

# Week 3

## Penetration Testing Report

### Introduction

This report document hereby describes the proceedings and results of a Black Box security assessment conducted against the **Week 3 Labs**. The report hereby lists the findings and corresponding best practice mitigation actions and recommendations.

### 1. Objective

The objective of the assessment was to uncover vulnerabilities in the **Week 3 Labs** and provide a final security assessment report comprising vulnerabilities, remediation strategy and recommendation guidelines to help mitigate the identified vulnerabilities and risks during the activity.

### 2. Scope

This section defines the scope and boundaries of the project.

<b>Application Name</b>	Cross-Site Scripting
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### 3. Summary

Outlined is a Black Box Application Security assessment for the **Week 3 Labs**.

**Total number of Sub-labs: 11 Sub-labs**

High	Medium	Low
3	3	5

**High** - Number of Sub-labs with hard difficulty level

**Medium** - Number of Sub-labs with Medium difficulty level

**Low** - Number of Sub-labs with Easy difficulty level

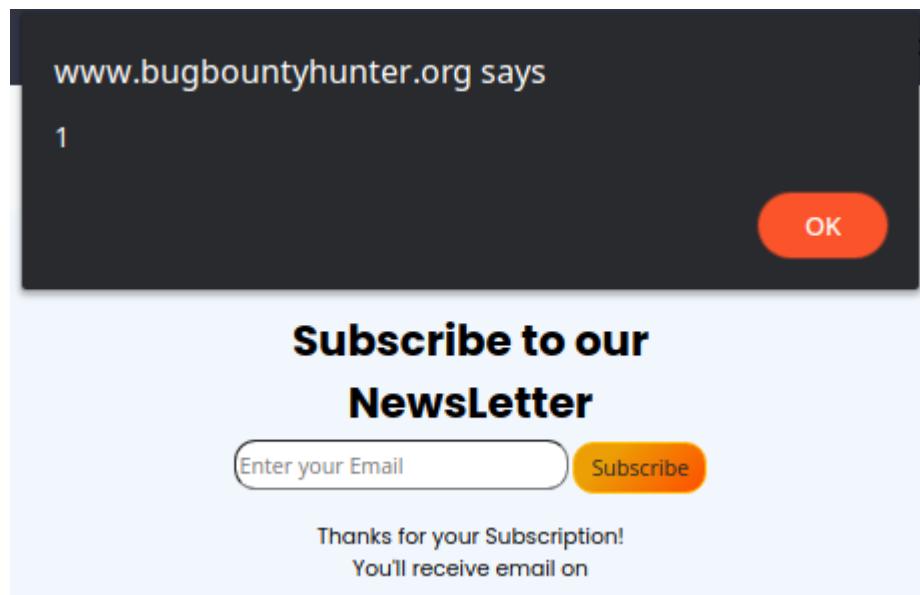
## 1. Cross-Site Scripting

### 1.1. Let's Do IT!

Reference	Risk Rating
Let's Do IT!	Low
<b>Tools Used</b>	
Browser	
<b>Vulnerability Description</b>	
The vulnerability is Cross-Site Scripting that allows users to execute JS codes in the input fields.	
<b>How It Was Discovered</b>	
Manual Analysis - Pass any JS code in the input field and it will get executed.	
<b>Vulnerable URLs</b>	
<a href="https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_1/lab_1.php">https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_1/lab_1.php</a>	
<b>Consequences of not Fixing the Issue</b>	
Impersonating users and stealing credentials.	
<b>Suggested Countermeasures</b>	
Filter input and encode data.	
<b>References</b>	
<a href="https://github.com/s0md3v/AwesomeXSS">https://github.com/s0md3v/AwesomeXSS</a>	

## Proof of Concept

The proof of the above vulnerability.

