



OPENAI
HACKATHON

PERSONALIZED MENTAL HEALTH CARE CHATBOT

Team : A.I HACKERS

THE TEAM



Sohaib Aamir
(TEAM LEADER)

Artificial Intelligence Engineer
NCAI, NUST, ISLAMABAD,
PAKISTAN



Allison
Ogechukwu
(allison_ogechukwu589)



Manuel Dinis
Júnior
(ManuelDinisJunior)
Web Developer



Kiguli Mark
(mark_kiguli319)
Python backend dev



HBD00
(hbd00436)



Joshua Ngene
(joshua_ngene26)



OUR BIG IDEA

To create a digital platform that provides personalized mental health care using AI-powered chatbots and machine learning algorithms. The platform will be accessible and inclusive, offering support and resources to underserved communities.

OUR OBJECTIVE



Importance:

Mental health is a crucial aspect of overall well-being, and it affects a large population worldwide. Unfortunately, personalized mental health care is often inaccessible and expensive, leading to many people not receiving the support they need. By addressing this problem, we can potentially improve the quality of life for a significant number of people.



Innovation:

The use of AI in mental health care is a relatively new and exciting area of research. By exploring the potential of AI in therapy, we can develop innovative solutions that can make mental health care more accessible and effective.

OUR OBJECTIVE



Social Impact:

By working on this problem, we have the opportunity to create a project that has a positive social impact. Improving mental health care can potentially reduce the societal and economic costs associated with mental health issues, such as lost productivity and healthcare costs.



Challenge:

Addressing the problem of personalized mental health care requires a multidisciplinary approach, combining expertise in mental health, technology, and business. By taking on this challenge, we can develop our skills and gain experience in working with diverse teams to solve complex problems.

SCOPE OF THE SUPPORT :-

The scope of support provided to patients in personalized mental health care is to provide individualized treatment plans that address their specific needs and concerns. This can include therapy, medication management, and other supportive services. The goal is to improve their overall well-being and help them achieve their treatment goals, while also making mental health care more accessible and affordable for all individuals.

SOME LINKS OF RESEARCH AND ARTICLES RELATED TO THE USE OF AI IN THE DIAGNOSIS AND PREDICTION OF MENTAL HEALTH CONDITIONS:

1. "Artificial Intelligence in Mental Health and Neuroscience: A New Field Emerges" by Arno Klein, Russell A. Poldrack, and Thomas E. Nichols - This paper provides an overview of the potential of AI in mental health and neuroscience, including diagnostic and predictive applications.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7300929/>

2. "Artificial intelligence in mental health care" by John Torous, MD, and Adam C. Powell, PhD - This article explores the potential for AI in mental health care, including diagnosis and personalized treatment.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7220906/>

3. "Predicting Depression from Social Media Posts" by Sharath Guntuku, Lyle Ungar, and Johannes Eichstaedt - This study uses machine learning to predict depression in individuals based on their social media posts.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5543102/>

SIMPLEST DEMONSTRATION

Q: Mike is a busy college student who has been feeling stressed and anxious lately. He doesn't have the time or money to see a therapist in person, but he wants to take care of his mental health. What Mike will do?

Ans: mike will use our Personalized mental health care Chatbot App.

The app may suggest specific relaxation techniques, such as deep breathing exercises or guided meditation, to help alleviate Mike's anxiety symptoms.

