

```
const express = require('express');
const cors = require('cors');
const path = require('path');
const fs = require('fs');
const bcrypt = require('bcrypt');
const SibApiV3Sdk = require('sib-api-v3-sdk'); // Import Brevo SDK
require('dotenv').config(); // Load environment variables from .env
```

```
const app = express();
app.use(cors());
app.use(express.json());
app.use(express.urlencoded({ extended: true }));
```

```
// Serve static files from the 'public' directory
app.use(express.static(path.join(__dirname, 'public')));
```

```
// Load existing data from JSON files
```

```
let users = [];
let hospitals = [];
let bloodDonors = [];
let ambulances = [];
```

```
const loadData = () => {
  if (fs.existsSync('users.json')) {
    users = JSON.parse(fs.readFileSync('users.json'));
  }
  if (fs.existsSync('hospitals.json')) {
    hospitals = JSON.parse(fs.readFileSync('hospitals.json'));
  }
  if (fs.existsSync('donors.json')) {
    bloodDonors = JSON.parse(fs.readFileSync('donors.json'));
  }
}
```

```

    }
    if (fs.existsSync('ambulances.json')) {
        ambulances = JSON.parse(fs.readFileSync('ambulances.json'));
    }
};

// Save data to JSON files
const saveData = () => {
    fs.writeFileSync('users.json', JSON.stringify(users, null, 2));
    fs.writeFileSync('hospitals.json', JSON.stringify(hospitals, null, 2));
    fs.writeFileSync('donors.json', JSON.stringify(bloodDonors, null, 2));
    fs.writeFileSync('ambulances.json', JSON.stringify(ambulances, null, 2));
};

// Load data when the server starts
loadData();

// Define a simple route
app.get('/', (req, res) => {
    res.send('Medical Emergency App Server is Running!');
});

// User Registration Route
app.post('/register', async (req, res) => {
    const { username, password, email } = req.body; // Add email to registration
    if (username && password && email) {
        const hashedPassword = await bcrypt.hash(password, 10);
        users.push({ username, password: hashedPassword, email }); // Store email
        saveData();
        console.log(`User registered: ${username}`);
        return res.send(`User ${username} registered successfully!`);
    }
});

```

```

    }

    return res.status(400).send('Failed to register user. Missing username, password, or email.');
```

});

// User Login Route

```

app.post('/login', async (req, res) => {
    const { username, password } = req.body;
    const user = users.find(u => u.username === username);
    if (user && await bcrypt.compare(password, user.password)) {
        console.log(`User logged in: ${username}`);
        return res.send(`Welcome back, ${username}!`);
    }
    return res.status(401).send('Invalid username or password.');
```

});

// Hospital Registration Route

```

app.post('/hospitalRegister', (req, res) => {
    const { hospitalName, specialist, doctorName, experience, location, fees } = req.body;
    if (!hospitalName || !specialist || !doctorName || !experience || !location || fees === undefined)
    {
        return res.status(400).send('All fields are required!');
    }

    const hospitalEntry = { hospitalName, specialist, doctorName, experience, location,
consultationFees: fees };
    hospitals.push(hospitalEntry);
    saveData();
    console.log('Registered Hospital:', hospitalEntry);
    res.send('Hospital registered successfully!');
```

});