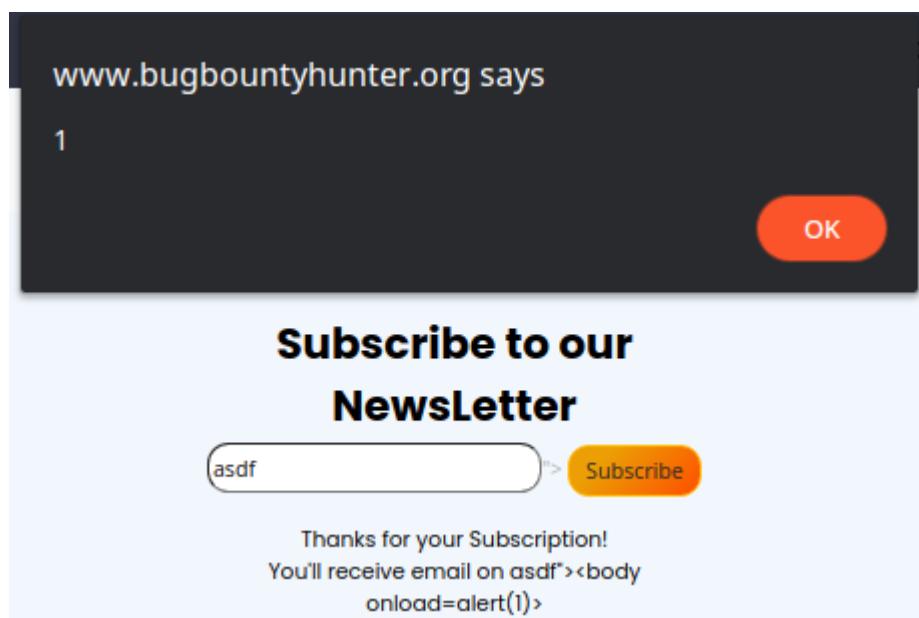


## 1.2. Balancing Is Important In Life!

Reference	Risk Rating
Balancing Is Important In Life!	Low
Tools Used	
Browser	
Vulnerability Description	
The vulnerability is Cross-Site Scripting that allows users to execute JS codes in the input fields.	
How It Was Discovered	
Manual Analysis - Pass any JS code by using a close tag or comment in the input field and it will get executed.	
Vulnerable URLs	
<a href="https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_2/lab_2.php">https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_2/lab_2.php</a>	
Consequences of not Fixing the Issue	
Impersonating users and stealing credentials.	
Suggested Countermeasures	
Filter input and encode data.	
References	
<a href="https://github.com/s0md3v/AwesomeXSS">https://github.com/s0md3v/AwesomeXSS</a>	

## Proof of Concept

The proof of the above vulnerability.

