

STARS GPT (AI-BASED Tutoring Chatbot)

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INTRODUCTION

STARS GPT dives into the world of OpenAI in the context of students. The objective is to provide a system that has trained AI that can fetch consistent results for posed questions from student users.

PROBLEM STATEMENT

Students around the world look to AI large language models like ChatGPT for help. The over reliance on a general purpose model like ChatGPT, however, leads to inconsistent results. STARS GPT aims to address these issues by using past assignments from Dr. Wells to train the AI to give consistent results which in turn will lead to a better learning environment for students here at FIU.

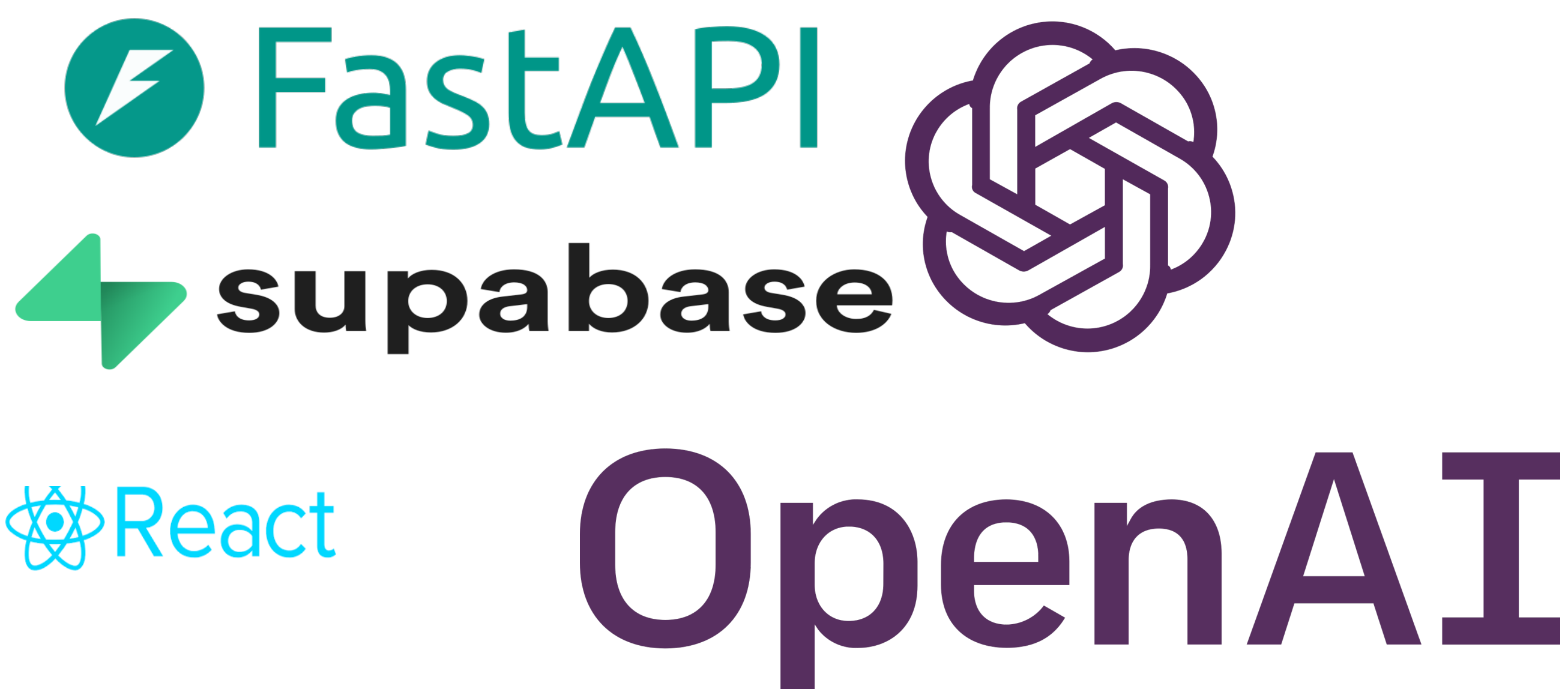
ROLE SUMMARY

The code acts as a wrapper around the OpenAI API granting an interface that has to ability to conveniently generate responses based on user input. Strips the messages and then sends them to OpenAI in proper format.

