

CIS 129 Final Project

Mental Health Help App

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Introduction to Mental Health Idea

A person is silhouetted against a vibrant sunset over the ocean. The person stands on a dark, grassy cliff edge, looking out towards the horizon. The sky is a mix of orange, red, and purple, reflecting on the water's surface. In the distance, a small lighthouse is visible on a rocky outcrop. The overall mood is contemplative and serene.

PROBLEM:

The problem I'm proposing here is, access to **mental health** resources is limited, and many people **struggle** to find support, especially immediate support.

PERSONAL MOTIVATION:

I have a personal interest in **mental health** and the importance of accessible support. I've been through **rough rough** times that I would never wish upon anyone, I can't imagine if someone went through similar **mental struggles** what they would do if they didn't have support like I did with mainly my family for me, or anyone in their life to **support** them.

Summary of Current Mental Health Findings

HELPFUL RESOURCES AND EDUCATION:

There was a study on the Psychiatry of AI and how it might change the landscape of Mental Health Care. One thing they pointed out was AI will always keep pushing back limitations further and further and it will keep evolving. Another study actually points out that it is actually feasible that AI would help with mental health with many studies they did with diverse men and women.



CURRENT SOFTWARE SOLUTIONS:

Some existing solutions I've researched are apps like "Headspace" and "Calm" that offer meditation and mindfulness exercises that are fairly effective for their purpose.

The background of the slide features a sunset sky with warm orange and yellow tones. In the foreground, the silhouettes of two people are captured in mid-air, jumping joyfully with their arms raised. The person on the left is in a more compact, tucked jumping pose, while the person on the right has their arms spread wide and legs bent, conveying a sense of freedom and happiness.

Intention and Design of Mental Health App

PROPOSED SOFTWARE SOLUTION:


My idea is a **mental health** chatbot app/AI that provides **immediate** support, resources, and tracks a user's mood over time.

Something it would do is use AI to provide personalized advice and maybe includes community support groups. Obviously, this would work with many languages. And the Software could also easily connect you to **professional help** if you need it very easily.

Mental Health Solution

Design Proposal

PSEUDOCODE WRITE UP AND IDEAS:



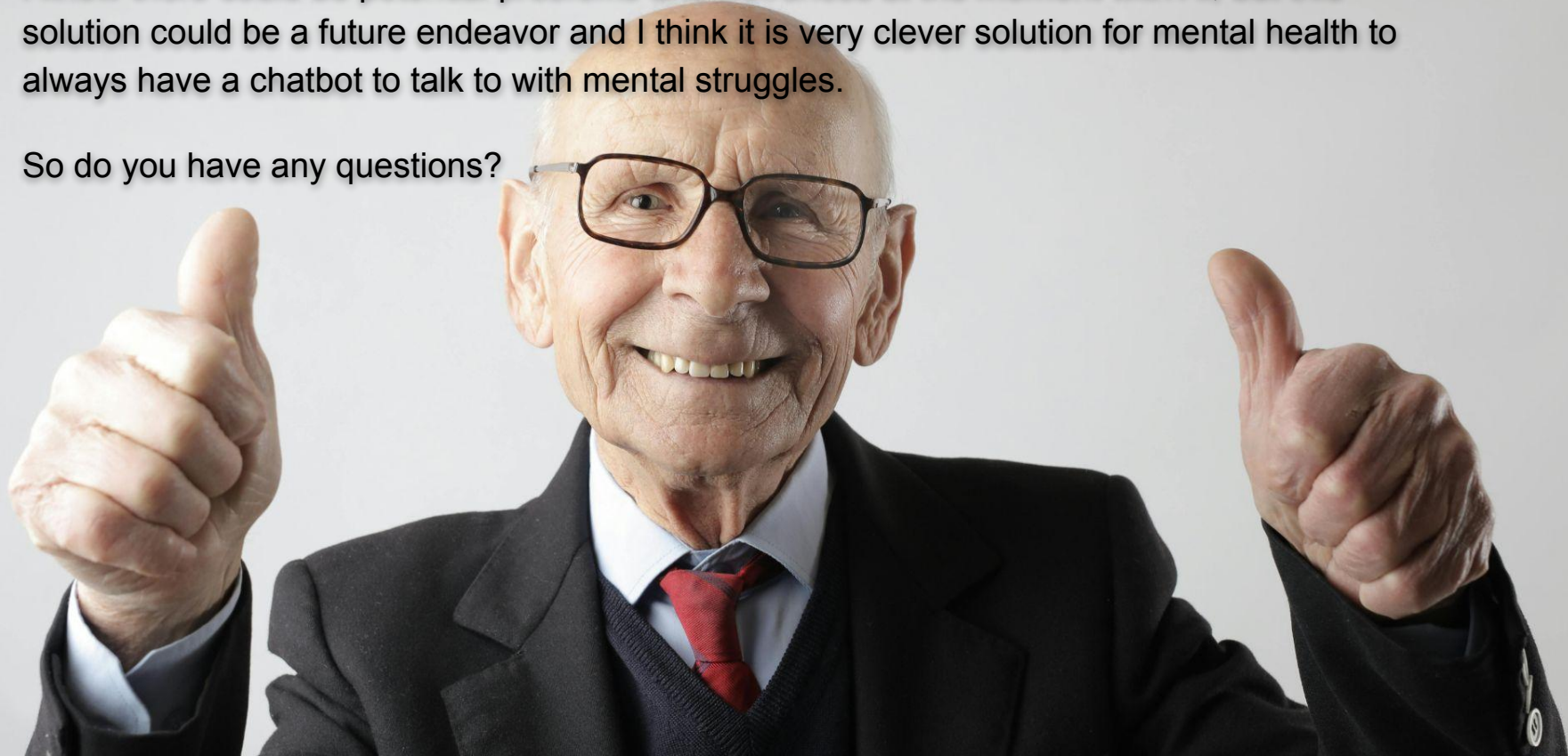
```
Initialize user profile
Initialize chatbot with NLP capabilities
Initialize everything needed
While user is active:
    Daily check-in with user
        Record mood and provide assistance or support
    Prompt user to input their mental health concerns
    Chatbot analyzes input and Displays relevant resources
    If user indicates distress:
        Connect user to professional help
    Else
        Display AI-generated personal advice
    If user wants community support:
        Connect user to support groups
    Else
        Display AI-generated personal advice
Save user interactions to improve future responses
```

*This AI
would have to
be extremely
complex

Open Questions and Final Remarks:

I know there could be potential problems and weirdness at the moment with AI, but this solution could be a future endeavor and I think it is very clever solution for mental health to always have a chatbot to talk to with mental struggles.

So do you have any questions?



Works Cited

App Store: “Calm” Calm.com, Inc.

App Store: “Headspace” Headspace Inc.

Spiegel, Brennan M. R., et al. “Feasibility of Combining Spatial Computing and AI for Mental Health Support in Anxiety and Depression.” NPJ Digital Medicine, vol. 7, no. 1, Jan. 2024, pp. 1–5. EBSCOhost, <https://doi.org/10.1038/s41746-024-01011-0>.

Asbach, Michael, et al. “AI in Psychiatry: Changing the Landscape of Mental Health Care.” Psychiatric Times, vol. 41, no. 3, Mar. 2024, pp. 15–17. EBSCOhost, search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=ccm&AN=176111979&authtype=shib&site=eds-live&scope=site.