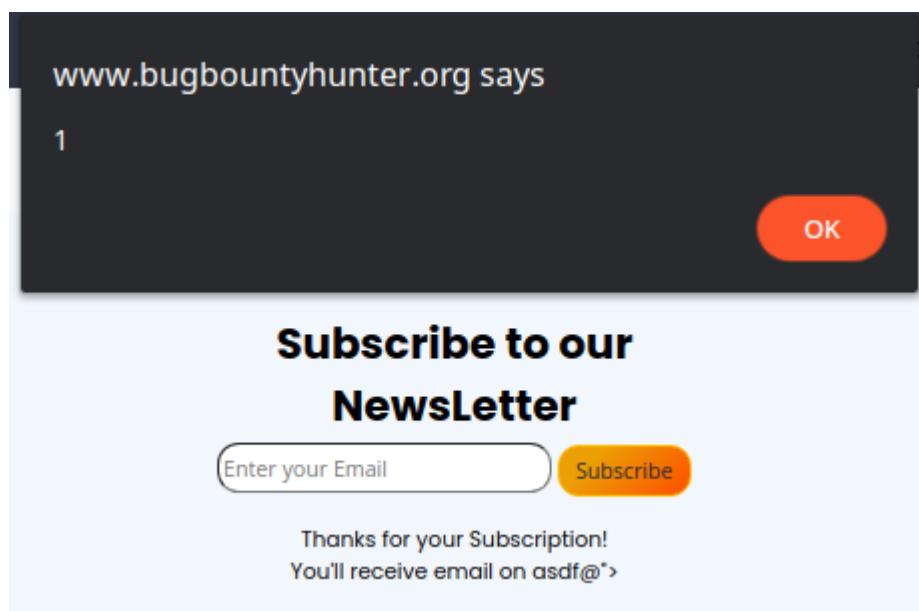


## 1.3. XSS Is Everywhere!

Reference	Risk Rating
XSS Is Everywhere!	Low
Tools Used	
Browser	
Vulnerability Description	
The vulnerability is Cross-Site Scripting that allows users to execute JS codes in the input fields.	
How It Was Discovered	
Manual Analysis - Pass any JS code by using a close tag or comment in the input field and it will get executed.	
Vulnerable URLs	
<a href="https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_3/lab_3.php">https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_3/lab_3.php</a>	
Consequences of not Fixing the Issue	
Impersonating users and stealing credentials.	
Suggested Countermeasures	
Filter input and encode data.	
References	
<a href="https://github.com/s0md3v/AwesomeXSS">https://github.com/s0md3v/AwesomeXSS</a>	

## Proof of Concept

The proof of the above vulnerability.

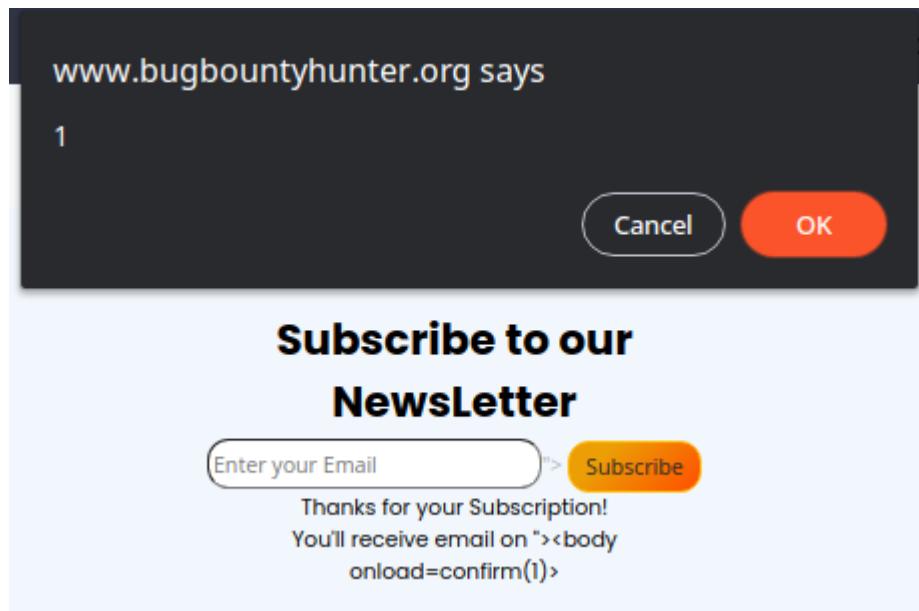


## 1.4. Alternative Are Must!

Reference	Risk Rating
Alternative Is Must!	Medium
Tools Used	
Browser	
Vulnerability Description	
The vulnerability is Cross-Site Scripting that allows users to execute JS codes in the input fields.	
How It Was Discovered	
Manual Analysis - Pass any JS code by using a close tag or comment without an alert in the input field and it will get executed.	
Vulnerable URLs	
<a href="https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_4/lab_4.php">https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_4/lab_4.php</a>	
Consequences of not Fixing the Issue	
Impersonating users and stealing credentials.	
Suggested Countermeasures	
Filter input and encode data.	
References	
<a href="https://github.com/s0md3v/AwesomeXSS">https://github.com/s0md3v/AwesomeXSS</a>	

## Proof of Concept

The proof of the above vulnerability.

