clicked the “Give me a guided meditation” button, which was then responded to by the AI model with a clearly detailed and thorough explanation for the user to easily follow.

[3:00 - Visualization] Imagine yourself in a peaceful place. It could be a beach, a forest, a mountain meadow, or anywhere that feels safe and serene to you.

Visualize the sights, sounds, and sensations of this place. Notice the texture of the sand beneath your feet, the feel of the breeze on your skin, or the sound of birds singing in the trees.

Allow yourself to fully immerse in this peaceful environment. Let go of any thoughts or worries as you breathe in and out.

[4:30 - Final Relaxation] Take one final deep breath in through your nose and out through your mouth. As you exhale, imagine any remaining tension or stress leaving your body completely.

Repeat the phrase "I am calm" to yourself one last time. Feel a sense of peace and relaxation spreading throughout your entire being.

[5:00 - Conclusion] Take your time to slowly come back to awareness. Notice how you feel now. Take one more deep breath in, and when you're ready, open your eyes.

Remember that this feeling of calm and relaxation can stay with you long after the meditation is over. Take it with you into your day, and know that you can return to this peaceful place whenever you need it.

(End with a gentle silence)

Target Users & Market Impact

Who will benefit?

- **Students:** facing academic stress
- **Working professionals:** Battling burnout
- **Individuals:** struggling with anxiety and depressing
- Anyone needing mental wellness guidance

Market Potential?

- Global mental health chatbot market : 1.28B by 2027
- Increasing demand for AI-driven mental wellness solutions





Conclusion

- CalmConnect empowers individuals through AI-driven mental health support.
- Accessible, affordable and always available.
- Helps bridge the gap in mental health accessibility.

Team ASH

Thank You