Index.html

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Prime Number Checker</title>

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

</head>

<body>

<div class="container">

<h1>Prime Number Checker</h1>

<input type="number" id="number" placeholder="Enter a number">

<button onclick="checkPrime()">Check</button>

<p id="result"></p>

</div>

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

</body>

</html>

Css

body {

font-family: Arial, sans-serif;

display: flex;

justify-content: center;

align-items: center;

height: 100vh;

margin: 0;

background-color: #f0f0f0;

}

.container {

text-align: center;

background-color: white;

padding: 20px;

border-radius: 8px;

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

}

input[type="number"] {

padding: 10px;

width: 100%;

margin-bottom: 10px;

border: 1px solid #ddd;

border-radius: 4px;

}

button {

padding: 10px 20px;

background-color: #007bff;

color: white;

border: none;

border-radius: 4px;

cursor: pointer;

}

button:hover {

background-color: #0056b3;

}

#result {

margin-top: 20px;

font-size: 1.2em;

font-weight: bold;

}

Js

function checkPrime() {

const number = document.getElementById('number').value;

const resultElement = document.getElementById('result');

if (number === "" || number < 2) {

resultElement.textContent = "Please enter a number greater than 1.";

resultElement.style.color = "red";

return;

}

let isPrime = true;

for (let i = 2; i <= Math.sqrt(number); i++) {

if (number % i === 0) {

isPrime = false;

break;

}

}

if (isPrime) {

resultElement.textContent = `${number} is a prime number!`;

resultElement.style.color = "green";

} else {

resultElement.textContent = `${number} is not a prime number.`;

resultElement.style.color = "red";

}

}