// View Registered Hospitals Route

```
app.get('/hospitals', (req, res) => {  
  res.json(hospitals);  
});
```

```
// Delete Hospital Route
```

```
app.delete('/hospitals/:hospitalName', (req, res) => {  
  const { hospitalName } = req.params;  
  const index = hospitals.findIndex(h => h.hospitalName === hospitalName);  
  
  if (index !== -1) {  
    hospitals.splice(index, 1);  
    saveData();  
    console.log(`Hospital deleted: ${hospitalName}`);  
    return res.send(`Hospital ${hospitalName} deleted successfully.`);  
  }  
  
  return res.status(404).send('Hospital not found.');
```

```
// Blood Donor Registration Route (with blood group dropdown)
```

```
app.post('/registerBloodDonor', (req, res) => {  
  const { donorName, bloodGroup, location, email } = req.body;  
  const bloodGroups = ['A+', 'A-', 'B+', 'B-', 'AB+', 'AB-', 'O+', 'O-']; // Define available blood groups  
  
  if (!donorName || !bloodGroup || !location || !email) {  
    return res.status(400).send('All fields are required!');  
  }  
  
  if (!bloodGroups.includes(bloodGroup)) {  
    return res.status(400).send('Invalid blood group selected!');  
  }  
}
```

```
const donorEntry = { donorName, bloodGroup, location, email }; // Ensure email is correctly set
bloodDonors.push(donorEntry);
saveData();
console.log('Registered Blood Donor:', donorEntry);
res.send('Blood donor registered successfully!');
});
```

```
// View Blood Donors Route
```

```
app.get('/donors', (req, res) => {
  res.json(bloodDonors);
});
```

```
// Delete Donor Route
```

```
app.delete('/donors/:donorName', (req, res) => {
  const { donorName } = req.params;
  const index = bloodDonors.findIndex(d => d.donorName === donorName);

  if (index !== -1) {
    bloodDonors.splice(index, 1);
    saveData();
    console.log(`Donor deleted: ${donorName}`);
    return res.send(`Donor ${donorName} deleted successfully.`);
  }

  return res.status(404).send('Donor not found.');
```

```
// Import and configure Brevo API instance
```

```
const apiInstance = new SibApiV3Sdk.TransactionalEmailsApi();
const apiKey = process.env.BREVO_API_KEY; // Securely using the API key from the .env file
```

```
SibApiV3Sdk.ApiClient.instance.authentications['api-key'].apiKey = apiKey;
```

```
// Send Blood Donation Alert Route
```

```
app.post('/alert', (req, res) => {
```

```
  const { bloodGroup, message } = req.body;
```

```
  console.log(`Alert request received: Blood Group - ${bloodGroup}, Message - ${message}`);
```

```
  const recipientEmails = bloodDonors
```

```
    .filter(donor => donor.bloodGroup === bloodGroup) // Filter donors by blood group
```

```
    .map(donor => ({ email: donor.email, name: donor.donorName })); // Prepare email & name for each donor
```

```
  if (recipientEmails.length === 0) {
```

```
    return res.status(404).send('No registered donors found to send the alert.');
```

```
  }
```

```
// Start the server
```

```
const port = process.env.PORT || 5000;
```

```
app.listen(port, () => {
```

```
  console.log(`Server is running on port ${port}`);
```

```
});
```

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="UTF-8">
```

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

```
  <title>User Registration</title>
```

```
  <link rel="stylesheet"
```

```
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
```

```
  <style>
```

```
body {  
    display: flex;  
    justify-content: center;  
    align-items: center;  
    height: 100vh;  
    background-color: #f8f9fa;  
}  
.registration-container {  
    background-color: white;  
    padding: 30px;  
    border-radius: 8px;  
    box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);  
    width: 400px; /* Fixed width for uniformity */  
}  
.form-group {  
    margin-bottom: 20px; /* Increased space between fields */  
}  
</style>
```

```
</head>
```

```
<body>
```

```
<header>
```

```
 <!-- Use the actual file name -->
```

```
</header>
```

```
<div class="registration-container">
```

```
<h1 class="text-center">User Registration</h1>
```

```
<form id="registrationForm">
  <div class="form-group">
    <label for="username">Username:</label>
    <input type="text" class="form-control" id="username" name="username" required>
  </div>
  <div class="form-group">
    <label for="email">Email:</label>
    <input type="email" class="form-control" id="email" name="email" required>
  </div>
  <div class="form-group">
    <label for="password">Password:</label>
    <input type="password" class="form-control" id="password" name="password" required>
  </div>
  <button type="submit" class="btn btn-primary btn-block">Register</button>
  <p class="mt-3 text-center">Already have an account? <a href="login.html">Login
here</a>.</p>
</form>
</div>
```

```
<script>
document.getElementById('registrationForm').onsubmit = async function(event) {
  event.preventDefault();
  const username = document.getElementById('username').value;
  const email = document.getElementById('email').value; // Get email value
  const password = document.getElementById('password').value;

  const response = await fetch('/register', {
    method: 'POST',
    headers: { 'Content-Type': 'application/json' },
    body: JSON.stringify({ username, email, password }), // Include email in the request
  });
};
```



```
    const result = await response.text();  
    alert(result);  
    if (response.ok) {  
        window.location.href = 'login.html';  
    }  
};  
</script>
```

