Summary: This code handles logic to work with webhook

```
const response = await fetch("https://vansh-tyagi.app.n8n.cloud/webhook-test/ai-image", {
    method: "POST",
    headers: {
        "Content-Type": "application/json",
    },
    body: JSON.stringify({ text: userMessage }),
});

let rawText = await response.text();
    console.log(" Raw response:", rawText);
```

The CSS part is mention over here:

```
color: green;
```

Selector/class	What It Styles	Main Properties & Effects
body	Entire page	Font, padding, background
h1	Main heading	Space below
#chat	Chat container	Width, centering, background, padding, shadow
#chatBox	Message area	Height, scroll, space below
.message	All messages	Space below, line height
.message.user	User messages	Green color, right-aligned
.message.bot	oot Bot messages Dark gray, left-aligned	
input	Input field	Padding, width, font size

<pre>font-size: 16px; background-color: #2b8a3e; color: white; border: none; cursor: pointer;</pre>	button	Button	Padding, font size, color, no border
<pre>button:hover { background-color: #256e33; }</pre>	button:hover	Button (hover)	Darker green color

This is the frontend part of html, basically objects of the page:

Element	Purpose
<body></body>	Main container for the webpage content
<div id="chat"></div>	Contains all chat elements
<h1>Ask Perplexity</h1>	Displays the chat title
<div id="chatBox"></div 	Displays chat messages
<pre><input id="userInput"/></pre>	User types messages here
<pre><button onclick="sendMessage() "></button></pre>	Sends the user's message when clicked

Now the Script code that is handling all the logic:

Code blocks : from 1st till last	Reasons
<pre>const inputField = document.getElementById("userInput"); const chatBox = document.getElementById("chatBox");</pre>	Explanation: These lines grab two HTML elements by their IDs. inputField is likely a text input where users type messages. chatBox is the container where chat messages are displayed.
<pre>function appendMessage(sender, text, className) {</pre>	Explanation: This function adds a new message to the chat box. It takes three arguments: sender: Who sent the message (e.g., "You" or "Bot") text: The message content className: A CSS class for styling (e.g., "user", "bot")
<pre>const msgDiv = document.createElement("div"); msgDiv.className = `message \${className}`;</pre>	Explanation: msgDiv is a new <div> element created for the message. className adds classes for styling (e.g., "message bot").</div>
<pre>// Replace \n with for bot responses only if (className === "bot") { text = text.replace(/\n/g, " '); msgDiv.innerHTML = `\${sender}: \${text}`; } else { msgDiv.innerHTML = `\${sender}: \${escapeHTML(text)}`; } }</pre>	■ If it's a bot message (className === "bot"): ■ Newlines (\n) in the message are replaced with to display line breaks. ■ The message is formatted with the sender in bold, followed by a line break, then the message. ■ If it's not a bot message: ■ The message uses escapeHTML(text) (a function not shown here, but typically used to prevent XSS by escaping HTML special characters). ■ The message is formatted with the sender in bold, then the message text.
<pre>chatBox.appendChild(msgDiv); chatBox.scrollTop = chatBox.scrollHeight;</pre>	Explanation: • appendChild(msgDiv): Adds the new message to the chat box. • scrollTop = scrollHeight: Scrolls the chat box to the bottom, so the latest message is visible.
<pre>function escapeHTML(str) { return str.replace(/[&<>"']/g, (m) => ({ "&": "&", "<": "<", ">": ">", "": """, "": "'" }[m])); }</pre>	 1. /[&<>"']/g

This is a basic but important security measure.

```
async function sendMessage() {
   const response = await
   let rawText = await response.text();
   console.log(" Raw response: ", rawText);
   // / Remove <think>...</think>
   // 🗸 Remove all asterisks used for markdown
   console.error("X Fetch Error:", error);
   appendMessage("Bot", `X Network Error: ${error.message}`,
```

- 1. async function sendMessage() {
- async means this function can use await to handle promises (like network requests).
- Purpose: Sends a user's message and handles the bot's response.

2. Get User Input

```
const userMessage = inputField.value.trim();
if (!userMessage) return;
```

- inputField.value.trim():
 - Gets the text the user typed and removes extra spaces.
- if (!userMessage) return:
 - If the input is empty, the function stops here.

3. Display User Message

```
appendMessage("You", userMessage, "user");
inputField.value = "";
```

appendMessage(...):

javascript

- Adds the user's message to the chat box.
- inputField.value = "":
 - · Clears the input field for the next message.

4. Send Message to Server

```
try {
  const response = await
fetch("https://vansh-tyagi.app.n8n.cloud/webhook-test/ai-im
age", {
    method: "POST",
    headers: {
        "Content-Type": "application/json",
    },
    body: JSON.stringify({ text: userMessage }),
});
```

- fetch(...):
 - Sends a POST request to the server with the user's message.

- Content-Type: application/json:
 - Tells the server the data is JSON.
- body: JSON.stringify({ text: userMessage }):
 - Sends the message as { "text": "your message" }.
- JSON.stringify() is a JavaScript function that converts a JavaScript object or value into a JSON-formatted string.
- Headers in the context of HTTP (the protocol used for web communication) are key-value pairs of information sent with every request from a client (like a browser) to a server, and with every response from the server back to the client

These headers provide important metadata about the request or response, such as:

- Content type (e.g., Content-Type: application/json tells the server or client what format the data is in)
- Authentication (e.g., Authorization: Bearer ... for login tokens)
- Caching instructions (e.g., Cache-Control: no-cache)
- Language preferences (e.g., Accept-Language: en-US)
- Request origin and user agent (e.g., User-Agent and Referer)
- Headers are used to help both sides understand how to process the request or response, manage security, control caching, and much more

5. Handle Server Response

```
javascript
let rawText = await response.text();
console.log(" Raw response:", rawText);
```

- response.text():
 - Gets the server's response as text.
- console.log(...):
 - Logs the raw response for debugging.

6. Clean Up the Response

```
// ✓ Remove outer { ... } if present
if (rawText.startsWith("{") && rawText.endsWith("}")) {
 rawText = rawText.slice(1, -1);
// remove first occurrence of "message:"
rawText = rawText.replace(/["']?message["']?\s*:\s*/, "");
// / Remove all asterisks used for markdown
rawText = rawText.replace(/\*/g, "");
        Removes <think>...</think>:
               Deletes any text between <think> and </think>.
        Removes outer curly braces { ... }:
                If the response is wrapped in curly braces, removes them.
        Removes "message:":
                Removes the first occurrence of message: (with optional
                quotes and spaces).
```

- Removes asterisks *:
 - Removes all asterisks (often used for markdown formatting).

7. Display Bot Response

javascript

```
appendMessage("Bot", rawText, "bot");
```

- appendMessage(...):
 - Adds the cleaned-up bot response to the chat box.

8. Error Handling

- Logs the error.
- appendMessage(...):
 - Shows an error message in the chat box.

```
inputField.addEventListener("keypress", (e) => {
   if (e.key === "Enter") sendMessage();
});
```

Code Part	What It Does
<pre>inputField.addEventListener("keypre ss",)</pre>	Listens for key presses in the input field
(e) => { }	Runs code when a key is pressed
if (e.key === "Enter")	Checks if the Enter key was pressed
sendMessage();	Calls the send message function



You: hello, i'm vansh tyagi

Bot:

Hello, Vansh Tyagi! « It's nice to meet you. Is there something I can help you with today? Whether you have a question, need advice, or just want to chat—I'm here for it!

Let me know what brings you here!

Type your message... Send





