SQL Injection Vulnerability Report

Affected Product

Attribute	Details
Product Name	Online Shopping Portal Project
Vendor	PHPGurukul
Version	v2.1
Affected File	Online Shopping Portal project-V2.0\shopping\check_availability.php
Affected Parameter	email
Method	POST
Vulnerability Type	Time-Based Blind SQL Injection

Official Website

PHPGurukul - Online Shopping Portal

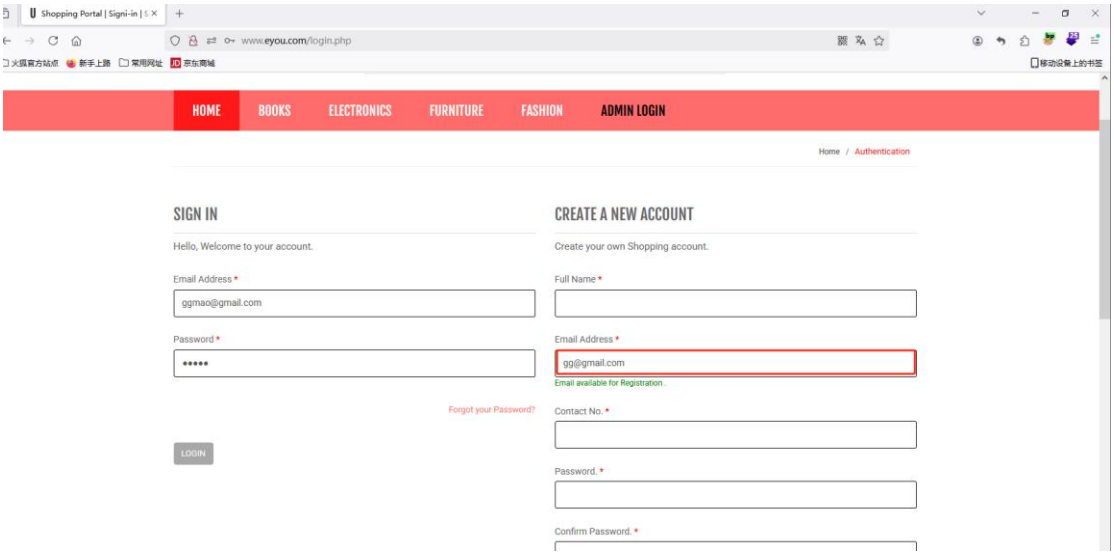
Vulnerability Overview

A SQL Injection vulnerability exists in the email parameter of the **Online Shopping Portal Project v2.1**, allowing remote attackers to execute arbitrary SQL commands. By injecting time-delay payloads, attackers can determine the presence of a SQL Injection flaw by observing server response delays.