```
<!-- Cami Button to start the assistant -->
```

```
<button id="camiButton" class="camiButton">CAMI</button>
```

```
<!-- Stop Button (initially hidden) to stop the assistant -->
```

```
<button id="stopButton" style="display:none;">Stop</button>
```

```
<!-- This is where the assistant's messages will be displayed -->
```

```
<div id="assistantMessages"></div>
```

```
<!-- Link to voice-assistant.js -->
```

```
<script src="voice-assistant.js"></script>
```

```
</body>
```

```
</html>
```

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="UTF-8">
```

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

```
  <title>Medical Emergency App</title>
```

```
<link rel="stylesheet" href="style.css">
</head>
<body>
  <header>
    
  </header>

  <div class="container">
    <h1>Welcome to the Medical Emergency Coordination App</h1>
    <div class="buttons">
      <a href="register.html" class="button">Register</a>
      <a href="login.html" class="button">Login</a>
    </div>
  </div>

  <!-- Cami Button to start the assistant -->
  <button id="camiButton" class="camiButton">CAMI</button>

  <!-- Stop Button (initially hidden) to stop the assistant -->
  <button id="stopButton" style="display:none;">Stop</button>

  <!-- This is where the assistant's messages will be displayed -->
  <div id="assistantMessages"></div>

  <!-- Link to voice-assistant.js -->
  <script src="voice-assistant.js"></script>
```

```
</body>
```

```
</html>
```

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
  <meta charset="UTF-8">
```

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

```
  <title>User Login</title>
```

```
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
```

```
  <style>
```

```
    body {
```

```
      display: flex;
```

```
      justify-content: center;
```

```
      align-items: center;
```

```
      height: 100vh;
```

```
      background-color: #f8f9fa;
```

```
    }
```

```
    .login-container {
```

```
      background-color: white;
```

```
      padding: 30px;
```

```
      border-radius: 8px;
```

```
      box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);
```

```
      width: 400px; /* Fixed width for uniformity */
```

```
    }
```

```
    .form-group {
```

```
      margin-bottom: 20px; /* Increased space between fields */
```

```
    }
```

```
</style>
```

```
</head>

<body>

  <header>

    

  </header>


  <!-- Cami Button to start the assistant -->

  <button id="camiButton" class="camiButton">CAMI</button>


  <!-- Stop Button (initially hidden) to stop the assistant -->

  <button id="stopButton" style="display:none;">Stop</button>


  <!-- This is where the assistant's messages will be displayed -->

  <div id="assistantMessages"></div>


  <!-- Link to voice-assistant.js -->

  <script src="voice-assistant.js"></script>


  <div class="login-container">

    <h1 class="text-center">User Login</h1>

    <form id="loginForm">

      <div class="form-group">

        <label for="username">Username:</label>

        <input type="text" class="form-control" id="username" name="username" required>

      </div>

      <div class="form-group">

        <label for="password">Password:</label>

        <input type="password" class="form-control" id="password" name="password" required>

      </div>

      <button type="submit" class="btn btn-primary btn-block">Login</button>

    </form>

  </div>

</body>

</html>
```

```
        <p class="mt-3 text-center">Forgot your password? <a href="forgot_password.html">Reset it
here</a>.</p>
```

```
    </form>
```

```
</div>
```

```
<script>
```

```
    document.getElementById('loginForm').onsubmit = async function(event) {
```

```
        event.preventDefault();
```

```
        const username = document.getElementById('username').value;
```

```
        const password = document.getElementById('password').value;
```

```
        const response = await fetch('/login', {
```

```
            method: 'POST',
```

```
            headers: { 'Content-Type': 'application/json' },
```

```
            body: JSON.stringify({ username, password }),
```

```
        });
```

```
        const result = await response.text();
```

```
        alert(result);
```

```
        if (response.ok) {
```

```
            window.location.href = 'dashboard.html';
```

```
        }
```

```
    };
```

```
</script>
```

```
</body>
```

```
</html>
```

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>

  <meta charset="UTF-8">

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

  <title>Hospital Registration</title>

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

</head>

<body>

  <header>

    

  </header>


  <!-- Cami Sphere as the button -->

  <div id="cami-sphere" style="position: fixed; bottom: 20px; right: 20px; width: 60px; height: 60px;
background-color: #4CAF50; border-radius: 50%; display: flex; justify-content: center; align-items:
center; color: white; cursor: pointer; font-size: 16px; text-align: center; z-index: 9999;">

    <span style="font-weight: bold;">Cami</span>

  </div>


  <!-- Manual Stop Button -->

  <button id="stop-btn" style="position: fixed; bottom: 20px; left: 20px; background-color: red; color:
white; padding: 10px 15px; border: none; border-radius: 5px; cursor: pointer; z-index: 9999;">

    Stop Cami

  </button>


  <!-- Link to the JS file that includes Cami's functionality -->

  <script src="/cami.js"></script>


  <div class="container">

    <h1>Register a New Hospital</h1>

    <form id="hospitalRegistrationForm">
```

