JavaScript Cheat Sheet

JavaScript Arrays

concat()	Join several arrays into one
copyWithin()	Copy array elements within the array, to and from specified positions
indexOf()	Return the primitive value of the specified object
includes()	Check if an array contains the specified element
join()	Combine elements of an array into a single string and return the string
entries()	Return a key/value pair Array Iteration Object
every()	Check if every element in an array passes a test
fill()	Fill the elements in an array with a static value
filter()	Create a new array with every element in an array that pass a test
find()	Return the value of the first element in an array that pass a test
forEach()	Call a function for each array element
from()	Create an array from an object
lastIndexOf()	Give the last position at which a given element appears in an array
pop()	Remove the last element of an array
push()	Add a new element at the end
reverse()	Sort elements in descending order
reduce()	Reduce the values of an array to a single value (going left-to-right)
reduceRight()	Reduce the values of an array to a single value (going right-to-left)
shift()	Remove the first element of an array
slice()	Pull a copy of a portion of an array into a new array object
sort()	Sort elements alphabetically
splice()	Add elements in a specified way and position
unshift()	Add a new element to the beginning

JavaScript Boolean Methods

toString()	Convert a Boolean value to a string, and return the result
valueOf()	Return the first position at which a given element appears in an array
toSource()	Return a string representing the source code of the object

JavaScript Arithmetic Operators

+	Addition
-	Subtraction
*****	Multiplication
/	Division
(...)	Grouping operator (operations within brackets are executed earlier than those outside)
%	Modulus (remainder)
++	Increment numbers
--	Decrement numbers
==	Equal to
===	Equal value and equal type
!=	Not equal
!==	Not equal value or not equal type
>	Greater than
<	Lesser than
>=	Greater than or equal to
<=	Lesser than or equal to
?	Ternary operator

Logical Operators

&&	Logical AND
||	Logical OR
!	Logical NOT

Bitwise Operators

&	AND statement
|	OR statement
~	NOT
^	XOR
<<	Left shift
>>	Right shift
>>>	Zero fill right shift

Functions

alert()	Output data in an alert box in the browser window
confirm()	Open up a yes/no dialog and return true/false depending on user click
console.log()	Write information to the browser console (good for debugging purposes)
document.write()	Write directly to the HTML document
prompt()	Create a dialog for user input

Global Functions

decodeURI()	Decode a Uniform Resource Identifier (URI) created by encodeURI or similar
decodeURIComponent()	Decode a URI component
encodeURI()	Encode a URI into UTF-8
encodeURIComponent()	Same but for URI components
eval()	Evaluate JavaScript code represented as a string
isFinite()	Determine whether a passed value is a finite number
isNaN()	Determine whether a value is an illegal number
Number()	Convert an object's value to a number
parseFloat()	Parse a string and return a floating point number
parseInt()	Parse a string and return an integer

JavaScript Loops

for	The most common way to create a loop in JavaScript
while	Set up conditions under which a loop executes
do while	Similar to the while loop, however, it executes at least once and performs a check at the end to see if the condition is met to execute again
break	Stop and exit the cycle if certain conditions are mets
continue	Skip parts of the cycle if certain conditions are met

Escape Characters

\'	Single quote
\"	Double quote
****	Backslash
\b	Backspace
\f	Form feed
\n	New line
\r	Carriage return
\t	Horizontal tabulator
\v	Vertical tabulator

JavaScript String Methods

charAt()	Return a character at a specified position inside a string
charCodeAt()	Give the unicode of character at that position
concat()	Concatenate (join) two or more strings into one
fromCharCode()	Return a string created from the specified sequence of UTF-16 code units
indexOf()	Provide the position of the first occurrence of specified text within a string
lastIndexOf()	Same as indexOf() but with the last occurrence, searching backwards
match()	Retrieve the matches of a string against a search pattern
replace()	Find and replace specified text in a string
search()	Execute a search for a matching text and return its position
slice()	Extract a section of a string and return it as a new string
split()	Split a string object into an array of strings at a specified position
startsWith()	Check whether a string begins with specified characters
substr()	Similar to slice() but extracts a substring depended on a specified number of characters
substring()	Similar to slice() but can't accept negative indices
toLowerCase()	Convert strings to lower case
toUpperCase()	Convert strings to upper case
valueOf()	Return the primitive value (that has no properties or methods) of a string object

Regular Expression Syntax

Pattern Modifiers

e	Evaluate replacement
i	Perform case-insensitive matching
g	Perform global matching
m	Perform multiple line matching
s	Treat strings as single line
x	Allow comments and whitespace in pattern
U	Ungreedy pattern

Brackets

[abc]	Find any of the characters in the brackets
[^abc]	Find any character not in the brackets
[0-9]	Find digit specified in the brackets
[A-z]	Find any character from uppercase A to lowercase z
(a|b|c)	Find any of the alternatives separated with |

Metacharacters

.	Find a single character, except newline or line terminator
\w	Word character
\W	Non-word character
\d	A digit
\D	A non-digit character
\s	Whitespace character
\S	Non-whitespace character
\b	Find a match at the beginning/end of a word
\B	Find a match not at the beginning/end of a word
\0	NUL character
\n	A new line character
\f	Form feed character
\r	Carriage return character
\t	Tab character
\v	Vertical tab character
\xxx	Character specified by an octal number xxx
\xdd	Latin character specified by a hexadecimal number dd
\udddd	Unicode character specified by a hexadecimal number dddd

Quantifiers

n+	Match any string that contains at least one n
n*	Any string that contains zero or more occurrences of n
n?	Any string that contains zero or one occurrences of n
n{X}	Any string that contains a sequence of X n's
n{X,Y}	Strings that contains a sequence of X to Y n's
n{X,}	Matches any string that contains a sequence of at least X n's
n$	Any string with n at the end of it
^n	String with n at the beginning of it
?=n	Any string that is followed by a specific string n
?!n	String that is not followed by a specific string n