Steps to Reproduce

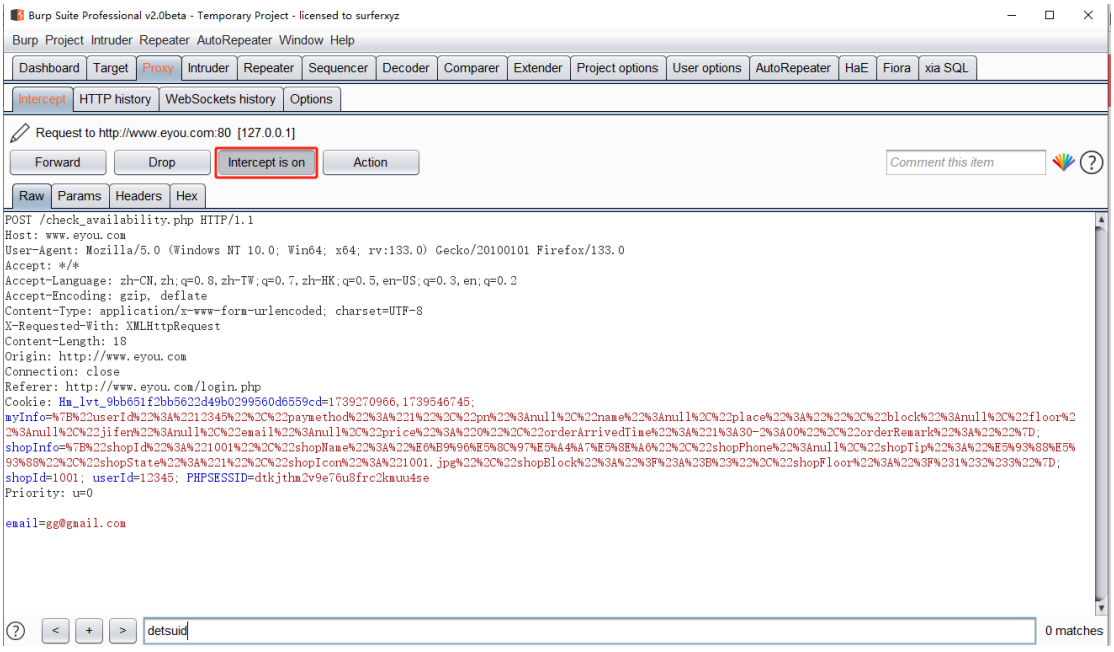
1. **Access the Vulnerable URL:**

   ```
   http://www.eyou.com/login.php
   ```



2. **Intercept the Request:**

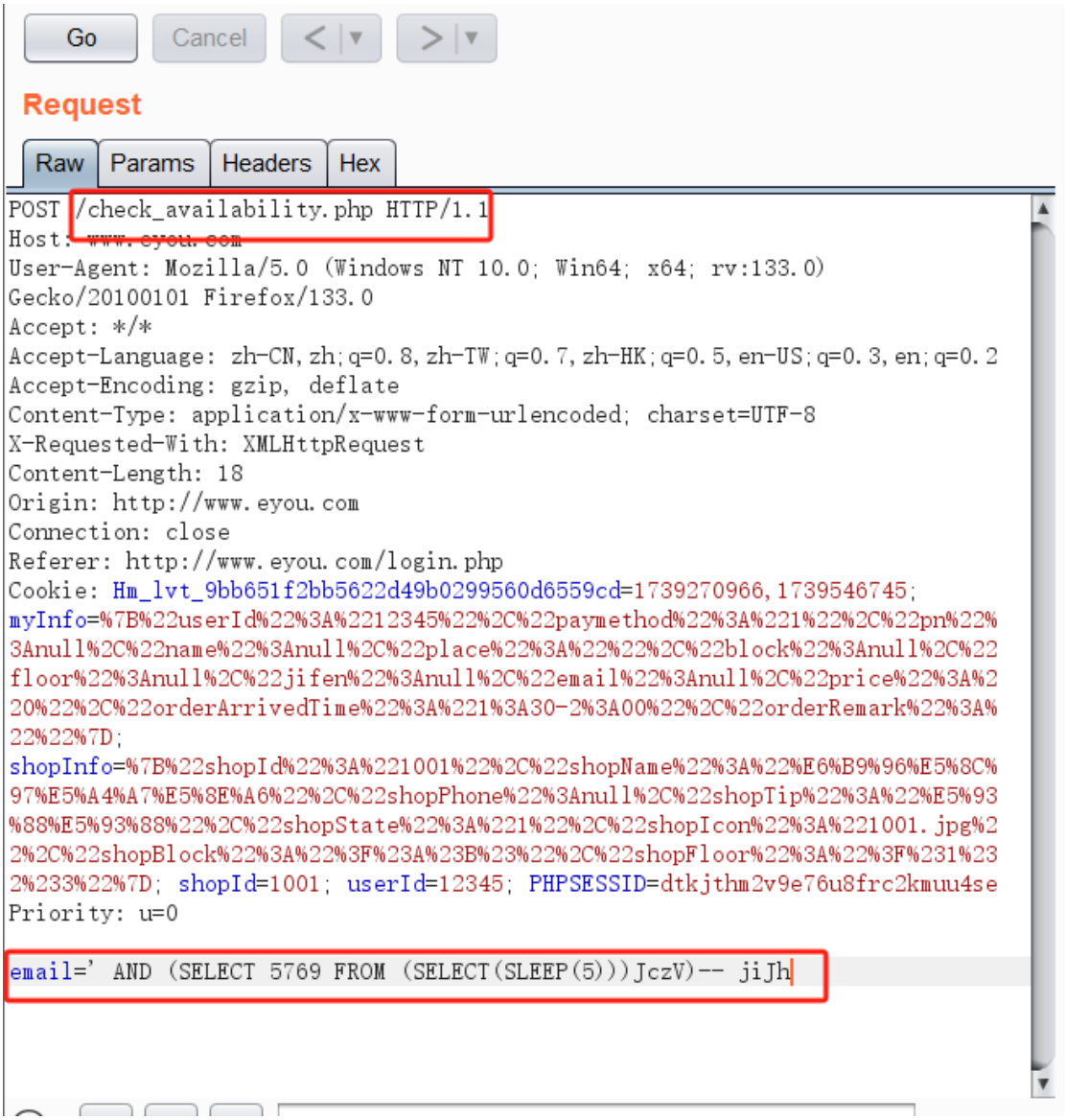
Enable Burp Suite and set up the browser to route traffic through it.



