Full Front-End Code (React + Tailwind)

```jsx
import React, { useState } from "react";

export default function App() {
  const [file, setFile] = useState(null);
  const [loading, setLoading] = useState(false);
  const [metrics, setMetrics] = useState(null);

  const handleFileChange = (e) => {
    setFile(e.target.files[0]);
  };

  const handleRunModel = async () => {
    if (!file) {
      alert("Please upload a dataset file first!");
      return;
    }
    setLoading(true);
    const formData = new FormData();
    formData.append("file", file);

    // Replace with your backend endpoint
    try {
      const response = await fetch("http://127.0.0.1:5000/run_model", {
        method: "POST",
        body: formData,
      });
      const result = await response.json();
      setMetrics(result);
    } catch (error) {
      console.error("Error running model:", error);
```

```jsx
    alert("Failed to run the model. Check console for details.");
  }
  setLoading(false);
};


return (
  <div className="min-h-screen bg-gray-100 flex flex-col items-center p-6 font-sans">
    <h1 className="text-3xl font-bold mb-6 text-blue-700">
      Socio-Behavioral Graph Embedding Framework
    </h1>


    <div className="bg-white shadow-md rounded-xl p-6 w-full max-w-lg">
      <h2 className="text-xl font-semibold mb-3 text-gray-700">Upload Dataset</h2>
      <input
        type="file"
        onChange={handleFileChange}
        accept=".csv,.json"
        className="block w-full mb-4 text-gray-700 border border-gray-300 rounded-md p-2"
      />


      <button
        onClick={handleRunModel}
        disabled={loading}
        className={`w-full py-2 rounded-lg font-semibold text-white ${
          loading ? "bg-gray-400" : "bg-blue-600 hover:bg-blue-700"
        }`}
      >
        {loading ? "Processing..." : "Run Model"}
      </button>
    </div>
```

```jsx
      {metrics && (
        <div className="bg-white shadow-md rounded-xl p-6 w-full max-w-lg mt-6">
          <h2 className="text-xl font-semibold mb-4 text-gray-700">
            Model Performance
          </h2>
          <ul className="text-gray-700 space-y-2">
            <li>
              <strong>Accuracy:</strong> {metrics.acc.toFixed(3)}
            </li>
            <li>
              <strong>Precision:</strong> {metrics.precision.toFixed(3)}
            </li>
            <li>
              <strong>Recall:</strong> {metrics.recall.toFixed(3)}
            </li>
            <li>
              <strong>F1-Score:</strong> {metrics.f1.toFixed(3)}
            </li>
            <li>
              <strong>AUC:</strong> {metrics.auc.toFixed(3)}
            </li>
          </ul>
        </div>
      )}

      <footer className="text-gray-500 mt-8 text-sm">
        © 2025 Socio-Behavioral Graph Embedding Research
      </footer>
    </div>
  );
}
```