



“Single-File AI Chatbot with Real-Time LLM Integration”

Submitted by:

Mahir Faisal | BSSE 1316
Mehedi Hasan Rizon | BSSE 1326
Ibne Bin Rafid | BSSE 1330

Submitted to:

Md. Saeed Siddik
Assistant Professor

**Institute of Information Technology,
University of Dhaka**

Submitted on 8th November, 2025

Single-File AI Chatbot with Real-Time LLM Integration

1. Project Objective

To deliver a zero-dependency, single HTML file chatbot that instantly connects any user to a powerful Large Language Model (LLM) via [API](#), enabling conversational AI in under 10 seconds of setup.

2. Core Features

- One file only (index.html): no build tools, no node_modules
- Modern, responsive UI with message bubbles and auto-scroll
- Real-time “Thinking...” indicator
- Send a message via the **Send** button
- Direct backend LLM calls (Groq)
- Works locally

3. Technology Stack

Layer	Technology
Frontend	HTML5, CSS3, Vanilla JavaScript
Backend	Groq (llama-3.3-70b-versatile)
Deployment	Static file (no server needed)

9. Conclusion

A production-ready AI chatbot in one file, zero backend. Perfect for personal use, demos, prototypes, or embedding.

One file. One API key. Infinite conversations.

Ready to use instantly, open, and chat. Fully deployable in seconds.

Status: Complete | Live | Open-source friendly