

Check Point Report

Vulnerable Application: BodgeIt

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Vulnerability	Type of Vulnerability	Details of the Attack	Screenshot evidence
Login as test@thebodgeitstore.com	SQL Injection (Injection flaw)	Login using test@thebodgeitstore.com' or '=' was entered in username field	Figure 1
Login as user1@thebodgeitstore.com	SQL Injection (Injection flaw) SQL Injection	' or '=' was entered in both id and password to log on	Figure 2
Login as admin@thebodgeitstore.com	SQL Injection (Injection flaw) SQL Injection	Login using admin@thebodgeitstore.com' or '=' was entered in username field	Figure 3
Find hidden content as a non admin user	Security Misconfiguration Broken Access Control/Failure to restrict URL Access	Exploring URL links is noticeable that they have similar pattern: http://192.168.56.101/bodgeit/home.jsp ; http://192.168.56.101/bodgeit/about.jsp ;	Figure 4

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		<p>So we try to check if Admin page uses the same address pattern. Entering http://192.168.56.3/bodgeit/admin.jsp lets us access unprotected Admin page with hidden information for non-admin user. we try to check if Admin page uses the same address pattern. Entering http://192.168.56.3/bodgeit/admin.jsp lets us access unprotected Admin page with hidden information for non-admin user.</p>	
Find diagnostic data	<p><u>Security Misconfiguration / Leftover Debug Code</u></p>	<p>Check on the website all links by adding at the end of their URL addresses this code <code>?debug=true</code>. If any debugging data was left by the developer, then the webpage will render it. In this case <code>"DEBUG basketid = 2"</code>.</p>	Figure 5.
		<p>there debugged appear on page "Your Basket" which is <code>"DEBUG basketid = 4"</code> (ALL)</p>	Figure 5.1
Level 1: Display a popup using: <script>alert("XSS")</script>	Cross-Site Scripting	<p>Went Go to Search page, Copy and pasted enter following code into form field <code>"<script>alert('XSS')</script>"</code> and popup appeared</p>	Figure 6.
Level 2: Display a popup using: <script>alert("XSS")	Cross-Site Scripting	<p>Register a new account and entering aateam@legacy.com</p>	Figure 7.

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</script>		<script>alert("XSS")</script> in the username boxRegister a new account entering aateam@legacy.com<script>alert("XSS")</script> in the username.	
Level 3: Display a popup using: <script>alert("XSS")</script>	Cross-Site Scripting	Login with aateam@legacy.com<script>alert(' or '='<script>("XSS")</script> in the username.	Figure 8
Access someone else's basket	Broken Authentication	Log in as admin admin page check and basket IDLog in as an Admin and from Admin page check how basket ID's are assigned. Then we can to try access someone else basketd by manipulating cookies. In this case we amended basked id value in the cookie "b id=b id:8" to "b id:1". After pressing "Update basket" we have successfully, accessed another user's ean access basket, "b id:1" content.	Figure 9
Force someone to add an item to their basket when they visit your webpage.	Looking for this oneCross-Site Request Forgery Broken Access Control	Are you ok, Alexa. Dids you see Keys link ? Ah? 🙄 the final report? Yes At the end of this table! yes, the final report yep Notice that items are added to the basket	40Figure 12

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Field Code Changed

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		<p>by a post method. If the attacker views the network data, they can inspect the post request traffic. By clicking on the 'edit and resent' tab, the hacker can view the request body. This can then be added at the end of the link, e.g. http://192.168.56.101/bodgeit/basket.jsp?productid=8&price=3.7&quantity=1, which will send a query string to the server for this item to be added to the basket. An attacker might replace a normal link, such as the home link, with the query string link (by inspecting the link element and replacing the ahref attribute to this link). A victim can click the link unaware that they've been attacked</p>	
Get the store to owe you money	<p>Broken Access Control Security Misconfiguration No input validation.</p>	<p>I've attached a screenshot at the end of this page.</p> <p>Add purchase item to basket and update basket content. Next, explore the can explore basket web page code trying to find the block for any relevant code related to the quantity of purchased items. After locating this, the value of number of items in basket can be</p>	<p>Figure 104</p>

