

Online Code Editor - Single File Implementation

```
// App.js - Online Code Editor (ReactJS + Judge0 API)
import React, { useState } from "react";
import axios from "axios";
import Editor from "@monaco-editor/react";

const App = () => {
  const [code, setCode] = useState("// Write your code here...");
  const [language, setLanguage] = useState("cpp"); // Default C++
  const [output, setOutput] = useState("");

  const languages = {
    cpp: 54,
    python: 71,
    javascript: 63,
  };

  const executeCode = async () => {
    const options = {
      method: "POST",
      url: "https://judge0-ce.p.rapidapi.com/submissions",
      headers: {
        "X-RapidAPI-Host": "judge0-ce.p.rapidapi.com",
        "X-RapidAPI-Key": "YOUR_RAPIDAPI_KEY",
        "Content-Type": "application/json",
      },
      data: {
        source_code: code,
        language_id: languages[language],
        stdin: "",
      },
    };

    try {
      const response = await axios.request(options);
      const token = response.data.token;

      setTimeout(async () => {
        const result = await axios.get(
          `https://judge0-ce.p.rapidapi.com/submissions/${token}`,
          { headers: { "X-RapidAPI-Key": "YOUR_RAPIDAPI_KEY" } }
        );

        setOutput(result.data.stdout || result.data.stderr || "No output");
      }, 3000);
    } catch (error) {
      setOutput("Error executing code.");
    }
  };
};
```

```

return (
  <div style={{ textAlign: "center", padding: "20px" }}>
    <h2>Online Code Editor</h2>
    <select onChange={(e) => setLanguage(e.target.value)} value={language}>
      <option value="cpp">C++</option>
      <option value="python">Python</option>
      <option value="javascript">JavaScript</option>
    </select>
    <Editor
      height="300px"
      width="600px"
      language={language}
      theme="vs-dark"
      value={code}
      onChange={(value) => setCode(value)}
    />
    <button onClick={executeCode} style={{ margin: "10px", padding: "10px" }}>
      Run Code
    </button>
    <h3>Output:</h3>
    <pre>{output}</pre>
  </div>
);
};

export default App;

```