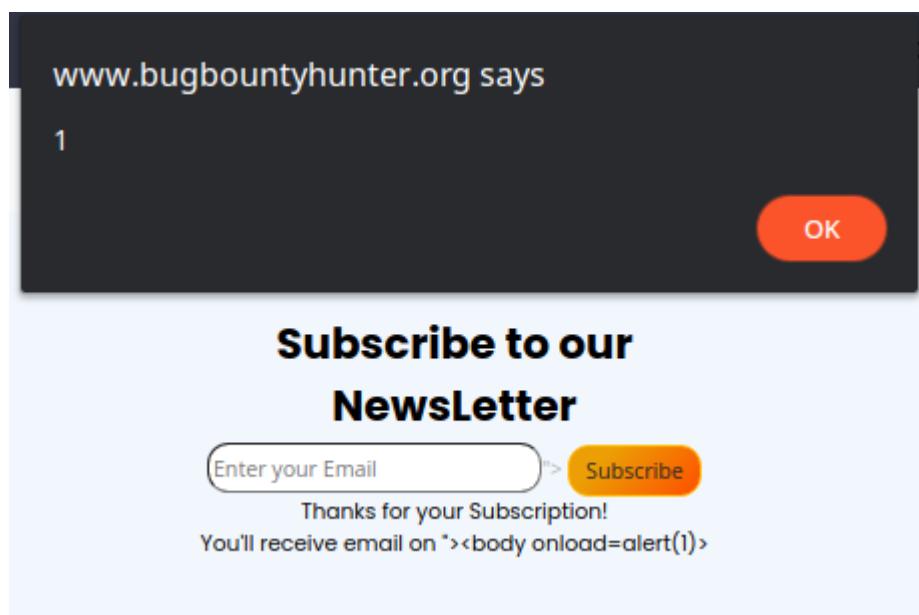


## 1.5. Developer Hates Scripts!

Reference	Risk Rating
Developer Hates Scripts!	Hard
Tools Used	
Browser	
Vulnerability Description	
The vulnerability is Cross-Site Scripting that allows users to execute JS codes in the input fields.	
How It Was Discovered	
Manual Analysis - Pass any JS code by using a close tag or comment without using script tag in the input field and it will get executed.	
Vulnerable URLs	
<a href="https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_5/lab_5.php">https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_5/lab_5.php</a>	
Consequences of not Fixing the Issue	
Impersonating users and stealing credentials.	
Suggested Countermeasures	
Filter input and encode data.	
References	
<a href="https://github.com/s0md3v/AwesomeXSS">https://github.com/s0md3v/AwesomeXSS</a>	

## Proof of Concept

The proof of the above vulnerability.