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		<u>changed value we change it to a negative number. Clicking update basket afterwards. The web application processes this as if it was trusted data, making the - it makes store- owe money to the attacker</u>	
<u>Change your password via a GET request</u>	<u>Information exposure through query strings in URL</u>	<u>Click view page source, form submit is set to POST. Inspect one of the password field, replace FORM with GET – click change password. Notice new password is displayed in url bar</u>	<u>Figure 11</u>
<u>Conquer AES encryption, and display a popup using: <script>alert("H@ck ed A3S")</script></u>	<u>We do not have to this exercise</u>		
<u>Conquer AES encryption and append a list of table names to the normal results.</u>	<u>We do not have to this exercise</u>		

Helping links:

- https://www.synackfin.tech/documents/Final_Report_CS_Fundamentals.pdf
- https://www.synackfin.tech/documents/Final_Report_CS_Fundamentals.pdf

Screendumps

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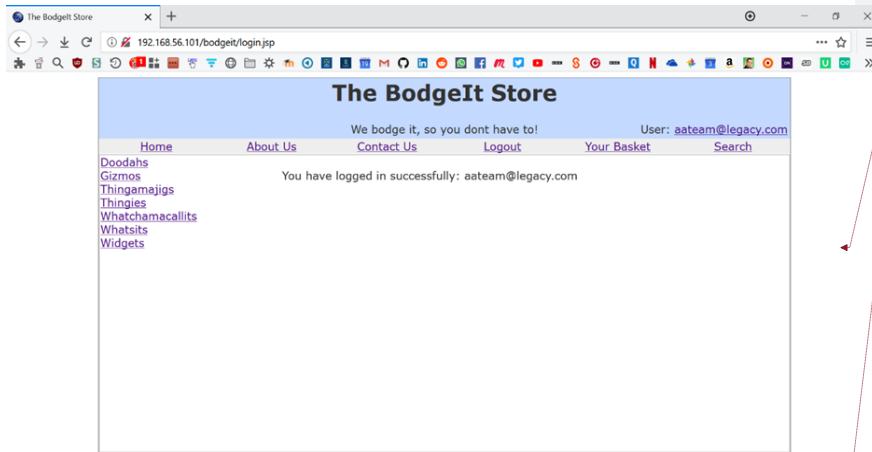
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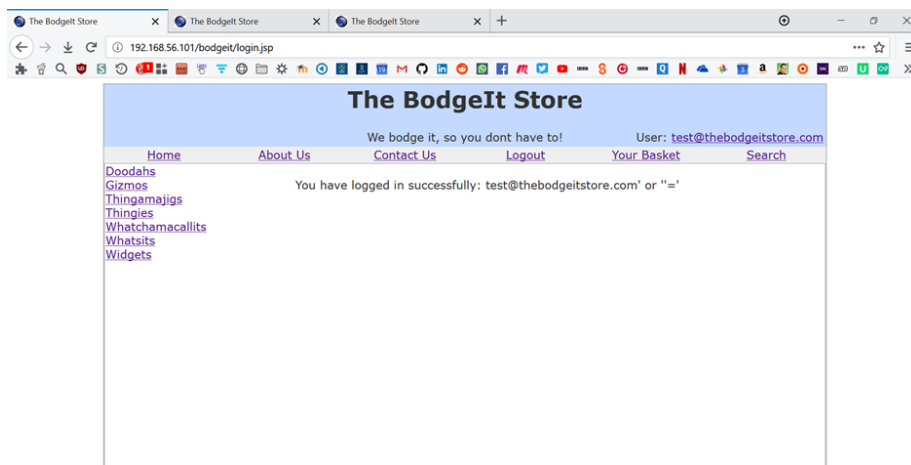
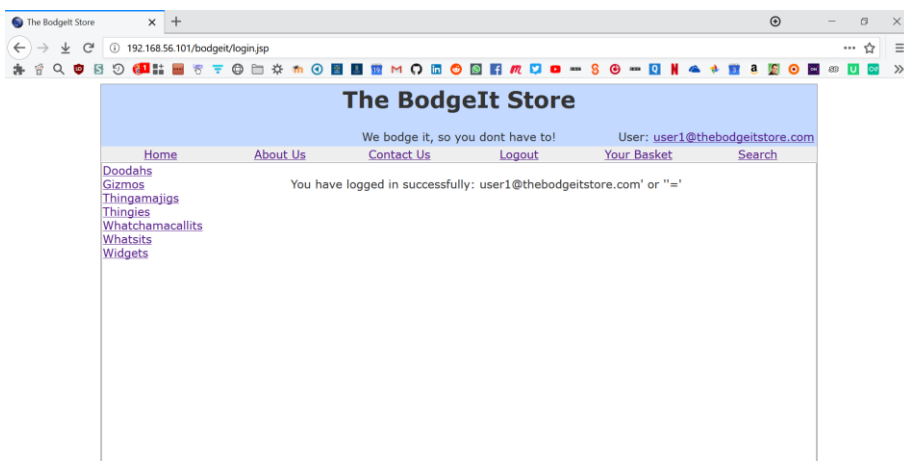


