|| SWAMI SHREEJI ||

### **🧠 Goal:**

User URL daale input box mein → Button dabaye → Website check ho → Output mile: “Safe” ya “Unsafe”.

## **📁 File: App.jsx**

import { useState } from 'react';

👉 Ye React ka hook hai — useState. Isse hum value store karte hain jo time ke saath change hoti hai (jaise user ka input, output result etc).

import axios from 'axios';

import './App.css';

import { GOOGLE\_API\_KEY } from './config';

import { VIRUSTOTAL\_API\_KEY } from './config';

🧾

* axios: Ye ek third-party library hai jo API se baat karne (request/response bhejne) mein kaam aati hai.
* ./App.css: CSS styling ke liye.
* GOOGLE\_API\_KEY & VIRUSTOTAL\_API\_KEY: Hum in dono API keys ko config.js file se import kar rahe hain. Ye keys Google aur VirusTotal APIs ke liye hain — jo URLs ko check karti hain safe/spam ke liye.

function App() {

👉 Ye main function component hai jahan saari logic likhi jaayegi.

const [url, setUrl] = useState('');

📝

* url variable user ka input store karega.
* setUrl() se us value ko update karte hain.

const [status, setStatus] = useState(null);

🛑 Ye status message (like "Safe" ya "Unsafe") store karega.

const [loading, setLoading] = useState(false);

⏳ Jab tak result nahi aata, button pe loading dikhana ho toh true. Baad mein false.

const [scanResults, setScanResults] = useState({});

📊 VirusTotal ya koi aur API agar full detailed engine-wise report bhejti hai (jaise "malicious", "harmless" etc), toh uska data yahan store hota hai.

### 

### **✅ Function: checkWebsite**

const checkWebsite = async () => {

if (!url) return;

🧠 Agar user ne kuch bhi URL nahi dala toh kuch bhi check mat karo — direct return kar jao.

setLoading(true);

setStatus(null);

🧽

* Loading start kar diya.
* Purana status hata diya (naya result aane wala hai na).

### **📦 Request Body (for Google API)**

const requestBody = {

client: {

clientId: "yourcompany", // any name

clientVersion: "1.0"

},

threatInfo: {

threatTypes: ["MALWARE", "SOCIAL\_ENGINEERING", "UNWANTED\_SOFTWARE"],

platformTypes: ["ANY\_PLATFORM"],

threatEntryTypes: ["URL"],

threatEntries: [{ url }]

}

};

💣 Ye API ko batata hai ke kya check karna hai:

* Kya-kya threats check karni hai.
* Platform kya hai.
* Hum kis URL ko check karwana chahte hain.

### **🌐 API Request:**

const response = await axios.post(

` https://safebrowsing.googleapis.com/v4/threatMatches:find?key=${GOOGLE\_API\_KEY}`,

requestBody

);

🛰️ Ye Google Safe Browsing API ko request bhejta hai, jo batata hai ye website safe hai ya nahi.

if (response.data && response.data.matches) {

setStatus('❌ Unsafe (Threats Detected)');

} else {

setStatus('✅ Safe Website');

}

🔍 Agar result mein kuch matches milte hain (dangerous website) toh status red flag.  
 Agar kuch nahi mila — toh website safe.

setLoading(false);

✅ Loading khatam — ab hum result dikha sakte hain.

## **🖼️ JSX (UI Code)**

return (

<div className="app">

👉 Ye poora UI return karta hai — ek div ke andar sab kuch.

<h1>🌐 Website Safety Checker</h1>

👑 Heading dikhata hai — app ka naam.

<input

type="text"

placeholder="Enter website URL..."

value={url}

onChange={(e) => setUrl(e.target.value)}

/>

🧑‍💻 Ye input box hai jahan user URL type karta hai.

* onChange se value update hoti hai.

<button onClick={checkWebsite} disabled={loading}>

{loading ? 'Checking...' : 'Check'}

</button>

🖱️ Jab user "Check" button dabaye:

* checkWebsite() call hota hai.
* Agar loading true hai toh button disabled hota hai.

{status && <p className="status">{status}</p>}

📣 Agar status available hai (safe ya unsafe) toh usse show karo.

{Object.keys(scanResults).length > 0 && (

<div className="report">

<h3>Detailed Report:</h3>

<ul>

{Object.entries(scanResults).map(([engine, result]) => (

<li key={engine}>

<strong>{engine}:</strong>{' '}

{result.category === 'malicious' && <span style={{ color: 'red' }}>❌ Malicious</span>}

{result.category === 'suspicious' && <span style={{ color: 'orange' }}>⚠️ Suspicious</span>}

{result.category === 'harmless' && <span style={{ color: 'green' }}>✅ Harmless</span>}

{result.category === 'undetected' && <span>➖ Undetected</span>}

</li>

))}

</ul>

</div>

)}

🧪

* Ye tab dikhai deta hai jab VirusTotal se full scan result aaye.
* Har antivirus engine ka result dikhaata hai — alag-alag color aur emoji ke saath.

export default App;

🚪 Ye line App component ko export kar raha hai — taaki index.js file ya koi aur file ise use kar sake.

## **😎 Recap — Important Concepts Used:**

| **Concept** | **Used For** |
| --- | --- |
| useState | Input, status, loading, results handle karne ke liye |
| axios | API se baat karne ke liye |
| JSX | UI banana |
| API | Real website checking logic |
| Conditional Rendering | Sirf jab result aaye tabhi show karo |