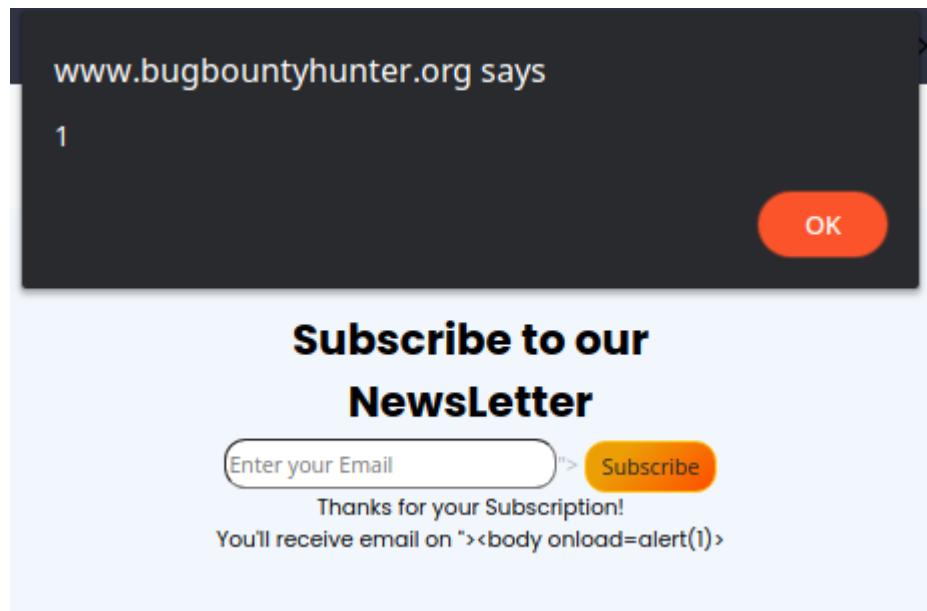


## 1.6. Change The Variation!

Reference	Risk Rating
Change The Variation!	Hard
Tools Used	
Browser	
Vulnerability Description	
The vulnerability is Cross-Site Scripting that allows users to execute JS codes in the input fields.	
How It Was Discovered	
Manual Analysis - Pass any JS code and it will get executed.	
Vulnerable URLs	
<a href="https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_6/lab_6.php">https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_6/lab_6.php</a>	
Consequences of not Fixing the Issue	
Impersonating users and stealing credentials.	
Suggested Countermeasures	
Filter input and encode data.	
References	
<a href="https://github.com/s0md3v/AwesomeXSS">https://github.com/s0md3v/AwesomeXSS</a>	

## Proof of Concept

The proof of the above vulnerability.

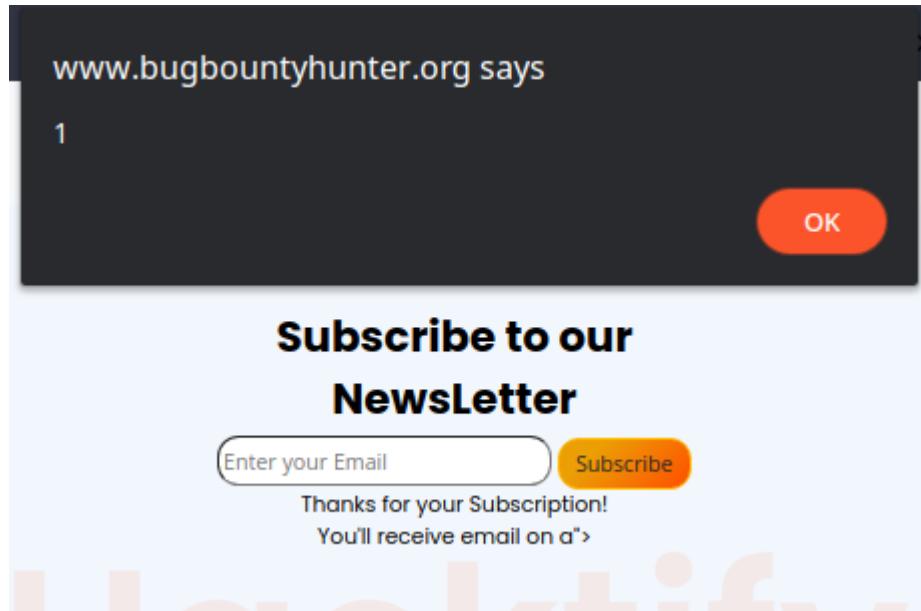


## 1.7. Encoding Is The Key?

Reference	Risk Rating
Encoding Is The Key?	Medium
Tools Used	
Browser	
Vulnerability Description	
The vulnerability is Cross-Site Scripting that allows users to execute JS codes in the input fields.	
How It Was Discovered	
Manual Analysis - Pass any URL Encoded JS code and it will get executed.	
Vulnerable URLs	
<a href="https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_7/lab_7.php">https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_7/lab_7.php</a>	
Consequences of not Fixing the Issue	
Impersonating users and stealing credentials.	
Suggested Countermeasures	
Filter input and encode data.	
References	
<a href="https://github.com/s0md3v/AwesomeXSS">https://github.com/s0md3v/AwesomeXSS</a>	

## Proof of Concept

The proof of the above vulnerability.