Figure 1: Login as test@thebodgeitstore.com



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Figure 2 Login as user1@thebodgeitstore.com

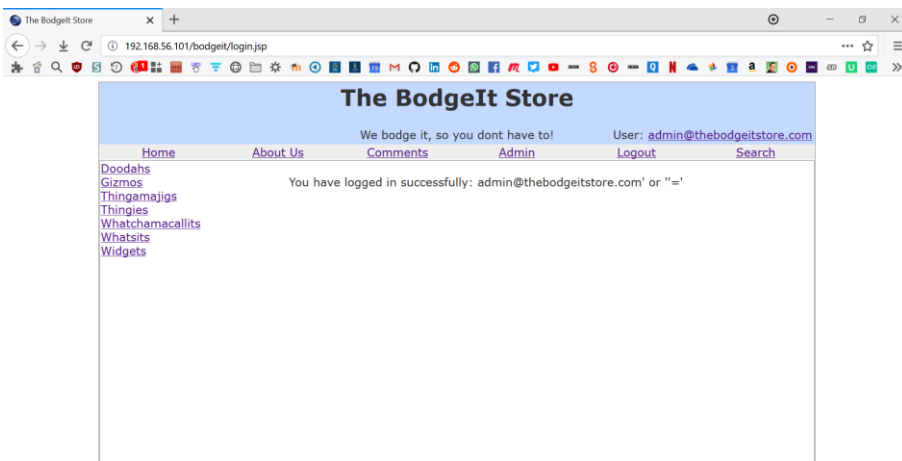
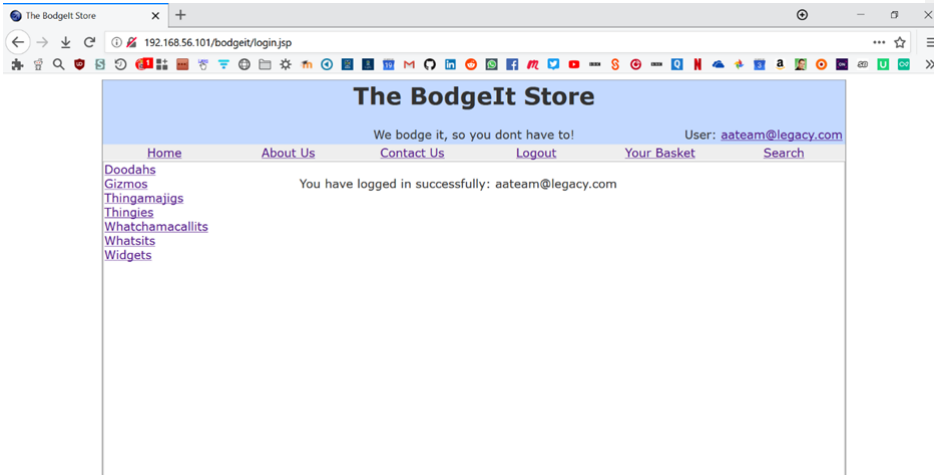