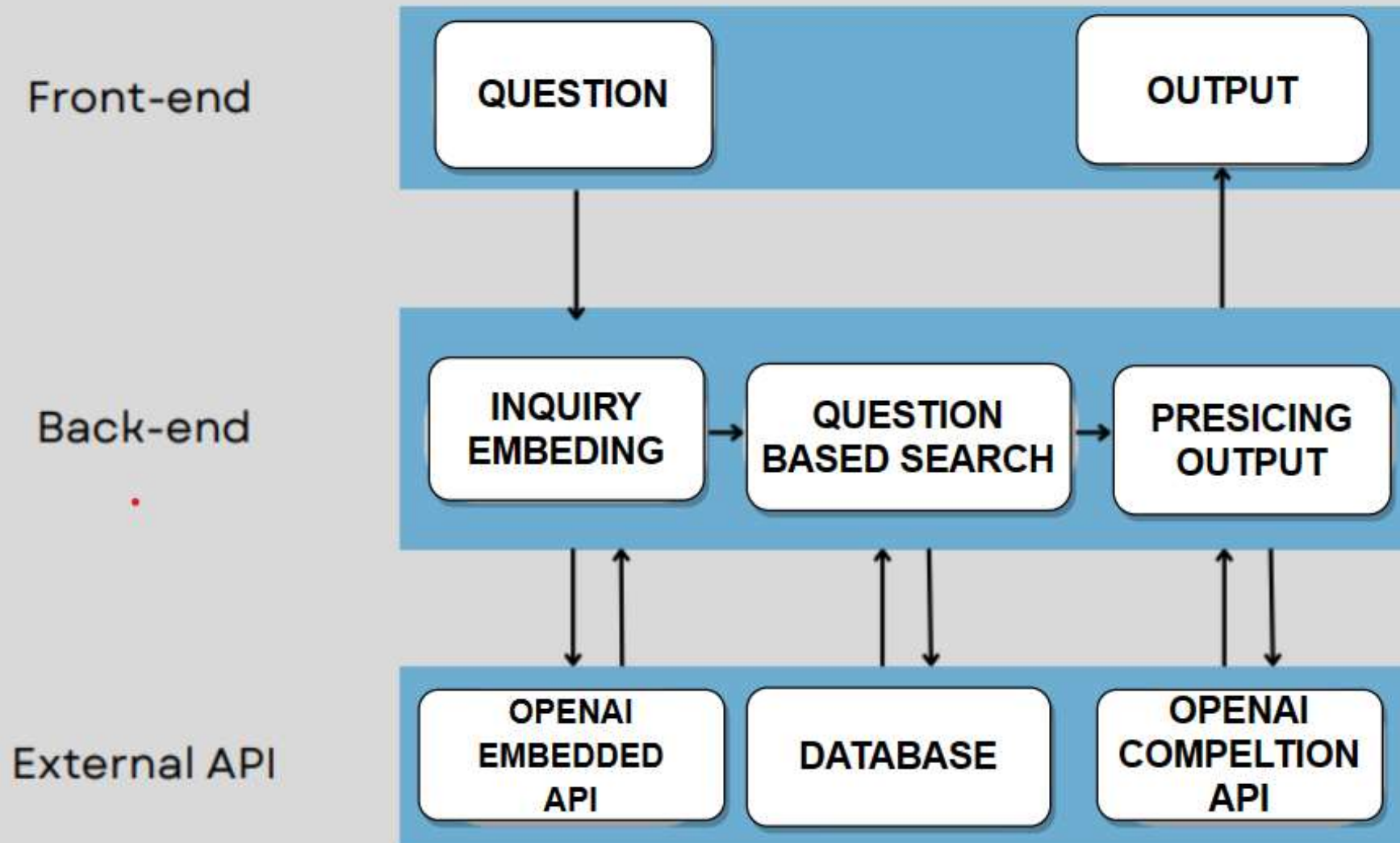
- The app may recommend certain lifestyle changes, such as improving sleep hygiene or increasing physical activity, to help manage symptoms of depression.

SIMPLEST WAY DEMONSTRATION:-

- The app may provide resources for cognitive-behavioral therapy (CBT), which is a type of therapy that has been shown to be effective for treating anxiety and depression.
- The app may encourage Mike to track his progress and set goals for himself, such as practicing a relaxation technique for a certain amount of time each day or increasing the number of steps he takes each day.

Overall, the suggestions that Mike receives from the app are designed to help him manage his mental health symptoms and improve his overall well-being.

PROPOSED FRAMEWORK



A close-up, high-angle photograph of a silver stethoscope resting on a dark, reflective surface. The stethoscope's chest piece is in the lower-left, and its tubing curves across the frame towards the upper-right. The background is a dark teal color with a subtle grid pattern.

THANK YOU



Sohaib Aamir

SERVICE REPRESENTATIVE / TEAM LEADER



sohaibaamir00@gmail.com



+92-311-1105552