bluetooth\_chat/  
│  
├── app.py  
├── chat.db # created automatically on first run  
├── requirements.txt  
└── templates/  
 └── index.html

Flask==2.2.5

(app.py

from flask import Flask, render\_template, request, jsonify  
from datetime import datetime  
import sqlite3, os  
  
app = Flask(\_\_name\_\_)  
DB\_PATH = 'chat.db'  
  
# --- Database Setup ---  
def init\_db():  
 if not os.path.exists(DB\_PATH):  
 conn = sqlite3.connect(DB\_PATH)  
 c = conn.cursor()  
 c.execute('''  
 CREATE TABLE messages (  
 id INTEGER PRIMARY KEY AUTOINCREMENT,  
 sender TEXT NOT NULL,  
 text TEXT NOT NULL,  
 time TEXT NOT NULL  
 )  
 ''')  
 c.execute('''  
 CREATE TABLE status (  
 id INTEGER PRIMARY KEY,  
 device TEXT  
 )  
 ''')  
 c.execute('INSERT INTO status (id, device) VALUES (1, NULL)')  
 conn.commit()  
 conn.close()  
  
  
def get\_db\_connection():  
 conn = sqlite3.connect(DB\_PATH)  
 conn.row\_factory = sqlite3.Row  
 return conn  
  
  
@app.route('/')  
def home():  
 return render\_template('index.html')  
  
  
# --- Chat Endpoints ---  
@app.route('/send', methods=['POST'])  
def send\_message():  
 data = request.get\_json()  
 text = data.get('message', '').strip()  
 if not text:  
 return jsonify({'error': 'Empty message'}), 400  
  
 time\_now = datetime.now().strftime('%H:%M')  
 conn = get\_db\_connection()  
 conn.execute('INSERT INTO messages (sender, text, time) VALUES (?, ?, ?)',  
 ('You', text, time\_now))  
 conn.commit()  
 conn.close()  
  
 return jsonify({'status': 'ok', 'message': {'sender': 'You', 'text': text, 'time': time\_now}})  
  
  
@app.route('/messages')  
def get\_messages():  
 conn = get\_db\_connection()  
 rows = conn.execute('SELECT sender, text, time FROM messages ORDER BY id ASC').fetchall()  
 conn.close()  
 return jsonify([dict(row) for row in rows])  
  
  
# --- Device Endpoints ---  
@app.route('/connect', methods=['POST'])  
def connect\_device():  
 data = request.get\_json()  
 device = data.get('device')  
 conn = get\_db\_connection()  
 conn.execute('UPDATE status SET device = ? WHERE id = 1', (device,))  
 conn.commit()  
 conn.close()  
 return jsonify({'status': 'connected', 'device': device})  
  
  
@app.route('/disconnect', methods=['POST'])  
def disconnect\_device():  
 conn = get\_db\_connection()  
 conn.execute('UPDATE status SET device = NULL WHERE id = 1')  
 conn.commit()  
 conn.close()  
 return jsonify({'status': 'disconnected'})  
  
  
@app.route('/status')  
def get\_status():  
 conn = get\_db\_connection()  
 row = conn.execute('SELECT device FROM status WHERE id = 1').fetchone()  
 conn.close()  
 return jsonify({'device': row['device']})  
  
  
if \_\_name\_\_ == '\_\_main\_\_':  
 init\_db()  
 app.run(debug=True)

## templates/index.html

<!doctype html>  
<html lang="ta">  
<head>  
 <meta charset="utf-8" />  
 <meta name="viewport" content="width=device-width,initial-scale=1" />  
 <title>Bluetooth Chat — Blue Theme</title>  
 <meta name="description" content="Bluetooth Chat — Blue themed frontend (HTML + CSS only)" />  
  