Figure 3 Login as admin@thebodgeitstore.com

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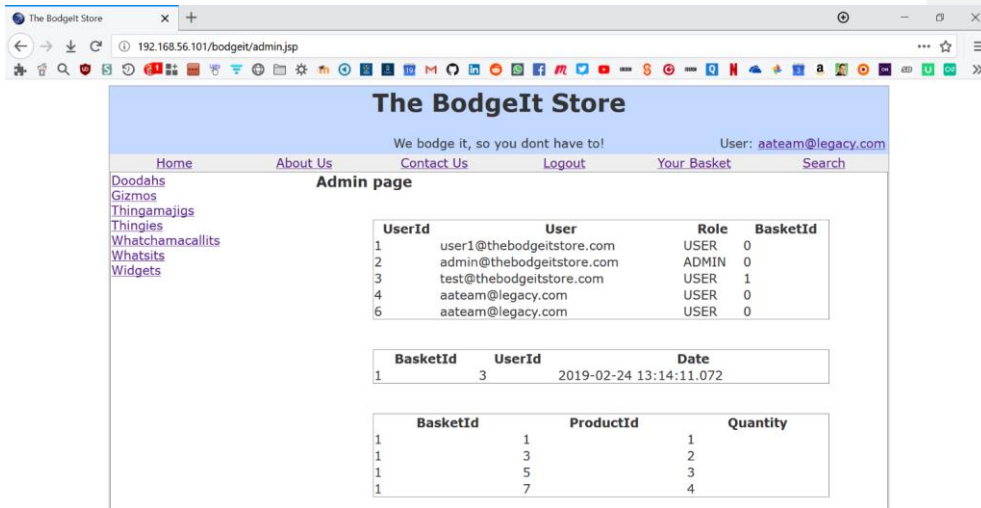


Figure 4 Find hidden content as a non-admin user

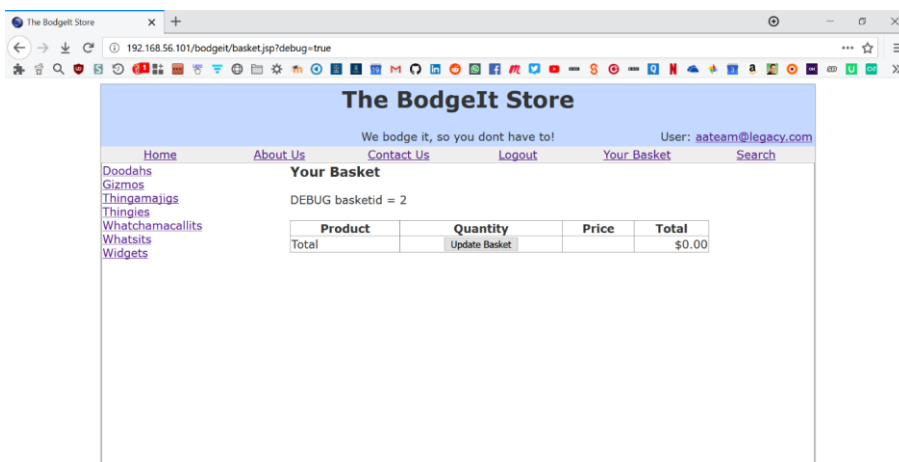


Figure 5 Find diagnostic data

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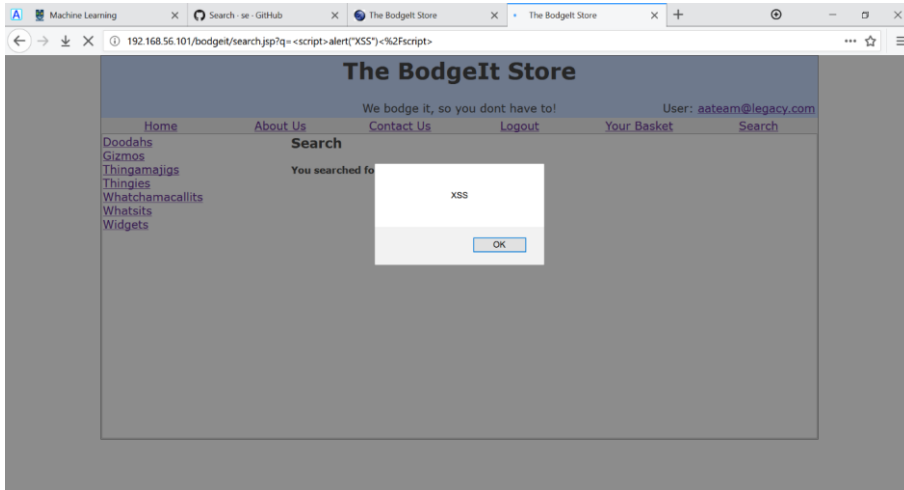