3. **Modify the Parameter:**

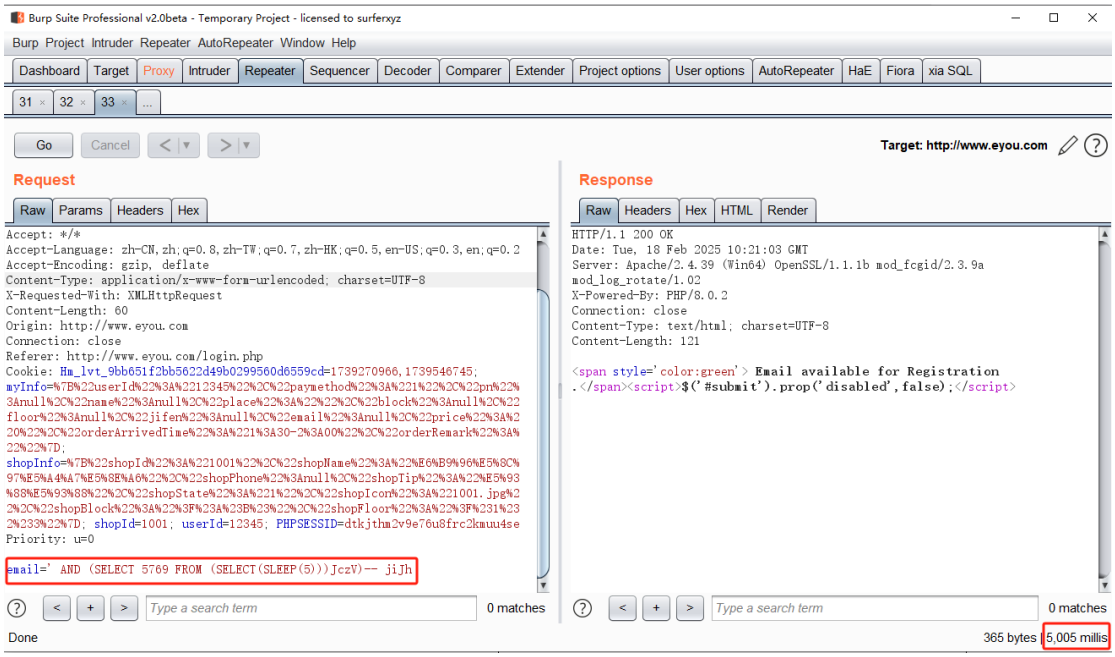
Send the request to Burp Suite Repeater and modify the email parameter with the following payload:

' AND (SELECT 5769 FROM (SELECT(SLEEP(5)))JczV)-- jiJh



4.**Send the Modified Request:**

- Forward the modified request in Burp Suite Repeater.
- Observe the delay in the response time.
- The server will delay its response by 5 seconds, confirming successful execution of the SLEEP() function, indicating a **time-based SQL injection vulnerability**.



Impact

- **Data Theft:** Unauthorized access to sensitive user or system data.
- **Data Manipulation:** Modification or deletion of database records.
- **Credential Exposure:** Extraction of usernames, passwords, or authentication details.
- **Server Compromise:** Potential exploitation of underlying server systems.
- **Reconnaissance:** Enumeration of database structures (tables, columns, schemas).
- **Financial Loss:** Downtime and potential monetary losses.
- **Loss of Reputation:** User trust degradation due to service disruption or data breaches.

Recommended Mitigations

- **Use Prepared Statements (Parameterized Queries).**
- **Sanitize User Inputs:** Validate and filter all incoming data.
- **Implement Web Application Firewall (WAF).**
- **Use the Principle of Least Privilege (PoLP) for database users.**
- **Regularly Update and Patch the Application.**

- **Monitor Logs for Suspicious Activities.**

For detailed guidelines, refer to: OWASP SQL Injection Prevention Cheat Sheet.