 <style>  
 /\* (Full CSS is the same as your provided theme) \*/  
 :root{ --bg-1: #071431; --bg-2: #092240; --card: rgba(255,255,255,0.04); --glass: rgba(255,255,255,0.06); --accent: #2fb3ff; --accent-2: #46a6ff; --muted: rgba(230,240,255,0.6); --in-msg: linear-gradient(180deg,#0dd7c1aa,#0bb3a7aa); --out-msg: linear-gradient(180deg,#1f6aa6aa,#154f92aa); --radius: 12px; --max-width: 1100px; }  
 \*{box-sizing:border-box}  
 html,body{height:100%}  
 body{margin:0;font-family:Inter, ui-sans-serif, system-ui, -apple-system, "Segoe UI", Roboto, "Helvetica Neue", Arial;background: radial-gradient(800px 400px at 10% 10%, rgba(47,179,255,0.05), transparent), linear-gradient(180deg,var(--bg-1), var(--bg-2));color:#eaf6ff;-webkit-font-smoothing:antialiased;-moz-osx-font-smoothing:grayscale;display:flex;align-items:center;justify-content:center;padding:28px;}  
 .wrap{width:100%;max-width:var(--max-width);border-radius:16px;overflow:hidden;display:grid;grid-template-columns:360px 1fr;gap:0;box-shadow: 0 10px 40px rgba(2,6,23,0.7), inset 0 1px 0 rgba(255,255,255,0.02);border: 1px solid rgba(255,255,255,0.03);background: linear-gradient(180deg, rgba(10,26,48,0.6), rgba(7,18,36,0.6));}  
 .sidebar{padding:20px;border-right: 1px solid rgba(255,255,255,0.03);background: linear-gradient(180deg, rgba(255,255,255,0.02), transparent);display:flex;flex-direction:column;gap:14px;}  
 .brand{display:flex;gap:12px;align-items:center}  
 .logo{width:48px;height:48px;border-radius:10px;background: linear-gradient(135deg,var(--accent),var(--accent-2));display:flex;align-items:center;justify-content:center;font-weight:700;color:#002233;box-shadow: 0 6px 18px rgba(46,150,255,0.12);flex: 0 0 48px}  
 .brand h1{margin:0;font-size:18px;letter-spacing:0.2px}  
 .brand p{margin:0;font-size:12px;color:var(--muted)}  
 .controls{display:flex;gap:10px;margin-top:6px}  
 .btn{appearance:none;border:0;padding:10px 12px;border-radius:10px;background:linear-gradient(180deg,var(--accent),var(--accent-2));color:#01263a;font-weight:600;cursor:pointer;box-shadow: 0 6px 18px rgba(47,179,255,0.12);transition:transform .12s ease, box-shadow .12s ease}  
 .btn:active{transform:translateY(1px)}  
 .btn.ghost{background:transparent;border:1px solid rgba(255,255,255,0.04);color:var(--muted);box-shadow:none}  
 .status-row{display:flex;justify-content:space-between;align-items:center;gap:8px;margin-top:8px}  
 .status{font-size:13px;color:var(--muted)}  
 .dot{width:10px;height:10px;border-radius:50%;background:linear-gradient(180deg,#10b981,#059669);box-shadow:0 3px 10px rgba(16,185,129,0.12)}  
 .device-list{margin-top:8px;display:flex;flex-direction:column;gap:10px;overflow:auto;padding-right:6px}  
 .device{display:flex;align-items:center;justify-content:space-between;gap:12px;padding:10px;border-radius:10px;background: linear-gradient(180deg, rgba(255,255,255,0.02), rgba(255,255,255,0.01));border:1px solid rgba(255,255,255,0.02)}  
 .device .meta{display:flex;flex-direction:column}  
 .device strong{font-size:14px}  
 .device small{font-size:12px;color:var(--muted)}  
 .empty{margin-top:18px;font-size:13px;color:var(--muted);background: linear-gradient(180deg, rgba(47,179,255,0.02), transparent);padding:12px;border-radius:10px;border:1px dashed rgba(255,255,255,0.02)}  
 .main{display:flex;flex-direction:column;min-height:520px;background: linear-gradient(180deg, rgba(255,255,255,0.01), transparent)}  
 .main .header{display:flex;align-items:center;justify-content:space-between;padding:18px;border-bottom:1px solid rgba(255,255,255,0.03);gap:12px}  
 .main .header .title{font-weight:700}  
 .main .header .sub{font-size:13px;color:var(--muted)}  
 .chat-area{padding:20px;flex:1;overflow:auto;display:flex;flex-direction:column;gap:12px;background-image: radial-gradient(1200px 400px at 95% 0%, rgba(70,166,255,0.02), transparent)}  
 .message{max-width:72%;padding:12px 14px;border-radius:14px;box-shadow: 0 6px 18px rgba(2,6,23,0.35);word-break:break-word;line-height:1.35;font-size:14px}  
 .message.in{align-self:flex-start;background: var(--in-msg);color:#022b2a;border: 1px solid rgba(255,255,255,0.02);border-bottom-left-radius:4px}  
 .message.out{align-self:flex-end;background: var(--out-msg);color:#eaf6ff;border: 1px solid rgba(255,255,255,0.02);border-bottom-right-radius:4px}  
 .meta-line{font-size:12px;color:var(--muted);margin-bottom:6px}  
 .composer{padding:16px;border-top:1px solid rgba(255,255,255,0.03);display:flex;gap:12px;align-items:center;background: linear-gradient(180deg, rgba(15,40,70,0.3), rgba(10,20,36,0.3))}  
 .input{flex:1;padding:12px 14px;border-radius:12px;border:1px solid rgba(255,255,255,0.04);background: rgba(255,255,255,0.02);color:inherit;font-size:14px;outline:none}  
 .input::placeholder{ color: rgba(230,246,255,0.45); }  
 .send{min-width:100px}  
 @media (max-width:880px){ .wrap{ grid-template-columns: 1fr; max-width:920px; } .sidebar{ display:none; } .main{ min-height: calc(100vh - 56px); border-radius:12px; } }  
 .device-list::-webkit-scrollbar, .chat-area::-webkit-scrollbar { height:8px; width:8px; }  
 .device-list::-webkit-scrollbar-thumb, .chat-area::-webkit-scrollbar-thumb { background: rgba(255,255,255,0.03); border-radius:8px; }  
 .btn:focus, .device button:focus, .input:focus { outline:2px solid rgba(47,179,255,0.18); outline-offset:2px; }  
 </style>  
</head>  
<body>  
 <div class="wrap" role="main" aria-label="Bluetooth Chat — Blue Theme">  
 <!-- SIDEBAR -->  
 <aside class="sidebar" aria-label="Devices sidebar">  
 <div class="brand" aria-hidden="false">  
 <div class="logo" aria-hidden="true">BC</div>  
 <div>  
 <h1>Bluetooth Chat</h1>  
 <p>Blue theme — Frontend UI (HTML + CSS)</p>  
 </div>  
 </div>  
  