Figure 6 Level 1: Display a popup using: <script>alert("XSS")</script> via SQL query in search box

Figure 7

Figure 7 Level 2: Display a popup using: <script>alert("XSS")</script> using sql query via register page

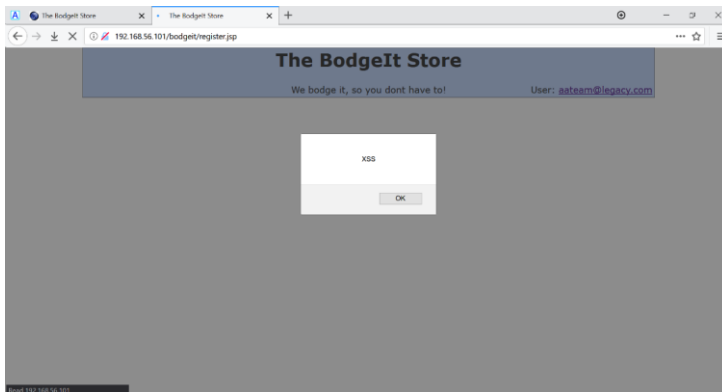


Figure 8 Level 3: Display a popup using: <script>alert("XSS")</script> Via the log in page

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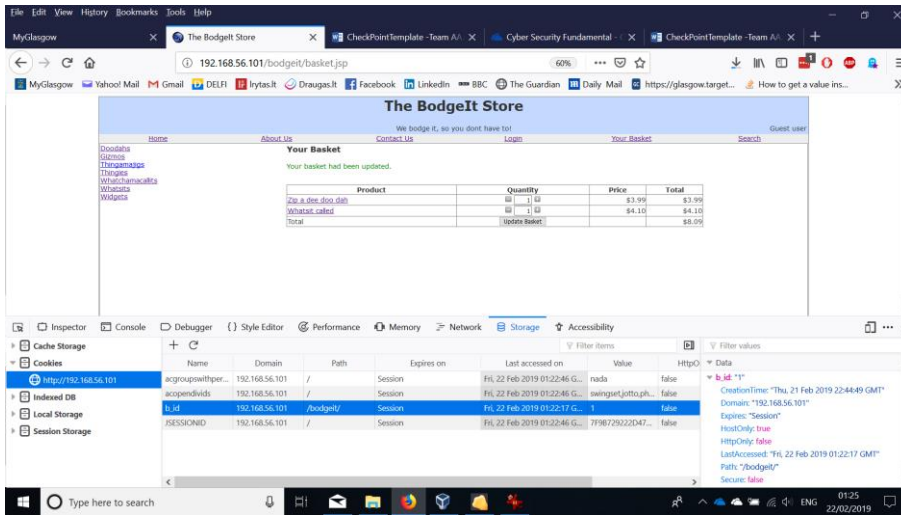
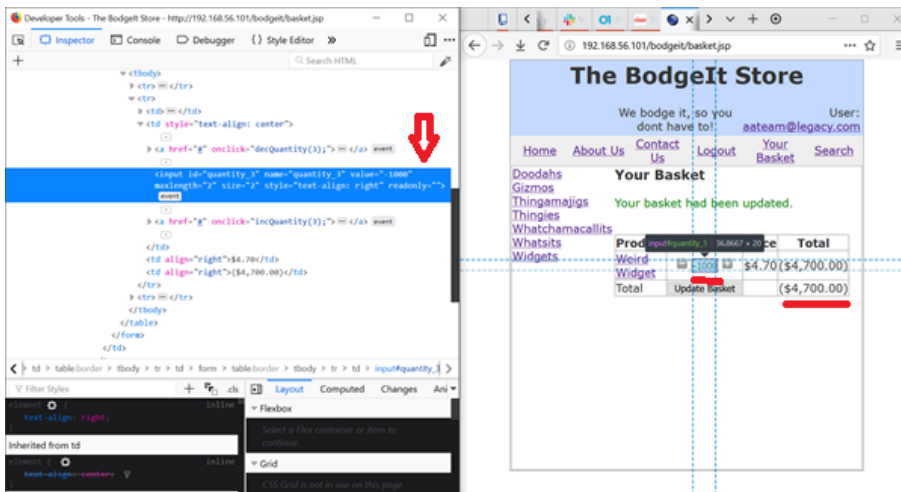
