Memory Support

Chatbot

For Pregnant Women

Nneka Asuzu

Personal Background

I'm Nneka Asuzu. I am from Nigeria

I hold a Master of Science (MSc) degree in Management and Systems, specializing in Database Technologies, from New York University

My passion for AI stems from its transformative potential to enhance human lives and improve various industries

I believe that by leveraging AI technologies, we can develop innovative solutions to address complex challenges and improve healthcare outcomes, such as those faced by pregnant women with cognitive memory issues

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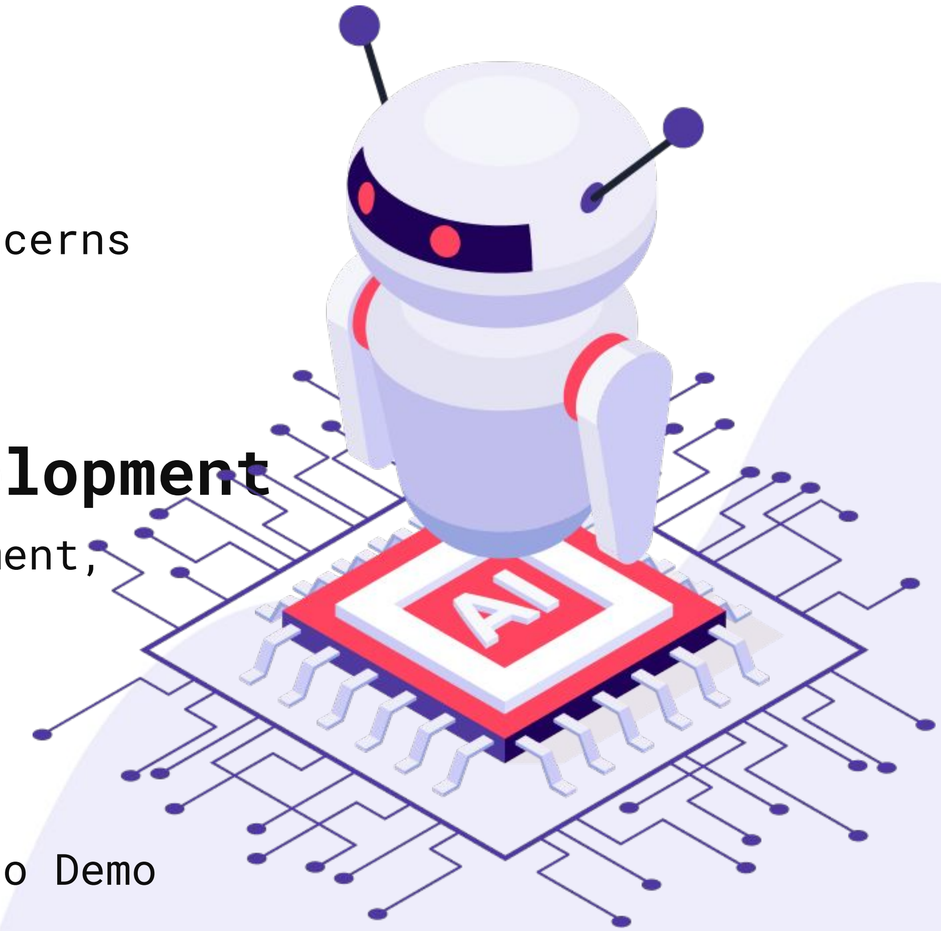


Proposed Project and Rationale

Proposed Project

Develop a Memory Support Chatbot for Pregnant Women using the GPT-2 language model

Leverage the capabilities of the GPT-2 language model to provide immediate and tailored responses, offering timely guidance and assistance

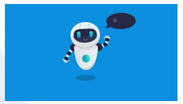
Personalized Support

Provide personalized support, solutions, tips, and advice for pregnant women experiencing cognitive memory issues

Support Accessibility

Address the lack of easily accessible and personalized support for pregnant women facing cognitive memory issues

