

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

DAY – 19

Date: Jul 17, 2025

LLaMA 3 Chat (via Ollama)

This project is a simple web-based chat interface that connects to a local LLaMA 3 API using Ollama. It allows you to send messages and receive AI responses in real-time.

STEP 1: Create the HTML file

Open your terminal and create a file named i.html:

```
vim i.html
```

```
step@step-HP-ProDesk-400-G5-SFF:~$ vim i.html
```

STEP 2: Write the HTML and JavaScript

```

step@step-HP-ProDesk-400-G5-SFF: ~
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>LLaMA 3 Chat</title>
  <style>
    body { font-family: sans-serif; margin: 20px; }
    #chat { width: 100%; height: 300px; border: 1px solid #ccc; padding: 10px; overflow-y: auto; white-space: pre-wrap; background: #f9f9f9; }
    #input { width: 80%; padding: 10px; }
    #send { padding: 10px; }
  </style>
</head>
<body>
  <h2>LLaMA 3 Chat (via Ollama)</h2>
  <div id="chat"></div><br>
  <input type="text" id="input" placeholder="Type a message..." />
  <button id="send">Send</button>

  <script>
    const chatBox = document.getElementById('chat');
    const input = document.getElementById('input');
    const sendBtn = document.getElementById('send');

    sendBtn.onclick = async () => {
      const userText = input.value.trim();
      if (!userText) return;

      appendMessage('You', userText);
      input.value = '';
      input.disabled = true;
      sendBtn.disabled = true;

      let aiMessage = '';
      appendMessage('LLaMA', '');

      const response = await fetch('http://localhost:11434/api/chat', {
        method: 'POST',

```

```
step@step-HP-ProDesk-400-G5-SFF: ~  
headers: { 'Content-Type': 'application/json' },  
body: JSON.stringify({  
  model: 'llama3',  
  messages: [{ role: 'user', content: userText }],  
  stream: true  
})  
});  
  
const reader = response.body.getReader();  
const decoder = new TextDecoder();  
  
while (true) {  
  const { value, done } = await reader.read();  
  if (done) break;  
  const chunk = decoder.decode(value);  
  const lines = chunk.split('\n').filter(line => line.trim());  
  
  for (const line of lines) {  
    try {  
      const json = JSON.parse(line);  
      const delta = json?.message?.content || '';  
      aiMessage += delta;  
      updateLastMessage('LLaMA', aiMessage);  
    } catch (e) {  
      console.error('Invalid JSON chunk:', line);  
    }  
  }  
}  
  
input.disabled = false;  
sendBtn.disabled = false;  
input.focus();  
};  
  
function appendMessage(sender, message) {  
  const div = document.createElement('div');  
  div.className = 'message';  
  65,1 68%
```

```
step@step-HP-ProDesk-400-G5-SFF: ~  
  
  for (const line of lines) {  
    try {  
      const json = JSON.parse(line);  
      const delta = json?.message?.content || '';  
      aiMessage += delta;  
      updateLastMessage('LLaMA', aiMessage);  
    } catch (e) {  
      console.error('Invalid JSON chunk:', line);  
    }  
  }  
}  
  
input.disabled = false;  
sendBtn.disabled = false;  
input.focus();  
};  
  
function appendMessage(sender, message) {  
  const div = document.createElement('div');  
  div.className = 'message';  
  div.innerHTML = `<strong>${sender}</strong> <span>${message}</span>`;  
  chatBox.appendChild(div);  
  chatBox.scrollTop = chatBox.scrollHeight;  
}  
  
function updateLastMessage(sender, newText) {  
  const messages = chatBox.getElementsByClassName('message');  
  if (!messages.length) return;  
  const last = messages[messages.length - 1];  
  const span = last.querySelector('span');  
  span.textContent = newText;  
  chatBox.scrollTop = chatBox.scrollHeight;  
}  
</script>  
</body>  
</html>
```

- This matches your streaming logic exactly.
- It uses fetch with stream: true.
- It updates the last message chunk by chunk.

STEP 3: Serve the file locally

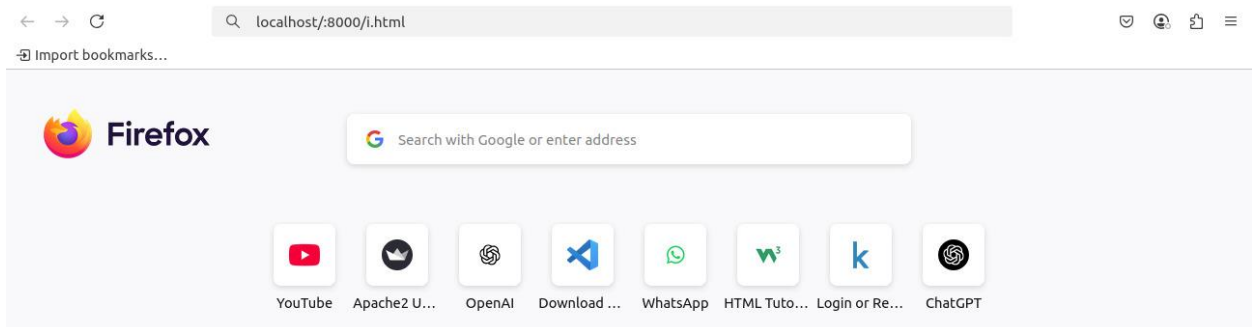
Run this in the same folder:

```
python3 -m http.server 8000
```

```
step@step-HP-ProDesk-400-G5-SFF:~$ python3 -m http.server 8000
Serving HTTP on 0.0.0.0 port 8000 (http://0.0.0.0:8000/) ...
```

This starts a simple HTTP server at:

```
http://localhost:8000/
```



Type a message, click Send, and see your conversation appear, streaming in real time!