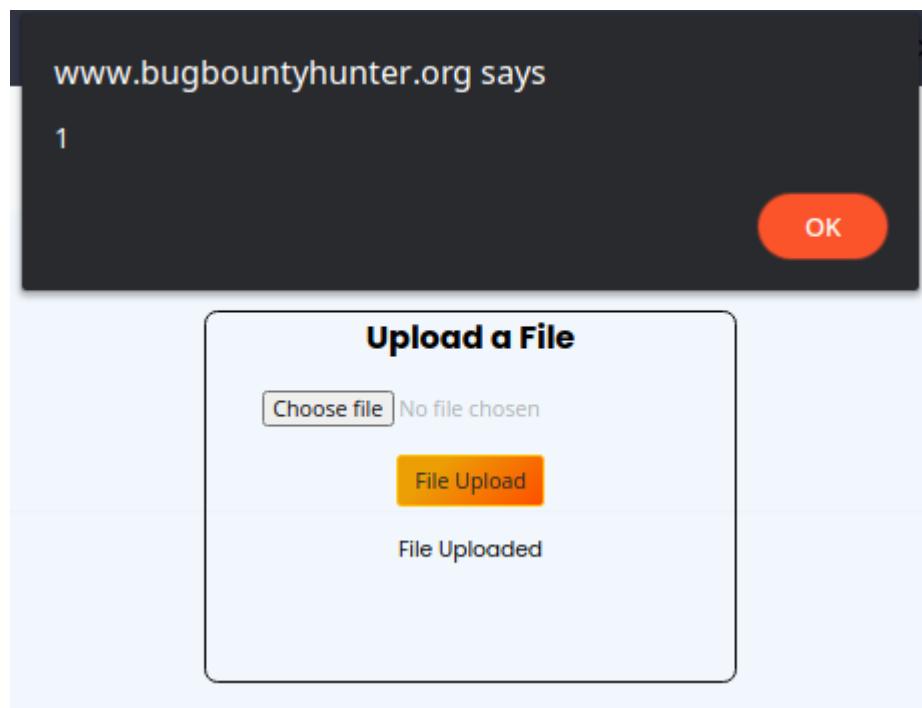


## 1.8. XSS With File Upload (File Name)

Reference	Risk Rating
XSS With File Upload (File Name)	Low
Tools Used	
Browser	
Vulnerability Description	
The vulnerability is Cross-Site Scripting that allows users to execute JS codes in the input fields.	
How It Was Discovered	
Manual Analysis - Pass any JS code as the file name, upload the file and it will get executed.	
Vulnerable URLs	
<a href="https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_8/lab_8.php">https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_8/lab_8.php</a>	
Consequences of not Fixing the Issue	
Impersonating users and stealing credentials.	
Suggested Countermeasures	
Filter input and encode data.	
References	
<a href="https://github.com/s0md3v/AwesomeXSS">https://github.com/s0md3v/AwesomeXSS</a>	

## Proof of Concept

The proof of the above vulnerability.