Project Goals

G 

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Interface

Develop user-friendly chatbot interface

Information

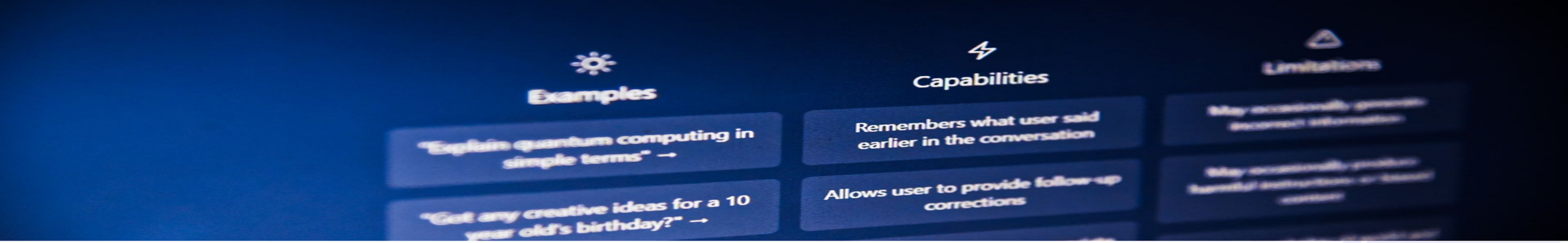
Provide a wide range of information and advice on cognitive memory issues during pregnancy

Empathy

Ensure empathetic, non-judgmental, and supportive responses

Effectiveness

Measure the effectiveness of the chatbot in improving the well-being of pregnant women



Addressing Key Concerns (Questions to Answer)

- How can AI provide personalized support for pregnant women with cognitive memory issues?
- How effective is the GPT-2 language model in generating relevant responses?
- Can the chatbox improve the overall experience of pregnant women?
- What are the prevalent misconceptions regarding cognitive memory issues during pregnancy, and how can the chatbot address them?
- How can the chatbot encourage pregnant women to seek professional advice?

Personal Experience

- Story behind this project? My personal experience
- Discovered that cognitive memory issues during pregnancy are often overlooked and not taken seriously

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Business Case

1 Addressing an Underserved Need

Provide much-needed support and resources for pregnant women facing cognitive memory challenges, addressing a currently underserved aspect of pregnancy-related care

2 Improving Well-being

By leveraging AI technology, the chatbot can offer personalized and accessible assistance

3 Enhancing Accessibility

Provides an easily accessible resource for pregnant women to manage their cognitive memory challenges effectively

4 Complementing Healthcare Professionals

While not a replacement for healthcare professionals, the chatbot can complement the advice of healthcare providers

Project Development Steps

Research

Conducted research on cognitive memory issues during pregnancy, existing support systems, and the capabilities of the GPT-2 language model.

Development

Developed the chatbot interface and integrated the GPT-2 language model to generate responses.

Quality Assurance

Ensured the chatbot provides accurate and helpful responses through testing and refinement

Project Development: Chatbot Operation

How the Chatbot Operates?

User Interaction

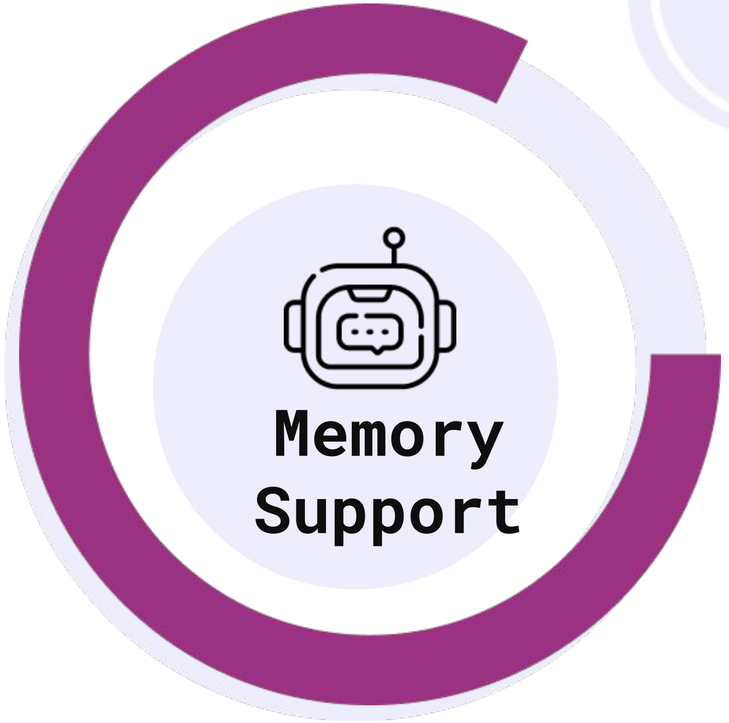
Users interact by typing their questions or concerns.