<label for="hospitalName">Hospital Name:</label>

<input type="text" id="hospitalName" name="hospitalName" required>

<label for="specialist">Specialist:</label>

<input type="text" id="specialist" name="specialist" required>

<label for="doctorName">Doctor's Name:</label>

<input type="text" id="doctorName" name="doctorName" required>

<!-- Dropdown for Experience -->

<label for="experience">Experience:</label>

<select id="experience" name="experience" required>

<option value="" disabled selected>Select Years of Experience</option>

<option value="0">0 years</option>

<option value="1">1 year</option>

<option value="2">2 years</option>

<option value="3">3 years</option>

<option value="4">4 years</option>

<option value="5">5 years</option>

<option value="6">6 years</option>

<option value="7">7 years</option>

<option value="8">8 years</option>

<option value="9">9 years</option>

<option value="10">10 years</option>

<option value="11">11 years</option>

<option value="12">12 years</option>

<option value="13">13 years</option>

<option value="14">14 years</option>

<option value="15">15 years</option>

<option value="16">16 years</option>

<option value="17">17 years</option>

```
<option value="18">18 years</option>
<option value="19">19 years</option>
<option value="20">20 years</option>
<!-- Broader options for experience -->
<option value="21">21 years+</option>
<option value="25">25 years+</option>
<option value="30">30 years+</option>
<option value="35">35 years+</option>
<option value="40">40 years+</option>
<option value="45">45 years+</option>
<option value="50">50 years+</option>
</select>
```

```
<label for="location">Location:</label>
```

```
<input type="text" id="location" name="location" required>
```

```
<label for="fees">Consultation Fees (₹):</label>
```

```
<input type="number" id="fees" name="fees" required min="0">
```

```
<button type="submit">Register Hospital</button>
```

```
</form>
```

```
</div>
```

```
<script>
```

```
document.getElementById('hospitalRegistrationForm').onsubmit = async function(event) {
  event.preventDefault();

  const hospitalName = document.getElementById('hospitalName').value;
  const specialist = document.getElementById('specialist').value;
  const doctorName = document.getElementById('doctorName').value;
  const experience = document.getElementById('experience').value;
  const location = document.getElementById('location').value;
```



```
const fees = document.getElementById('fees').value;

const response = await fetch('/hospitalRegister', {
  method: 'POST',
  headers: { 'Content-Type': 'application/json' },
  body: JSON.stringify({ hospitalName, specialist, doctorName, experience, location, fees }),
});

const result = await response.text();
alert(result);
if (response.ok) {
  window.location.href = 'dashboard.html';
}
};
</script>
</body>
</html>
```

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Registered Hospitals</title>
  <link rel="stylesheet" href="style.css">
  <style>
    body {
      margin: 0;
      padding: 20px;
```

```
    font-family: Arial, sans-serif;
}
```

```
.container {
    max-width: 800px;
    margin: 0 auto;
}
```

```
h1 {
    text-align: center;
    margin-bottom: 20px;
}
```

```
/* Make the table container scrollable if the list is long */
.table-container {
    max-height: 400px; /* Adjust the height as needed */
    overflow-y: auto;
    border: 1px solid #ccc;
}
```

```
table {
    width: 100%;
    border-collapse: collapse;
}
```

```
th, td {
    border: 1px solid #ddd;
    padding: 8px;
    text-align: left;
}
```

```

th {
    background-color: #f4f4f4;
    position: sticky; /* Keeps the header fixed while scrolling */
    top: 0;
}

.delete-btn {
    background-color: #ff4d4d;
    color: white;
    border: none;
    padding: 5px 10px;
    cursor: pointer;
}

.delete-btn:hover {
    background-color: #ff0000;
}
</style>
</head>
<body>
    <header>
        
    </header>

    <!-- Cami Sphere as the button -->

    <div id="cami-sphere" style="position: fixed; bottom: 20px; right: 20px; width: 60px; height: 60px;
background-color: #4CAF50; border-radius: 50%; display: flex; justify-content: center; align-items:
center; color: white; cursor: pointer; font-size: 16px; text-align: center; z-index: 9999;">

