



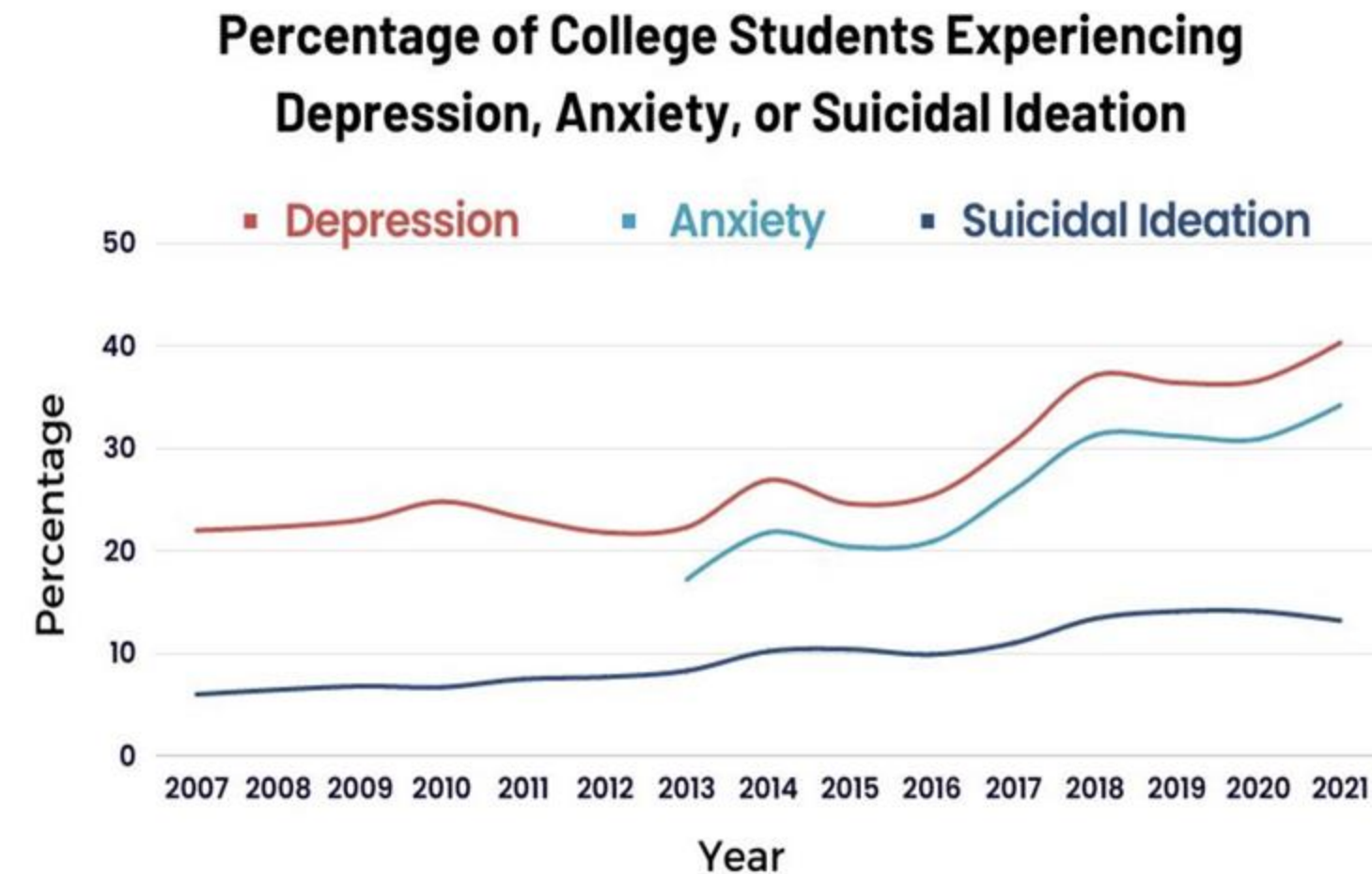
EmpathOS: A Mental Health Chatbot

— transforming conversations into compassionate support
for unresolved mental health challenges

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Problem Statement

- Rates of depression and anxiety in college trended upward over the past 10 years.
- With increased demand, it can be harder for students to access the mental care service.



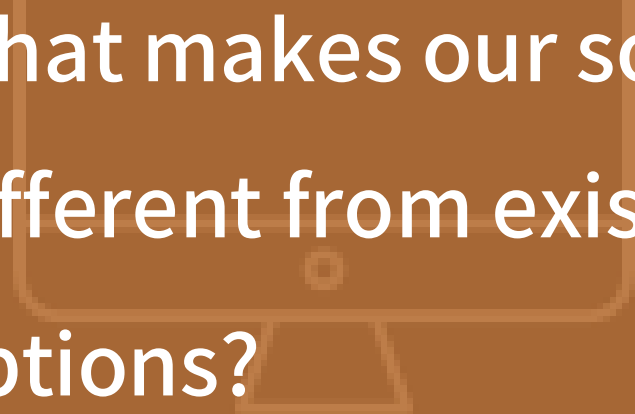
We aim to develop a mental health chatbot that offers confidential, immediate support with referrals to professional resources.

Our Audiences

Our target audiences are individuals who are facing mental health challenges, with a specific focus on the following groups:

- Teenagers
- College students
- Young adults





What makes our solution
different from existing
options?