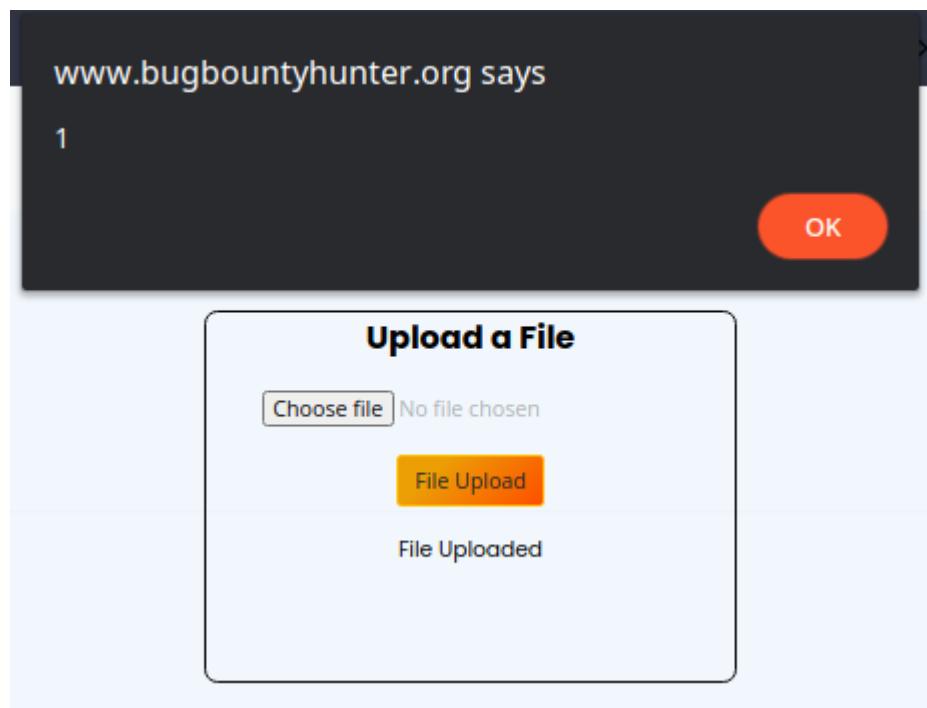


## 1.9. XSS With File Upload (File Content)

Reference	Risk Rating
XSS With File Upload (File Content)	Medium
Tools Used	
Browser	
Vulnerability Description	
The vulnerability is Cross-Site Scripting that allows users to execute JS codes in the input fields.	
How It Was Discovered	
Manual Analysis - Upload a JS file and it will get executed.	
Vulnerable URLs	
<a href="https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_9/lab_9.php">https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_9/lab_9.php</a>	
Consequences of not Fixing the Issue	
Impersonating users and stealing credentials.	
Suggested Countermeasures	
Filter input and encode data.	
References	
<a href="https://github.com/s0md3v/AwesomeXSS">https://github.com/s0md3v/AwesomeXSS</a>	

## Proof of Concept

The proof of the above vulnerability.



## 1.10. Stored Everywhere!

Reference	Risk Rating
Stored Everywhere!	Low
Tools Used	
Browser	
Vulnerability Description	
The vulnerability is Cross-Site Scripting that allows users to execute JS codes in the input fields.	
How It Was Discovered	
Manual Analysis - Pass any JS code in the input field and save the details, when we login again it will get executed.	
Vulnerable URLs	
<a href="https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_10/lab_10.php">https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_10/lab_10.php</a>	
Consequences of not Fixing the Issue	
Impersonating users and stealing credentials.	
Suggested Countermeasures	
Filter input and encode data.	
References	
<a href="https://github.com/s0md3v/AwesomeXSS">https://github.com/s0md3v/AwesomeXSS</a>	

## Proof of Concept

The proof of the above vulnerability.

The screenshot shows a browser window. At the top, a dark overlay displays the text "www.bugbountyhunter.org says" and a red "OK" button. Below this, the main content area shows a "User Profile" form. The form contains five input fields: "First Name:", "Last Name:", "Email:", "Password:", and "Confirm Password:". Each of these input fields has a green double arrow character at its right end, indicating they contain malicious script. At the bottom of the form are two orange buttons labeled "Update" and "Log out".

## 1.11. DOM's Are Love!

Reference	Risk Rating
DOM's Are Love!	Hard
Tools Used	
Browser	
Vulnerability Description	
The vulnerability is Cross-Site Scripting that allows users to execute JS codes in the input fields.	
How It Was Discovered	
Manual Analysis - Pass any JS code in the input field and it will get executed.	
Vulnerable URLs	
<a href="https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_11/lab_11.php">https://www.bugbountyhunter.org/internship_labs/HTML/xss_lab/lab_11/lab_11.php</a>	
Consequences of not Fixing the Issue	
Impersonating users and stealing credentials.	
Suggested Countermeasures	
Filter input and encode data.	
References	
<a href="https://github.com/s0md3v/AwesomeXSS">https://github.com/s0md3v/AwesomeXSS</a>	

## Proof of Concept

The proof of the above vulnerability.