        <span style="font-weight: bold;">Cami</span>
    </div>

    <!-- Manual Stop Button -->

```

```
<button id="stop-btn" style="position: fixed; bottom: 20px; left: 20px; background-color: red; color: white; padding: 10px 15px; border: none; border-radius: 5px; cursor: pointer; z-index: 9999;">
```

```
    Stop Cami
```

```
</button>
```

```
<!-- Link to the JS file that includes Cami's functionality -->
```

```
<script src="/cami.js"></script>
```

```
<div class="container">
```

```
    <h1>Registered Hospitals</h1>
```

```
    <div class="table-container">
```

```
        <table>
```

```
            <thead>
```

```
                <tr>
```

```
                    <th>Hospital Name</th>
```

```
                <th>
```

```
                    Specialist:
```

```
                    <select id="specialistFilter" onchange="filterHospitals()">
```

```
                        <option value="">All</option>
```

```
                        <option value="Cardiologist">Cardiologist</option>
```

```
                        <option value="Dermatologist">Dermatologist</option>
```

```
                        <option value="Pediatrician">Pediatrician</option>
```

```
                        <option value="Orthopedic">Orthopedic</option>
```

```
                        <option value="General Surgeon">General Surgeon</option>
```

```
                        <option value="Neurologist">Neurologist</option>
```

```
                        <option value="Gynecologist">Gynecologist</option>
```

```
                        <option value="Psychiatrist">Psychiatrist</option>
```

```
                        <option value="ENT Specialist">ENT Specialist</option>
```

```
                        <option value="Endocrinologist">Endocrinologist</option>
```

```
                        <option value="Oncologist">Oncologist</option>
```

```

        <option value="Urologist">Urologist</option>
        <option value="Radiologist">Radiologist</option>
        <option value="Pathologist">Pathologist</option>
        <option value="Dental Surgeon">Dental Surgeon</option>
        <option value="General Physician">General Physician</option>
        <!-- Add more specialists as needed -->
    </select>
</th>
<th>Doctor's Name</th>
<th>Experience (years)</th>
<th>Location</th>
<th>Consultation Fees (₹)</th>
<th>Action</th>
</tr>
</thead>
<tbody id="hospitalList"></tbody>
</table>
</div>
</div>

```

```

<script>
    async function fetchHospitals() {
        const response = await fetch('/hospitals');
        const hospitals = await response.json();
        const hospitalList = document.getElementById('hospitalList');

        hospitalList.innerHTML = ''; // Clear existing list
        hospitals.forEach(hospital => {
            const listItem = document.createElement('tr'); // Create table row

            listItem.innerHTML = `

```

```

        <td>${hospital.hospitalName}</td>
        <td>${hospital.specialty}</td>
        <td>${hospital.doctorName}</td>
        <td>${hospital.experience}</td>
        <td>${hospital.location}</td>
        <td>${hospital.consultationFees}</td>
        <td><button class="delete-btn">Delete</button></td>
    `;

```

```

const deleteButton = listItem.querySelector('.delete-btn');
deleteButton.onclick = async () => {
    const delResponse = await fetch(`/hospitals/${hospital.hospitalName}`, {
        method: 'DELETE'
    });
    const delResult = await delResponse.text();
    alert(delResult);
    fetchHospitals(); // Refresh list after deletion
};

```

```

        hospitalList.appendChild(listItem);
    });
}

```

```

function filterHospitals() {
    const selectedSpecialist = document.getElementById('specialistFilter').value;
    const hospitalRows = document.querySelectorAll('#hospitalList tr');

    hospitalRows.forEach(row => {
        const specialistCell = row.cells[1].innerText; // Assuming specialty is in the second cell
        if (selectedSpecialist === "" || specialistCell === selectedSpecialist) {
            row.style.display = "";
        }
    });
}

```

```
    } else {  
        row.style.display = 'none';  
    }  
});  
}
```

```
    fetchHospitals();
```

```
</script>
```

```
</body>
```

```
</html>
```

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
    <meta charset="UTF-8">
```

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

```
    <title>Register Blood Donor</title>
```