Targeted
Support



Evidence-based
Conversations

Value Proposition

Targeted Support: We focus on specific groups instead of generic responses

Evidence-based Conversations: RAG allows our chatbot to learn from the latest research in mental health.

How it benefits our users

24/7 Support

Accessible anytime, unlike traditional services restricted by appointments.

Scientifically Backed

RAG ensures that users are not only receiving empathetic support but also scientifically backed information.

Safe Space

Our secure chatbot ensures confidential exploration of mental health concerns.

Scalability and Efficiency

1

Technical Scalability

Leveraging Google Cloud services like **Cloud Run** or **GKE** enables the chatbot to auto-scale during peak times and downsize as demand decreases.

2

Performance Optimization

RAG enables accurate, context-aware responses
Fine-tuning with **LoRA** boosts efficiency with minimal computation.

3

Infrastructure Considerations

- **Google Cloud Platform (GCP):**

Offers scalable, secure solutions for mental health data with tools like Cloud Run and Pub/Sub.

- **Docker:**

Enables consistent, portable deployments, simplifying environment management.

- **Vertex AI:**

Streamlines model training, deployment, and monitoring for an always-updated, responsive chatbot.

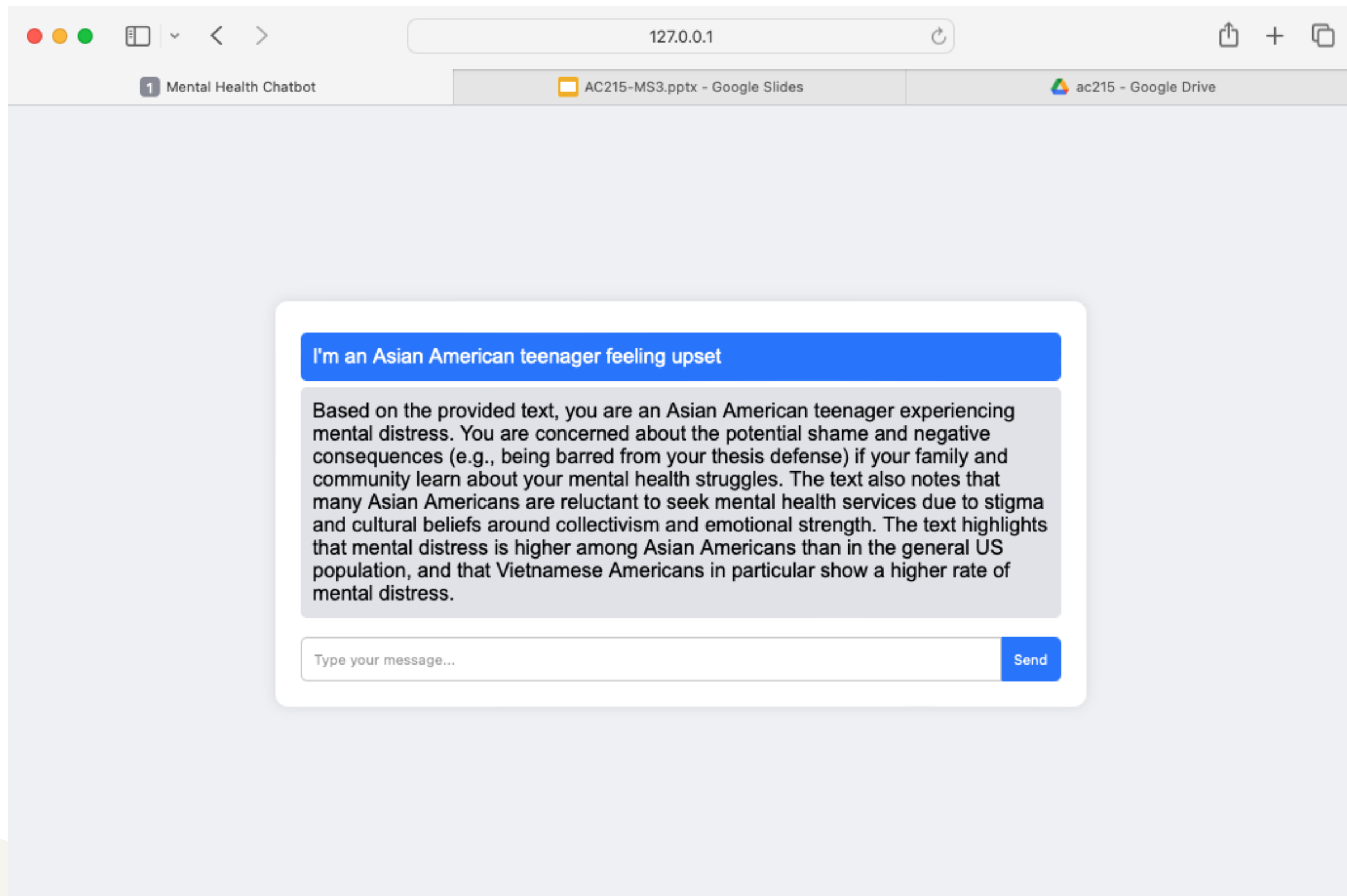
Next Steps

- Model Optimization and Continuous Improvement
- Conduct UX Interviews and Gather Feedback
- Use services like Cloud Run and GKE for scalability



Market Growth

- Strategic Partnerships with Mental Health Institutions
- Expansion into New User Groups and Markets





Questions