How to develop React apps that analyze emotions using OpenAI API

With OpenAI's API tool, you can analyze, generate detailed overview reports, and easily come up with solutions to increase leads. Here's how to create a React app that analyzes market sentiment using Open AI's API.

What is GPT?

OpenAI's Generative Pre-training Transformer (GPT-3) is a large-scale language model trained on massive amounts of textual data, making it capable of rapidly generating responses to any given query. enter. It uses natural language processing techniques to understand and process queries from users. They are the good factors that made GPT-3 so popular.

This model is especially useful in sentiment analysis because you can use it to assess and accurately identify customer sentiment towards products, brands, and other metrics.

Analyzing customer sentiment using GPT

Psychoanalysis is a natural language processing task, which involves identifying and classifying emotions expressed through textual data such as sentences, paragraphs, etc.

GPT can process data in series, so it can analyze emotions. This whole process involves training the sample with a large set of labeled text. They are classified according to the degree of positive, negative and moderate.

You can then use that trained sample to determine the view of the new text data. Basically, this pattern learns to identify psychology by analyzing the pattern and text structure. Then it classifies, and then generates a response.

In addition, GPT can be fine-tuned to evaluate data from the appropriate domain, like social media or customer feedback. This improves context-specific accuracy by training the model with emoticons unique to that particular domain.

OpenAI Advanced Tweet Classifier Integration

This API uses natural language processing techniques to analyze textual data such as messages or tweets to determine psychological states.

For example, if a text has a positive tone, the API will classify it as 'positive', otherwise it will be labeled "negative" or "neutral".

In addition, you can customize categories and more specific words to describe emotions.

Advanced Tweet classifier configuration

To get started, go to OpenAI's Developer Console to sign up for an account. You will need an API key to interact with the advanced tweet classifier API from the React app.

On the dashboard, click the Profile button on the top right > select **View API keys** .

Then, click **Create new secret key** to generate a new API key for your application. Remember to copy the key to use in the next step.

Create a React client

At the root of the project directory, create an .env file to store the API secret key.

```
REACT_APP_OPEN_AI_API_KEY='your API key'
```

Configuring the App.js . component

Open the src/App.js file, delete the boilerplate React code and replace it with the following code:

1. Create the imports:

```
import './App.css'; import React, {useState} from 'react';
```

2. Define functional App component and state variable to save user's message and its emotions after analysis.

```
function App() { ??const [message, setMessage] = useState(""); ??
const [sentiment, setSentiment] = useState("");
```

3. Create a handler function that will make asynchronous HTTP POST requests to the **Advanced Tweet Classifier** with the user message and API key in the request body for sentiment analysis.

4. The function then waits for a response from the API, parses it as JSON, and extracts the sentiment value in the selection array from the parsed data.

5. Next, the handler function will trigger **setSentiment** to update its state with the sentiment value.

```
??const API_KEY = process.env.REACT_APP_OPEN_AI_API_KEY; ??
const APIBODY ={ ????'model': "text-davinci-003", ????
'prompt': "What is the sentiment of this message?" + message, ????
'max_tokens': 60, ????'top_p': 1.0, ????'frequency_penalty': 0.0, ????
'presence_penalty': 0.0, ??} ??async function handleClick() { ????
await fetch('https://api.openai.com/v1/completions', { ??????
method: 'POST', ??????headers: { ????????
'Content-Type': 'application/json', ????????
'authorization': `Bearer ${API_KEY}` ??????}, ??????
body: JSON.stringify(APIBODY) ????}).then(response => { ??????
return response.json() ????}).then((data) => { ??????console.log(data);
??????setSentiment(data.choices[0].text.trim()); ????}).catch((error) => {
??????console.error(error); ????}); ??};
```

Finally, return the message box and Submit button:

```
??return ( ???? ??????
```

Sentiment Analysis Application

Enter the message to classify

```
 setMessage(e.target.value)} ??????????/> ????????</div> ????????<div
classname="Response"> ??????????<button onclick={handleClick}> Get Message
sentiment</button> ??????????{sentiment !== "" ? <p> The message is
```

```
justify;">
 <p style="text-align:center">
 <img width="60%"
```

XorFee6t2ic3JlUyohVkUDDMF7AetbVA73IIP9bc/9dB/6CtT1BB/rbn/AK6D/wBBWp6QBWT4u
/5FTWv+vKf/ANFtWtWT4u/5FTWv+vKf/wBFtWlL416ieweEf+RU0X/ryg/9FrWtXx3p2srBbeV
di+lK52tFeNHqcYGMEYGD27+1Wp/EFq8TCK31OKTBAYakxAOODqr68/4V7c8lm5N834f8EwVdW

KP7Qr+QezieWf8Kw1v/n6sP8Av4//AMRR/wAKw1v/AJ+rD/v4/wD8RXqdFH9oV/IPZxPLP+FYa
3/z9WH/AH8f/wCIo/4Vhrf/AD9WH/fx/wD4ivU6KP7Qr+QezieWf8Kw1v8A5+rD/v4//wARR/w
rDW/+fqw/7+P/APEV6V6nR9oV/IPZxPLP+FYa3/z9WH/fx/8A4ivU6

```
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OB6tj5R+JxSewR3PFviFdSeLvidBotqd0cLpaIQe5OXP5k/981V8aWZ8D/E2K9s1KQq8d1CoHU
dGH4kH86wfDer6tp3iI65p1iL+7jLMweJ5ArNn5iFI55Per3jTxD4g8UpbXGs6Mln9lyqyxW8i
```

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rw7eWmr2v2aZ7oyKvmI+V2KM5Un0rk/GXgLxNq3xEm1ex0zzbJpYiJfPjHACg8Fs9vSvZOc+gz
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n/oXNK/8Ao//ia2KKAMf/hEfDP/AELmlf8AgFH/APE0f8Ij4Z/6FzSv/AKP/wCJrYooAx/+ER8
M/wDQuaV/4BR//E0f8Ij4Z/6FzSv/AACj/wDia2KKAMf/AIRHwz/0Lmlf+AUf/wATR/wiPhn/A

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AAAOlFFFMAooooAKKKKACiiigAooooAKKKKACiiigAooooAKKKKACiiigDH8L/wDIKn/7CN7/A
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/jXitFH9mw/mDnZ7V/b2jf9Bax/8AAlP8aP7e0b/oLWP/AIEp/jXitFH9mw/mDnZ7V/b2jf8AQ

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