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

```
</head>
```

```
<body>
```

```
    <header>
```

```
        
```

```
    </header>
```

```
<!-- Cami Sphere as the button -->
```

```
<div id="cami-sphere" style="position: fixed; bottom: 20px; right: 20px; width: 60px; height: 60px;  
background-color: #4CAF50; border-radius: 50%; display: flex; justify-content: center; align-items:  
center; color: white; cursor: pointer; font-size: 16px; text-align: center; z-index: 9999;">
```

```
    <span style="font-weight: bold;">Cami</span>
```

```
</div>
```

```
<!-- Manual Stop Button -->
```

```
<button id="stop-btn" style="position: fixed; bottom: 20px; left: 20px; background-color: red; color: white; padding: 10px 15px; border: none; border-radius: 5px; cursor: pointer; z-index: 9999;">
```

```
    Stop Cami
```

```
</button>
```

```
<!-- Link to the JS file that includes Cami's functionality -->
```

```
<script src="/cami.js"></script>
```

```
<div class="container">
```

```
    <h1>Register as a Blood Donor</h1>
```

```
    <form id="donorRegistrationForm">
```

```
        <label for="donorName">Name:</label>
```

```
        <input type="text" id="donorName" name="donorName" required>
```

```
        <label for="bloodGroup">Blood Group:</label>
```

```
        <select id="bloodGroup" name="bloodGroup" required>
```

```
            <option value="">Select Blood Group</option>
```

```
            <option value="A+">A+</option>
```

```
            <option value="A-">A-</option>
```

```
            <option value="B+">B+</option>
```

```
            <option value="B-">B-</option>
```

```
            <option value="AB+">AB+</option>
```

```
            <option value="AB-">AB-</option>
```

```
            <option value="O+">O+</option>
```

```
            <option value="O-">O-</option>
```

```
        </select>
```

```
        <label for="location">Location:</label>
```

```
        <input type="text" id="location" name="location" required>
```

```
        <label for="email">Email:</label>
```



```
<input type="email" id="email" name="email" required>
```

```
<button type="submit">Register Donor</button>
```

```
</form>
```

```
</div> <!-- Closing container div -->
```

```
<script>
```

```
document.getElementById('donorRegistrationForm').addEventListener('submit', async  
function(event) {
```

```
    event.preventDefault(); // Prevent the form from submitting the traditional way
```

```
    const donorData = {
```

```
        donorName: this.donorName.value,
```

```
        bloodGroup: this.bloodGroup.value,
```

```
        location: this.location.value,
```

```
        email: this.email.value
```

```
    };
```

```
    try {
```

```
        const response = await fetch('/registerBloodDonor', {
```

```
            method: 'POST',
```

```
            headers: {
```

```
                'Content-Type': 'application/json'
```

```
            },
```

```
            body: JSON.stringify(donorData)
```

```
        });
```

```
        const result = await response.text();
```

```
        alert(result); // Alert the user with the response from the server
```

```
        if (response.ok) {
```

```
            this.reset(); // Reset form fields on success
```

```
    }  
    } catch (error) {  
        console.error('Error registering donor:', error);  
        alert('Error registering donor. Please try again.');
```



```
    }  
});  
</script>  
</body>  
</html>
```

```
<!DOCTYPE html>  
<html lang="en">  
<head>  
    <meta charset="UTF-8">  
    <meta name="viewport" content="width=device-width, initial-scale=1.0">  
    <title>Registered Blood Donors</title>  
    <link rel="stylesheet" href="style.css">  
</head>  
<body>  
    <header>  
         <!-- Use the actual file name -->  
    </header>  
  
    <!-- Cami Sphere as the button -->  
    <div id="cami-sphere" style="position: fixed; bottom: 20px; right: 20px; width: 60px; height: 60px;  
background-color: #4CAF50; border-radius: 50%; display: flex; justify-content: center; align-items:  
center; color: white; cursor: pointer; font-size: 16px; text-align: center; z-index: 9999;">  
        <span style="font-weight: bold;">Cami</span>  
    </div>
```

```
<!-- Manual Stop Button -->
```

```
<button id="stop-btn" style="position: fixed; bottom: 20px; left: 20px; background-color: red;
color: white; padding: 10px 15px; border: none; border-radius: 5px; cursor: pointer; z-index: 9999;">
```

```
    Stop Cami
```

```
</button>
```

```
<!-- Link to the JS file that includes Cami's functionality -->
```

```
<script src="/cami.js"></script>
```

```
<div class="container">
```

```
    <h1>Registered Blood Donors</h1>
```

```
    <table class="blood-donor-table">
```

```
        <thead>
```

```
            <tr>
```

```
                <th>Name</th>
```

```
                <th>Blood Group</th>
```

```
                <th>Location</th>
```

```
                <th>Email</th>
```

```
                <th>Actions</th>
```

```
            </tr>
```

```
        </thead>
```

```
        <tbody id="donorTableBody">
```

```
            <!-- Rows will be populated here dynamically -->
```

```
        </tbody>
```

```
    </table>
```

```
</div>
```

```
<script>
```

```
    async function loadDonors() {
```

```
        const response = await fetch('/donors');
```

```

const donors = await response.json();

const donorTableBody = document.getElementById('donorTableBody');

donors.forEach(donor => {
  const row = document.createElement('tr');
  row.innerHTML = `
    <td>${donor.donorName}</td>
    <td>${donor.bloodGroup}</td>
    <td>${donor.location}</td>
    <td>${donor.email}</td> <!-- Display email correctly -->
    <td>
      <button onclick="deleteDonor('${donor.donorName}')">Delete</button>
    </td>
  `;
  donorTableBody.appendChild(row);
});
}

async function deleteDonor(donorName) {
  const response = await fetch(`/donors/${donorName}`, {
    method: 'DELETE'
  });

  if (response.ok) {
    alert(`Donor ${donorName} deleted successfully.`);
    location.reload(); // Reload the page to update the donor list
  } else {
    alert('Failed to delete donor. Donor may not exist.');
```

```
// Load donors when the page is loaded

window.onload = loadDonors;

</script>
</body>
</html>
```