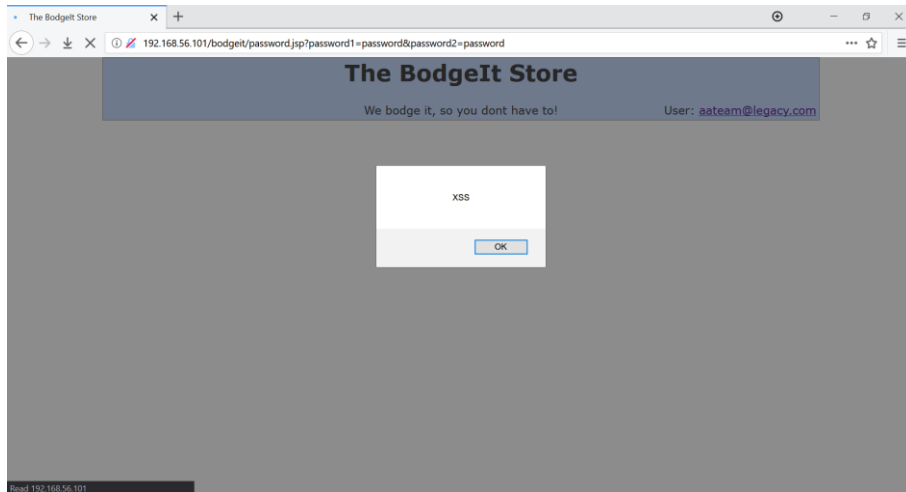


Figure 9: Access someone else's basket by exploiting poor session management control



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Figure 10 Changing your password via a GET request – new password ("password") is encoded in URL bar

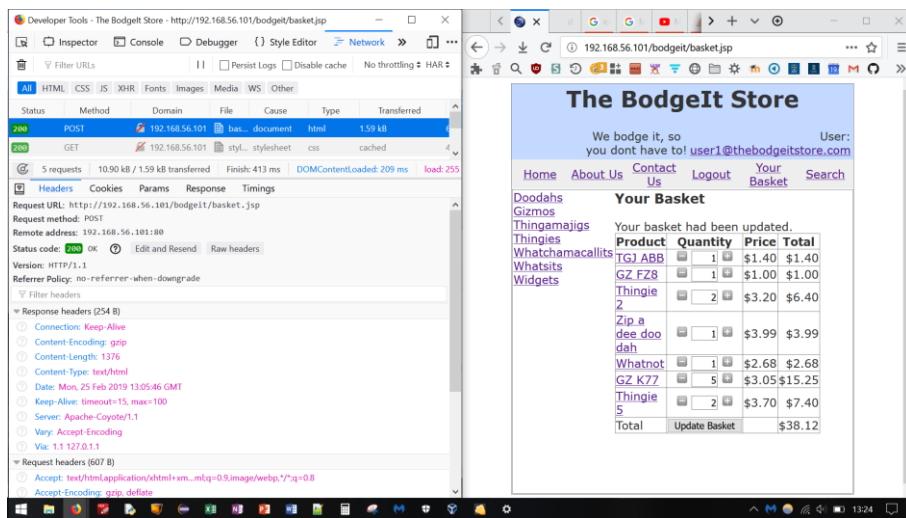


Figure 12: Force someone to add an item to their basket when they visit your webpage (using home link)

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