College chatbot

Programming languages

HTML

CSS

JAVASCRIPT

SERVER.JS

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8" />

  <meta name="viewport" content="width=device-width, initial-scale=1.0"/>

  <title>College Chatbot</title>

  <link rel="stylesheet" href="style.css"/>

</head>

<body>

  <div class="chat-container">

    <h2>💬 College Chatbot</h2>

    <div id="chat-box" class="chat-box"></div>

    <div class="input-area">

      <input id="user-input" type="text" placeholder="Type your message..." />

      <button onclick="sendMessage()">Send</button>

    </div>

  </div>

  <script src="script.js"></script>

</body>

</html>

body {

  font-family: Arial, sans-serif;

  display: flex;

  justify-content: center;

  align-items: center;

  height: 100vh;

  background: #0f1111;

}

.chat-container {

  width: 400px;

  background: rgb(163, 96, 96);

  padding: 20px;

  border-radius: 12px;

  box-shadow: 0 4px 10px rgba(225, 219, 219, 0.2);

  display: flex;

  flex-direction: column;

}

h2 {

  text-align: center;

  margin-bottom: 10px;

}

.chat-box {

  flex-grow: 1;

  border: 1px solid #ccc;

  border-radius: 8px;

  padding: 10px;

  overflow-y: auto;

  margin-bottom: 10px;

  height: 300px;

}

.message {

  margin: 5px 0;

  padding: 8px 12px;

  border-radius: 10px;

  max-width: 70%;

}

.user {

  background: #0078ff;

  color: white;

  margin-left: auto;

}

.bot {

  background: #eee;

  color: black;

  margin-right: auto;

}

.input-area {

  display: flex;

  gap: 5px;

}

input {

  flex-grow: 1;

  padding: 10px;

  border: 1px solid #ccc;

  border-radius: 8px;

}

button {

  padding: 10px 15px;

  border: none;

  border-radius: 8px;

  background: #0078ff;

  color: white;

  cursor: pointer;

}

button:hover {

  background: #005ec7;

}

async function sendMessage() {

  const inputBox = document.getElementById("user-input");

  const chatBox = document.getElementById("chat-box");

  const userMessage = inputBox.value.trim();

  if (!userMessage) return;

  // Show user message

  chatBox.innerHTML += `<div class="message user">${userMessage}</div>`;

  inputBox.value = "";

  chatBox.scrollTop = chatBox.scrollHeight;

  try {

    // Send to backend

    const res = await fetch("http://localhost:3001/chat", {

      method: "POST",

      headers: { "Content-Type": "application/json" },

      body: JSON.stringify({ message: userMessage }) // ✅ must be "message"

    });

    const data = await res.json();

    const botReply = data.reply || "⚠️ No reply from server.";

    // Show bot reply

    chatBox.innerHTML += `<div class="message bot">${botReply}</div>`;

    chatBox.scrollTop = chatBox.scrollHeight;

  } catch (error) {

    chatBox.innerHTML += `<div class="message bot">❌ Error connecting to server.</div>`;

  }

}

console.log("🚀 Starting College Chatbot server...");

const express = require("express");

const cors = require("cors");

const app = express();

const PORT = 3001;

app.use(cors());

app.use(express.json());

// ---------------- COLLEGE DATA ----------------

const college = {

  name: "BVVS Shree S R Kanthi Science, Arts and Commerce College, Mudhol",

  location: "Mudhol, Karnataka, India",

  principal: "Prof. Basavaraj Jarakunti",

  hod: "Prof. Basavaraj Lingaraddi (BCA Department)",

  courses: ["BCA", "B.Sc", "B.A"],

  bca: {

    duration: "3 years",

    fees: "Starting from ₹20,000",

    examFees: "₹1600 per semester",

    facilities: [

      "Separate computer labs with modern systems/monitors",

      "24/7 Wi-Fi internet connection",

      "Library"

    ],

    teachers: [

      "Jyoti Kalal Ma'am (students’ favorite)",

      "Kavita S Ma'am",

      "Shushma Divanad Ma'am",

      "Laxmi Ma'am",

      "Basavaraj Lingaraddi Sir",

      "Veena Ma'am (English)"

    ],

    contact: "9686474724"

  }

};

// ---------------- INTENTS & SYNONYMS ----------------

const intents = {

  "college name": ["name of the college", "college name", "what is the college name", "college called"],

  "location": ["where is the college", "college location", "address", "place"],

  "courses": ["courses offered", "what are the courses", "programs", "degrees", "branches"],

  "principal": ["who is the principal", "head of college"],

  "hod": ["who is the hod", "bca hod", "head of bca department"],

  "bca course": ["about bca", "bca details", "bca duration", "bca info"],

  "fees": ["bca fees", "college fees", "tuition fees", "exam fees"],

  "facilities": ["labs", "wifi", "wi-fi", "internet", "library", "infrastructure", "college facilities"],

  "teachers": ["faculty", "lecturers", "professors", "bca teachers"],

  "contact": ["phone", "mobile", "contact number", "how to contact"],

  "placements": ["placement", "jobs", "career", "future"]

};

// ---------------- MATCHING LOGIC ----------------

function replyForIntent(intent) {

  switch (intent) {

    case "college name":

      return `The name of the college is ${college.name}.`;

    case "location":

      return `The college is located in ${college.location}.`;

    case "courses":

      return `We offer ${college.courses.join(", ")}.`;

    case "principal":

      return `The principal of the college is ${college.principal}.`;

    case "hod":

      return `The HOD of BCA is ${college.hod}.`;

    case "bca course":

      return `BCA is a ${college.bca.duration} course with a bright future in IT and computer applications.`;

    case "fees":

      return `BCA fees start from ${college.bca.fees}, and semester exam fees are ${college.bca.examFees}.`;

    case "facilities":

      return `Facilities include ${college.bca.facilities.join(", ")}.`;

    case "teachers":

      return `BCA teachers: ${college.bca.teachers.join(", ")}.`;

    case "contact":

      return `For admissions/enquiries, contact: ${college.bca.contact}.`;

    case "placements":

      return "Our BCA program prepares students for roles in software development and IT services, and for higher studies like MCA.";

    default:

      return null;

  }

}

function findAnswer(raw) {

  const msg = raw.toLowerCase().trim();

  // Greetings

  if (["hi", "hii", "hello", "helo", "hey"].includes(msg)) {

    return "Hello! How are you? How can I help you today?";

  }

  // Direct includes on intent names

  for (const intent of Object.keys(intents)) {

    if (msg.includes(intent)) {

      return replyForIntent(intent);

    }

  }

  // Synonyms

  for (const [intent, list] of Object.entries(intents)) {

    if (list.some(alt => msg.includes(alt))) {

      return replyForIntent(intent);

    }

  }

  // Helpful fallback

  return "I didn’t catch that. You can ask about college name, location, courses, principal, HOD, BCA fees, facilities, teachers, placements, or contact.";

}

// ---------------- API ----------------

app.post("/chat", (req, res) => {

  const message = (req.body.message || req.body.question || "").toString();

  const reply = findAnswer(message);

  res.json({ reply });

});

// ---------------- START ----------------

app.listen(PORT, () => {

  console.log(`✅ Server running on http://localhost:${PORT}`);

});