 <div class="controls" role="group" aria-label="Device controls">  
 <button class="btn" type="button">சாதனங்கள் தேடு</button>  
 <button class="btn ghost" type="button">வெளிப்புறம்</button>  
 </div>  
  
 <div class="status-row" aria-hidden="false">  
 <div class="status">நிலை: <strong>இணைக்கவில்லை</strong></div>  
 <div class="dot" title="Disconnected" aria-hidden="true"></div>  
 </div>  
  
 <div class="device-list" aria-live="polite">  
 <!-- devices will be added here by JS -->  
 <div class="empty">  
 எந்தச் சாதனமும் கண்டறியப்படவில்லை — (UI-only மாதிரி)  
 </div>  
 </div>  
  
 <div style="margin-top:auto;font-size:12px;color:var(--muted)">  
 <div style="margin-bottom:6px">குறிப்பு:</div>  
 <div>இந்த பக்கம் frontend UI + mock Bluetooth. Web Bluetooth செயல்பாடு சேர்க்க வேண்டுமானால் real API பயன்படுத்தவும்.</div>  
 </div>  
 </aside>  
  
 <!-- CHAT MAIN -->  
 <section class="main" aria-label="Chat area">  
 <div class="header">  
 <div>  
 <div class="title">ப்ளூடூத் சாட்</div>  
 <div class="sub">Text-only chat — Blue theme frontend</div>  
 </div>  
 <d