

## CSE 154 Cheat Sheet

### DOM methods and properties:

children	Returns a collection of an element's child elements
parentNode	Returns the parent node of an element
classList	Returns the class name(s) of an element
className	Sets or returns the value of the class attribute of an element
appendChild(child)	Adds a new child node, to an element, as the last child node
addEventListener(event, fn)	Attaches an event handler to the specified element
getAttribute(attr)	Returns the specified attribute value of an element node
innerHTML	Sets or returns the content of an element
id	Sets or returns the value of the id attribute of an element
removeChild(child)	Removes a child node from an element
querySelector(selector)	Returns the first child element that matches a specified CSS selector(s) of an element
querySelectorAll(selector)	Returns all child elements that matches a specified CSS selector(s) of an element
getElementsByClassName(className)	Returns a NodeList containing all elements with the specified class name
getElementById(id)	Returns the element that has the ID attribute with the specified value
getElementsByTagName	Returns a NodeList containing all elements with the specified tag name
createElement(elType)	Creates an Element node
createTextNode()	Creates a Text node

### Event Object methods and properties:

target	Returns the element that triggered the event
type	Returns the name of the event
offsetX	Returns the horizontal coordinate of the mouse pointer, relative to the DOM element clicked on
offsetY	Returns the vertical coordinate of the mouse pointer, relative to the DOM element clicked on
stopPropagation()	Prevents further propagation of an event during event flow

### Events:

click	mousemove	keydown	change
dblclick	mouseout	error	focus
mouseenter	mouseover	success	submit
mouseleave	mouseup	load	select
mousedown	keyup	unload	resize

### JavaScript Math methods:

abs(data)	Returns the absolute value of x
ceil(data)	Returns x, rounded upwards to the nearest integer
floor(data)	Returns x, rounded downwards to the nearest integer
min(data1, data2, ...)	Returns the number with the lowest value
max(data1, data2, ...)	Returns the number with the highest value
pow(data, exp)	Returns the value of x to the power of y
random()	Returns a random number between 0 and 1
round(data)	Rounds x to the nearest integer

### JavaScript JSON methods:

parse(string)	returns the given string of JSON data as the equivalent JavaScript object
stringify(object)	returns the given object as a string of JSON data

**JavaScript Array methods and properties:**

length	Sets or returns the number of elements in an array
push(el)	Adds new elements to the end of an array, and returns the new length
pop()	Removes the last element of an array, and returns that element
unshift(el)	Adds new elements to the beginning of an array, and returns the new length
shift()	Removes the first element of an array, and returns that element
sort()	Sorts the elements of an array
slice(start, end)	Selects a part of an array, and returns the new array
join()	Joins all elements of an array into a string
concat(list2,...)	Joins two or more arrays, and returns a copy of the joined arrays
toString()	Converts an array to a string, and returns the result
indexOf(el)	Search the array for an element and returns its position

**JavaScript String methods and properties:**

length	Returns the length of a string
charAt(index)	Returns the character at the specified index (position)
indexOf(string)	Returns the position of the first found occurrence of a specified value in a string
split(delimiter)	Splits a string into an array of substrings
substring(start,end)	Extracts the characters from a string, between two specified indices
trim()	Removes whitespace from both ends of a string
toLowerCase()	Converts a string to lowercase letters
toUpperCase()	Converts a string to uppercase letters
concat(str2,...)	Joins two or more strings, and returns a new joined strings

**JavaScript Timer functions:**

setTimeout(fn, ms)	Executes a function, after waiting a specified number of milliseconds.
setInterval(fn, ms)	Repeats a given function at every given time-interval
clearTimeout(id)	Method stops the execution of the function specified by id
clearInterval(id)	Method stops the executions of the function specified by id

**JavaScript HttpRequest Objects:**

XMLHttpRequest()	Constructor
open(method, url, async)	Specifies the URL and HTTP request method
send(postData)	Sends the HTTP request to the server, with optional POST parameters
abort()	Stops the request
getAllResponseHeaders()	Gets all raw HTTP headers
responseText	The entire text of the fetched page, as a string
responseXML	The entire contents of the fetched page, as an XML document tree
status	The request's HTTP status code
statusText	HTTP status code text
load	Event triggered when request completes

**XML DOM methods and properties:**

getElementsByTagName(tagName)	Returns a NodeList containing all elements with the specified tag name
querySelector(selector)	Returns the first child element that matches a specified CSS selector(s)
querySelectorAll(selector)	Returns all child elements that matches a specified CSS selector(s)
textContent	Returns the text content of the node
firstChild	Returns the first child of the node
nodeValue	Returns the value of the node
getAttribute(attr)	Returns the value of the attribute with given name