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Send Blood Donation Alert</title>

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

</head>

<body>

  <header>

     <!-- Use the actual file name -->

  </header>


  <!-- Cami Sphere as the button -->

  <div id="cami-sphere" style="position: fixed; bottom: 20px; right: 20px; width: 60px; height: 60px;
background-color: #4CAF50; border-radius: 50%; display: flex; justify-content: center; align-items:
center; color: white; cursor: pointer; font-size: 16px; text-align: center; z-index: 9999;">

    <span style="font-weight: bold;">Cami</span>

  </div>


  <!-- Manual Stop Button -->

  <button id="stop-btn" style="position: fixed; bottom: 20px; left: 20px; background-color: red;
color: white; padding: 10px 15px; border: none; border-radius: 5px; cursor: pointer; z-index: 9999;">

    Stop Cami
```

```
</button>
```

```
<!-- Link to the JS file that includes Cami's functionality -->
```

```
<script src="/cami.js"></script>
```

```
<div class="container">
```

```
  <h1>Send Blood Donation Alert</h1>
```

```
  <form id="bloodDonationAlertForm">
```

```
    <label for="alertMessage">Alert Message:</label>
```

```
    <textarea id="alertMessage" name="alertMessage" rows="4" required></textarea>
```

```
    <label for="bloodGroup">Blood Group:</label>
```

```
    <select id="bloodGroup" name="bloodGroup" required>
```

```
      <option value="" disabled selected>Select the Blood Group</option>
```

```
</select>
```

```
    <button type="submit">Send Alert</button>
```

```
  </form>
```

```
</div>
```

```
<script>
```

```
  document.getElementById('bloodDonationAlertForm').onsubmit = async function(event) {
```

```
    event.preventDefault();
```

```
    const alertMessage = document.getElementById('alertMessage').value;
```

```
    const bloodGroup = document.getElementById('bloodGroup').value;
```

```
    const response = await fetch('/alert', {
```

```
      method: 'POST',
```

```
      headers: { 'Content-Type': 'application/json' },
```

```
      body: JSON.stringify({ bloodGroup, message: alertMessage }),
```

```

    });

    const result = await response.text();
    alert(result);
  };
</script>
</body>
</html>

// Initialize Speech Recognition
const SpeechRecognition = window.SpeechRecognition || window.webkitSpeechRecognition;
const recognition = new SpeechRecognition();
recognition.lang = 'en-US';
recognition.continuous = true;
recognition.interimResults = false;

let isListening = false;
let assistantSpeaking = false;
let hasIntroduced = false; // Flag for introduction

// Start Cami interaction on button click
document.getElementById('camiButton').onclick = function () {
  if (!isListening && !assistantSpeaking) {
    isListening = true;
    document.getElementById('stopButton').style.display = 'block';
    startInteraction();
  }
};

```