GPT-2 Integration

The chatbot uses the GPT-2 language model to generate responses based on input from its users

Supportive Responses

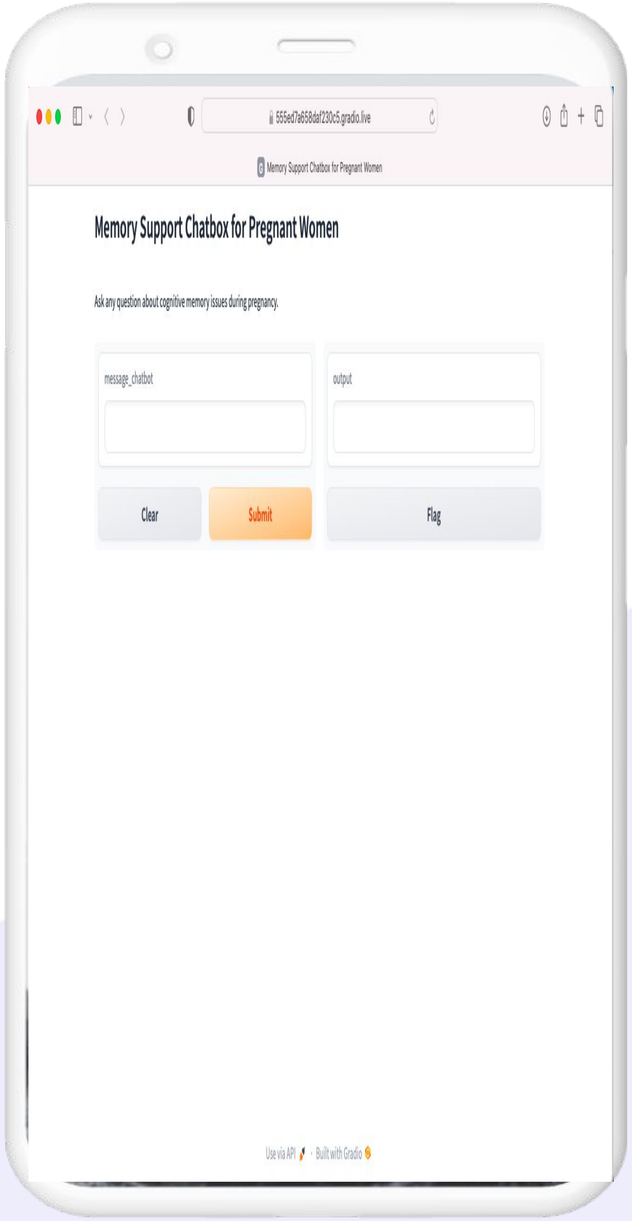
Analyzes the input and provides relevant information, tips, and advice to help pregnant women manage their cognitive memory issues effectively



Future Ideas

Expand features and integrate with other healthcare services

- ❏ Privacy & Security
- ❏ Language Understanding
- ❏ Telemedicine Integration
- ❏ Personalized Learning
- ❏ Multilingual Support
- ❏ Partner Support
- ❏ Interactive Features
- ❏ Feedback Options



Conclusion

- This chatbot has the potential to significantly improve the well-being and mental health of pregnant women facing cognitive memory issues

- Benefits: By providing personalized support, solutions, tips, and advice, the chatbot can empower pregnant women to manage their cognitive memory challenges effectively and navigate their pregnancy journey with confidence

- Future Plans: Through continuous improvement and innovation, we aim to make this chatbot a valuable resource for pregnant women worldwide.

