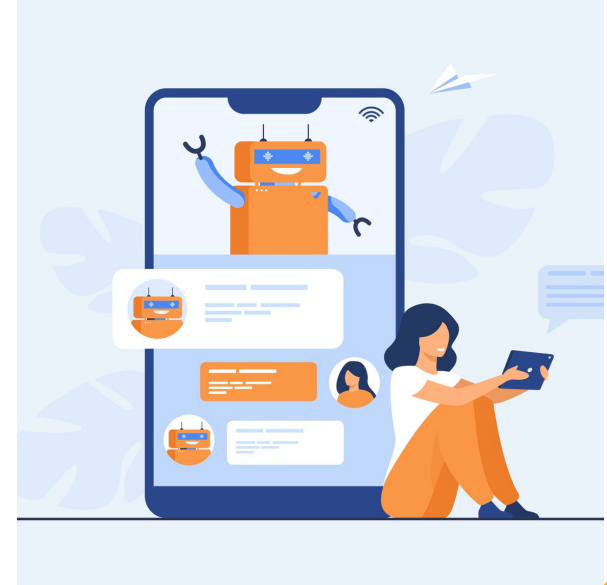# DATA 606: Capstone in Data Science

AI-Powered Mental Health Companion

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Motivation: The growing need for Mental Health Support

- Around 85% of people with mental health issues do not receive treatment, often due to a lack of available providers. (IDC).
- Referrals among non-binary individuals increased by 235% with the use of AI tools (Augnito).
- According to WHO's Mental Health Atlas, there are only 13 mental health workers per 100,000 people globally.

Idea

- A **multilingual mental health chatbot** that adapts to users' needs.
- Acts in different roles:
  - **Therapist-style conversation** for emotional support.
  - **Mental health checkup** using questionnaires.
  - **Progress tracking** against personal goals.
  - **Personalized wellness recommendations.**
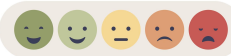- Available as a real-time, user-friendly web application.

Animoa - Your AI powered Mental Health Companion

Animoa is a web application designed to provide accessible mental health support offering a suite of interconnected features to address different needs
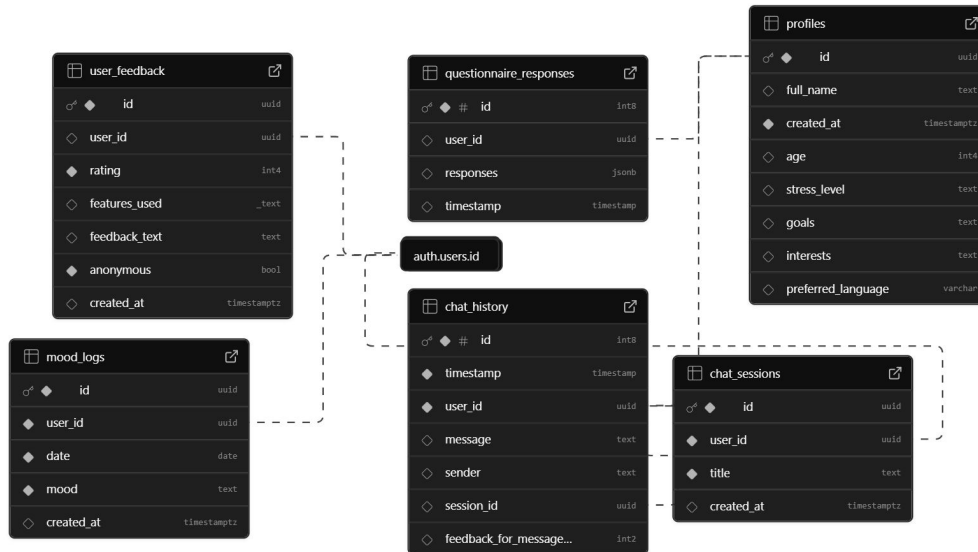
Key Features

★ Empathetic AI Chat

★ Mental Health Advisory

★ Visual Mood Tracking

★ Personalized User Profiles

★ Multiple Chat Sessions

★ Download Feature

★ Multiple Languages

How Animoa Works: Technical Architecture

Streamlit
Web interface

groq
AI Inference

supabase

Cloud Database
Postgresql

Llama 3.3

AI chat and recommendations

Database Schema

User experience

"The model recognized the main aspect of my mental health issue which my personal therapist has been trying to tell me for the past 2 years. It made me reflect and introspect in ways I hadn't before." — PhD Student, Biology, UMB Downtown

Impact

Animoa represents a significant step towards creating accessible and personalized mental health support tools that can empower individuals to take control of their well-being

Future Advancements

Professional Evaluation

↓

Localized Resources

↓

Handle severe situations

↓

Research Study
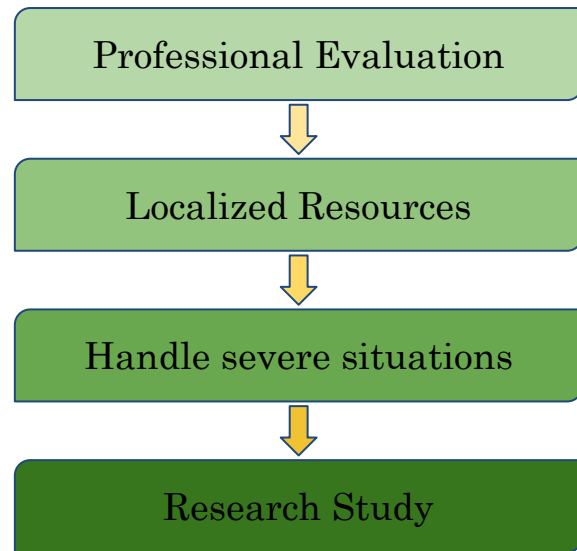
Thank you
Any Comments/Feedback? - zk18813@umbc.edu