**PHP Array functions:**

count(list)	Count all elements in an array
print_r(list)	Print array's contents
array_pop(list)	Pop the element off the end of array
array_push(list, el)	Push one or more elements onto the end of array
sort(list)	Sort an array
array_reverse(list)	Return an array with elements in reverse order
in_array(el, list)	Checks if a value exists in an array
list(a, b, ...)	Assign variables as if they were an array
implode(glue, pieces)	Join array elements with a string

**PHP String functions:**

strlen(s)	Get string length
strpos(haystack, needle)	Find the position of the first occurrence of a substring in a string
substr(s, start, length)	Return part of a string
trim(s)	Strip whitespace (or other characters) from the beginning and end of a string
strtolower(s)	Make a string lowercase
strtoupper(s)	Make a string uppercase
explode(delimiter, s)	Split a string by string
join(glue, pieces)	Alias of implode

**PHP functions:**

isset(el)	Tests if a variable is NULL
print(el)	Prints out the element
time()	Returns the current time in seconds
date(format, time)	Converts an optional given time in seconds to a date based on format
header(string)	Sends a raw HTTP header, examples: "Location: url.php", "Content-type: text/plain", HTTP/1.1 200 OK"
die(message)	Ends execution and sends back optional message
include(path)	Includes and evaluates the specified file

**PHP JSON functions:**

json_encode(string)	Returns JSON equivalent for the given object or array or value
json_decode(object)	Parses the given JSON data string and returns an equivalent associative array object

**PHP File functions:**

file(path)	Reads entire file into an array
basename(path)	Returns trailing name component of path
file_exists(path)	Checks whether a file or directory exists
file_get_contents(path)	Reads entire file into a string
file_put_contents(path, data)	Write a string to a file
scandir(path)	List files and directories inside the specified path
glob(pattern)	Find pathnames matching a pattern

**PHP Sessions and Cookie functions:**

setcookie(name, val, expiration)	Sends a cookie with given name and value to the user's browser, with optional expiration time given in seconds
session_start()	Loads existing session data or starts a new session if one doesn't exist
session_destroy()	Destroys old session data
session_regenerate_id(deleteID)	Regenerates session id for next session, optionally also deletes old id

**PHP DOM methods and properties:**

createElement(tag)	Create a new element node to add to the document
createTextNode(text)	Create a new text node to add to the document
getElementById(id)	Returns element with given id in the document
getElementsByTagName(tag)	Returns a collection of elements with the given tag
load(filename), loadXML(string)	Read XML data from a file on disk or from a string
save(filename), saveXML()	Write XML data to a file on disk or returns it as a string
validate()	Return whether the current document consists of valid XML data
tagName	Node's name
nodeValue	Node's value (text)
parentNode	Reference to the parent node
firstChild	Reference to the first child
lastChild	Reference to the last child
appendChild(DOMNode)	Appends given node as the last child of this node
insertBefore(newNode, oldNode)	Inserts given node before old node in list of children of this node
removeChild(DOMNode)	Removes given node from this node's children
getAttribute(name)	Returns the value of the attribute of the given name
setAttribute(name, value)	Sets the given value of the attribute of the given name
removeAttribute(name)	Removes the attribute of the given name

**PHP regex functions:**

preg_match(regex, str)	returns TRUE if string matches regex
preg_replace(regex, replacement, str)	returns a new string with all substrings that match regex replaced by replacement
preg_split(regex, str)	returns an array of strings from given string broken apart using given regex as delimiter

**Regex Characters:**

\	escape character
.	any character
	or
(...)	group
^	start of string
\$	end of string
[...]	a character set
-	(in a character set) marks a range
^	(in a character set) inverts the character set

**Regex Quantifiers:**

*	0 - ∞
+	1 - ∞
?	0 or 1
{MIN, MAX}	MIN - MAX (both are optional)

**Escape sequences that are predefined character sets**

\d	any digit [0-9]
\D	any non-digit [^0-9]
\w	any word character [a-zA-Z_0-9]
\W	any non-word char [^a-zA-Z_0-9]
\s	any whitespace character [ \t\n]

**MIME Type:**

text/plain
text/html
text/xml
application/json

**Super Globals:**

\$_GET
\$_POST
\$_COOKIE
\$_SESSION
\$_FILES

**HTTP status codes:**

200	OK
400	Bad Request
401	Unauthorized
404	Not Found
410	Gone
500	Internal Server Error