Project Constraints

1. No Dataset found

The lack of an existing dataset required the use of text files instead, which required additional cleaning and preprocessing efforts

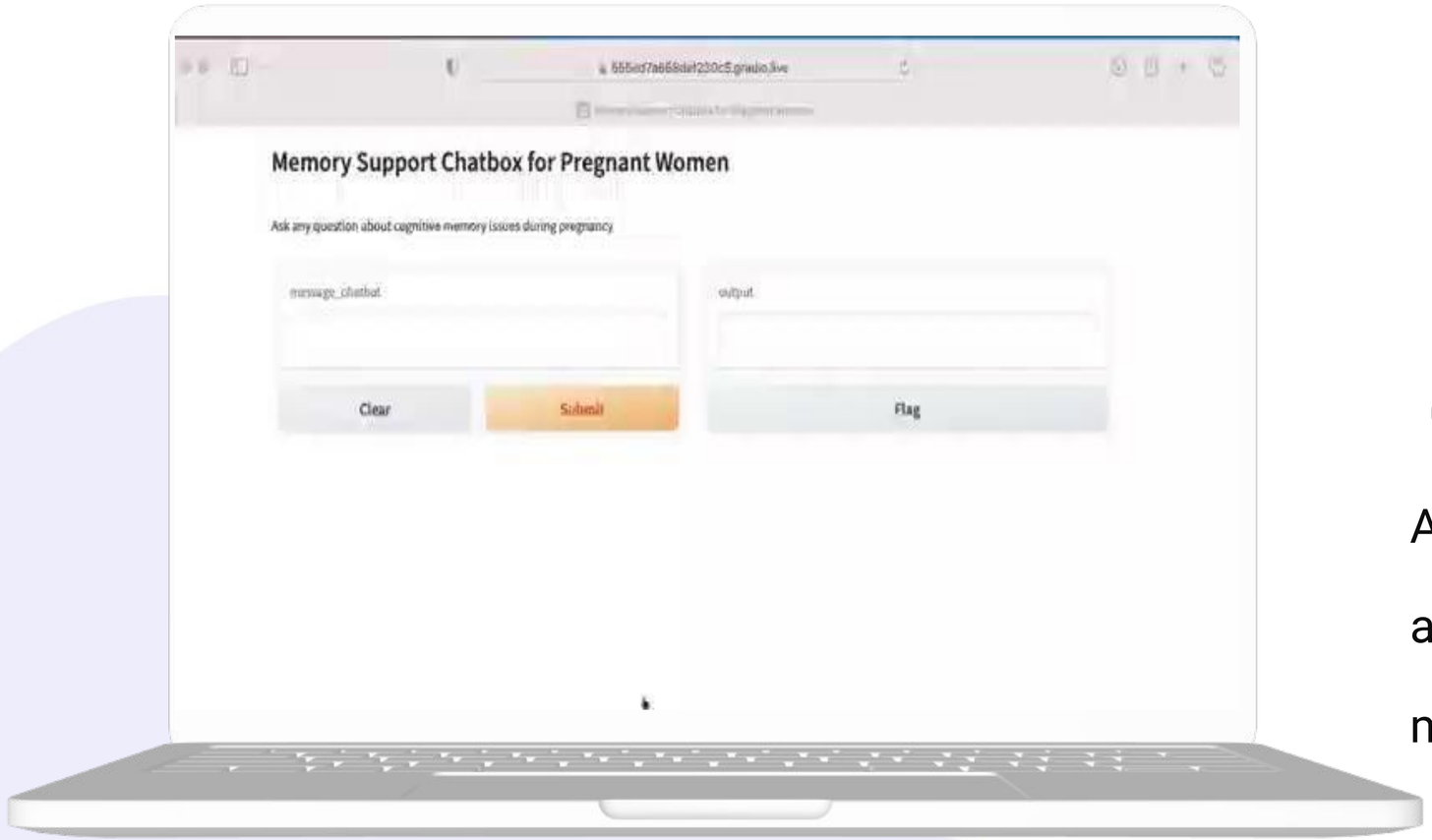
2. Imperfect Reponses

Despite fine-tuning the GPT-2 model, responses may not always be perfect or tailored to specific needs.

3. Limited Resources

Financial constraints prevented the use of paid open APIs, leading to the use of GPT-2 as an alternative solution.

Memory Support Chatbot Video Demo



Chatbot application

A chatbot application offering personalized support and guidance for pregnant women with cognitive memory issues, using the GPT-2 language model

Gradio URL link

Streamlit Link

Q & A

Thank you for your attention

Any Questions??