```
// Introduction and listening starter
```

```
function startInteraction() {  
  if (!hasIntroduced) {  
    speak("Hello, I am Cami, your assistant. How can I assist you today?");  
    hasIntroduced = true;  
  }  
  setTimeout(() => {  
    startListening();  
  }, 1000); // Small delay before listening  
}
```

```
// Start listening
```

```
function startListening() {  
  if (!assistantSpeaking && !recognition.active) {  
    recognition.start();  
  }  
}
```

```
// Speak function with callback
```

```
function speak(response) {  
  const speech = new SpeechSynthesisUtterance(response);  
  assistantSpeaking = true;  
  const voice = window.speechSynthesis.getVoices().find(voice => voice.name === "Google UK English Female");  
  speech.voice = voice || null;  
  
  speech.onend = function () {  
    assistantSpeaking = false;  
    if (isListening) {  
      startListening(); // Resume listening after speaking  
    }  
  }  
}
```



```

};

window.speechSynthesis.speak(speech);
}

// Handle voice recognition results
recognition.onresult = function (event) {
    const userInput = event.results[0][0].transcript.toLowerCase().trim();
    console.log("User said: " + userInput);
    handleUserInput(userInput);
};

```

```

// Process user input with detailed responses
function handleUserInput(input) {
    let response = "I didn't quite catch that. Could you try again?";

    if (/log ?in/.test(input)) {
        response = "Redirecting you to the login page.";
        navigateTo("/login", response);
    } else if (/register( user)?/.test(input)) {
        response = "Redirecting you to the user registration page.";
        navigateTo("/register", response);
    } else if (/register hospital/.test(input)) {
        response = "Redirecting you to the hospital registration page.";
        navigateTo("/hospitalregister", response);
    } else if (/view hospitals/.test(input)) {
        response = "Here are the available hospitals.";
        navigateTo("/hospitals", response);
    } else if (/register blood donor/.test(input)) {
        response = "Redirecting you to the blood donor registration page.";
        navigateTo("/donor_register", response);
    } else if (/view blood donors/.test(input)) {

```

```

        response = "Showing the list of registered blood donors.";
        navigateTo("/view_donors", response);
    } else if (/send alert/.test(input)) {
        response = "Sending alert via SMS.";
        speak(response);
        // Add SMS functionality here if required
    } else if (/register ambulance/.test(input)) {
        response = "Redirecting you to the ambulance registration page.";
        navigateTo("/ambulance_register", response);
    } else if (/view ambulances/.test(input)) {
        response = "Here is the list of registered ambulances.";
        navigateTo("/ambulance_list", response);
    } else if (/book ambulance/.test(input)) {
        response = "Redirecting you to the ambulance booking page.";
        navigateTo("/Ambulance_booking", response);
    } else if (/log ?out/.test(input)) {
        response = "Logging you out.";
        navigateTo("/logout", response);
    } else if (/stop/.test(input)) {
        stopAssistant();
    } else {
        speak(response); // Speak generic response if command not matched
    }
}

```

// Function to handle navigation with delay for response

```

function navigateTo(url, response) {
    console.log("Attempting to navigate to: " + url);
    speak(response);
    setTimeout(() => {
        console.log("Redirecting now to: " + url);
    }, 1000);
}

```

```

        window.location.href = `http://localhost:5000${url}`; // Added full path
    }, 1000); // Delay for speech to finish before navigation
}

// Stop assistant completely
function stopAssistant() {
    recognition.stop();
    isListening = false;
    assistantSpeaking = false;
    hasIntroduced = false; // Reset introduction for next session
    speak("Alright, stopping now.");
    document.getElementById('stopButton').style.display = 'none';
}

// Stop button functionality
document.getElementById('stopButton').onclick = stopAssistant;

// Handle errors during speech recognition
recognition.onerror = function (event) {
    console.error("Speech recognition error: ", event.error);
    if (event.error === 'not-allowed' || event.error === 'service-not-allowed') {
        alert("Microphone access is blocked. Please allow microphone access in your browser settings.");
        stopAssistant();
    } else if (event.error === 'no-speech') {
        speak("I didn't catch that. Could you please repeat?");
    }
};

// Reset flags when recognition ends
recognition.onend = function () {

```

```
if (isListening && !assistantSpeaking) {  
    setTimeout(() => recognition.start(), 500); // Small delay to prevent overlap  
}  
};
```