

Medical AI-Based Chat Bot Project

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Course: Yearly Project in The Department of CS.

Project Title: Medical AI-Based Chat Bot

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Problem Statement

Sometimes people are not aware of treatment for a disease. So, for a small problem, a person needs to go to the hospital for a checkup which is more time-consuming for anyone. Also talking on the phone with someone about the case can be hard on the person. Another problem is not all medical centers are open 24/7.

Such problems can be solved using a medical chatbot by properly guiding people toward a healthier and better approach.

My approach to solving it:

Here's my approach that I considered developing the chatbot:

- 1- I defined the purpose of the chatbot. Is it meant to provide general health advice, offer initial guidance, or help users decide whether they need to seek medical attention.
- 2- Create a comprehensive knowledge base that covers a wide range of common medical conditions, symptoms, and treatments if is possible.
- 3- Program the chatbot to communicate in a compassionate and empathetic manner.
- 4- Address the issue of limited medical center availability by ensuring the chatbot is accessible around the clock, providing users with immediate guidance regardless of the time.

Here are some code libraries, algorithms, and techniques:

- 1- OpenAI API.
- 2- Python.
- 3- Context Management:
When working with OpenAI API, I needed to manage the conversation context. I have maintained context by appending the conversation history to the prompt.

4- Context Management:

When working with OpenAI, you'll need to manage the conversation context. You can maintain context by appending the conversation history to the prompt.

5- Filtering and Moderation:

To prevent the model from generating inappropriate or harmful content, consider implementing a content filtering mechanism.

6- User Experience and Interface.

Bibliography:

1- <https://platform.openai.com/docs/introduction/overview>

2- OpenAI Python Package:

<https://pypi.org/project/openai/>

3- Chatterbot package:

<https://pypi.org/project/ChatterBot/>

4- Chatbot development:

<https://www.singlegrain.com/artificial-intelligence/how-to-build-a-chatbot/>