ACKNOWLEDGEMENT

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Technologies Used

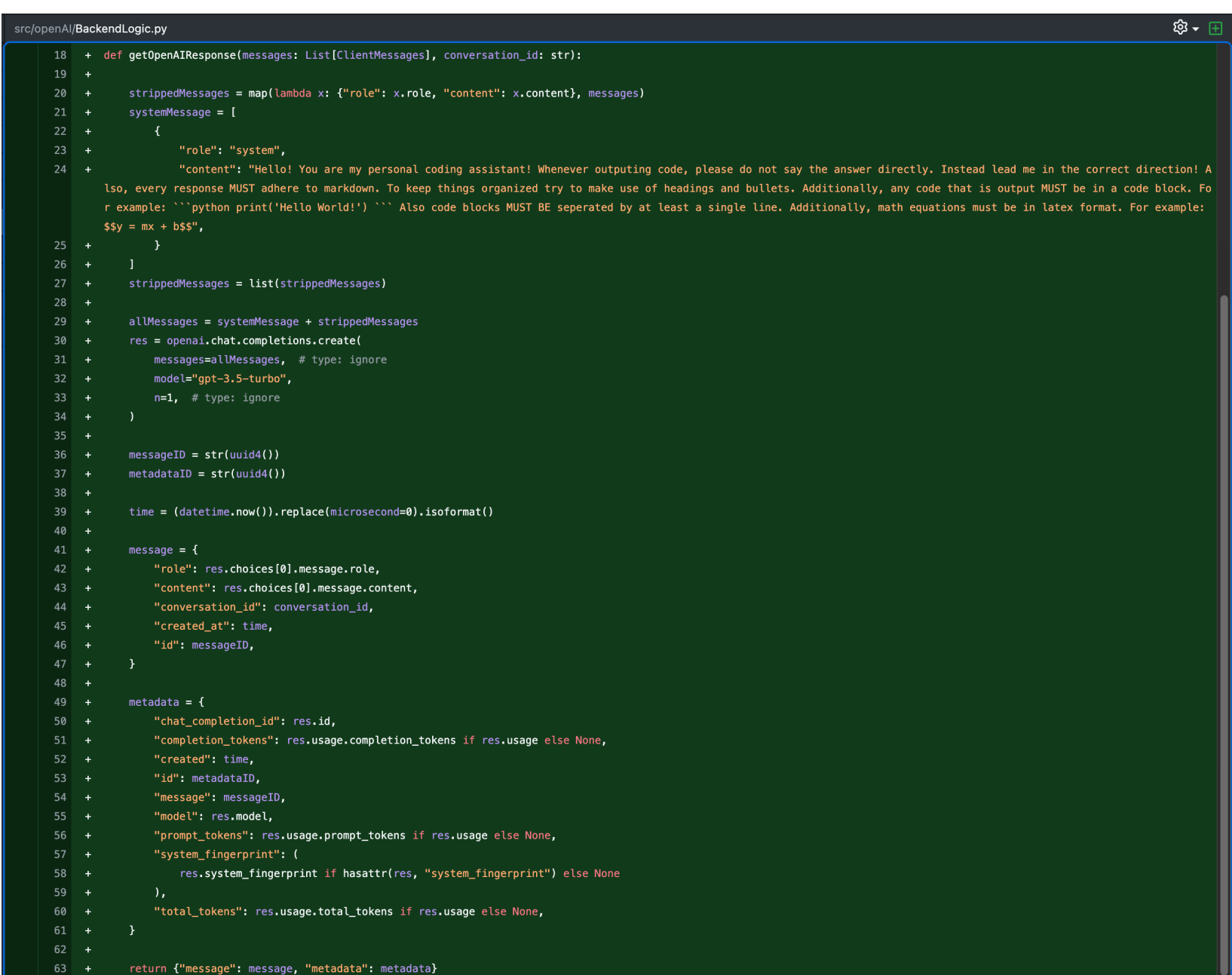


REQUIREMENTS

Python: is used to establish the code for AI messaging as well as the OpenAI call.
React: Library for building UI interfaces.
OpenAI API: Used for fetching messages and responses.
Supabase: Used to manage database and store conversation data.

IMPLEMENTATION

Established a function “getOpenAIResponse which takes two parameters (messages and conversation_id) which is responsible for generating responses based on input messages. The function processes the messages, extracts relevant information (role and content), then formats it for OpenAI. Metadata is constructed associated with the response. For example, timestamps and completion ID. Metadata plays a huge role in the ability to track, analyze and manage the interactions between the user and AI model.



APP SUMMARY

In summary, the app aims to achieve a complete support system for both students and STARS tutors. It can achieve this by its ability to clarify complex concepts from the KFSCIS curriculum to further aid their comprehension. With a combination of personalized guidance from FIU’s STARS tutoring group with 24/7 access to this AI-based chatbot, we can reach a great learning environment for FIU students.