Number Properties

MAX_VALUE	Maximum numeric value representable in JavaScript
MIN_VALUE	Smallest positive numeric value representable in JavaScript
NaN	The "Not-a-Number" value
NEGATIVE_INFINITY	Negative Infinity value
POSITIVE_INFINITY	Positive Infinity value

Number Methods

toExponential()	Return a string with a rounded number written as exponential notation
toFixed()	Return string of a number with a specified number of decimals
toPrecision()	Return string of a number written with a specified length
toString()	Return a number as a string
valueOf()	Return a number as a number

Math Properties

E	Euler's number
LN2	Natural logarithm of 2
LN10	Natural logarithm of 10
LOG2E	Base 2 logarithm of E
LOG10E	Base 10 logarithm of E
PI	The number PI
SQRT1_2	Square root of 1/2
SQRT2	Square root of 2

Math Methods

abs(x)	Return the absolute (positive) value of x
acos(x)	Arccosine of x, in radians
asin(x)	Arcsine of x, in radians
atan(x)	Arctangent of x as a numeric value
atan2(y,x)	Arctangent of the quotient of its arguments
ceil(x)	Value of x rounded up to its nearest integer
cos(x)	Cosine of x (x is in radians)
exp(x)	Value of E^x
floor(x)	Value of x rounded down to its nearest integer
log(x)	Natural logarithm (base E) of x
max(x,y,z,...,n)	Number with highest value
min(x,y,z,...,n)	Number with lowest value
pow(x,y)	X to the power of y
random()	Random number between 0 and 1
round(x)	Value of x rounded to its nearest integer
sin(x)	Sine of x (x is in radians)
sqrt(x)	Square root of x
tan(x)	Tangent of an angle

Dates

Date()	Create a new date object with the current date and time
Date(2017, 5, 21, 3, 23, 10, 0)	Create a custom date object. The numbers represent year, month, day, hour, minutes, seconds, milliseconds. You can omit anything you want except for year and month.
Date("2017-06-23")	Date declaration as a string
getDate()	Get the day of the month as a number (1-31)
getDay()	Get the weekday as a number (0-6)
getFullYear()	Get the year as a four digit number (yyyy)
getHours()	Get the hour (0-23)
getMilliseconds()	Get the millisecond (0-999)
getMinutes()	Get the minute (0-59)
getMonth()	Get the month as a number (0-11)
getSeconds()	Get the second (0-59)
getTime()	Get the time (milliseconds since January 1, 1970)
getUTCDate()	Day (date) of the month in the specified date according to universal time (also available for day, month, fullyear, hours, minutes etc.)
parse	Parse a string representation of a date, and return the number of milliseconds since January 1, 1970
setDate()	Set the day as a number (1-31)
setFullYear()	Set the year (optionally month and day)
setHours()	Set the hour (0-23)
setMilliseconds()	Set the milliseconds (0-999)
setMinutes()	Set the minutes (0-59)
setMonth()	Set the month (0-11)
setSeconds()	Set the seconds (0-59)
setTime()	Set the time (milliseconds since January 1, 1970)
setUTCDate()	Set the day of the month for a specified date according to universal time (also available for day, month, fullyear, hours, minutes etc.)

DOM Mode

Node Properties

attributes	Live collection of all attributes registered to an element
baseURI	Absolute base URL of an HTML element
childNodes	Collection of an element's child nodes
firstChild	First child node of an element
lastChild	Last child node of an element
nextSibling	Next node at the same node tree level
nodeName	Name of a node
nodeType	Type of a node
nodeValue	Value of a node
ownerDocument	Top-level document object for current node
parentNode	Parent node of an element
previousSibling	Node immediately preceding the current one
textContent	Textual content of a node and its descendants

Node Methods

appendChild()	Add a new child node to an element as the last child node
cloneNode()	Clone HTML element
compareDocumentPosition()	Compare the document position of two elements
getFeature()	Return an object which implements the APIs of a specified feature
hasAttributes()	Return true if an element has any attributes, else return false
hasChildNodes()	Return true if an element has any child nodes, else return false
insertBefore()	Insert a new child node before a specified, existing child node
isDefaultNamespace()	Return true if a specified namespaceURI is the default, else return false
isEqualNode()	Check if two elements are equal
isSameNode()	Check if two elements are the same node
isSupported()	Return true if a specified feature is supported on the element
lookupNamespaceURI()	Return the namespaceURI associated with a given node
lookupPrefix()	Return a DOMString containing the prefix for a given namespaceURI, if present
normalize()	Join adjacent text nodes and remove empty text nodes in an element
removeChild()	Remove a child node from an element
replaceChild()	Replace a child node in an element

Element Methods

getAttribute()	Return the specified attribute value of an element node
getAttributeNS()	Return string value of the attribute with the specified namespace and name
getAttributeNode()	Get the the specified attribute node

getAttributeNodeNS()	Return the attribute node for the attribute with the given namespace and name
getElementsByTagName()	Provide a collection of all child elements with the specified tag name
getElementsByTagNameNS()	Return a live HTML collection of elements with a certain tag name belonging to the given namespace
hasAttribute()	Return true if an element has any attributes, else return false
hasAttributeNS()	Provide a true/false value indicating whether the current element in a given namespace has the specified attribute
removeAttribute()	Remove a specified attribute from an element
removeAttributeNS()	Remove the specified attribute from an element within a certain namespace
removeAttributeNode()	Take away a specified attribute node and return the removed node
setAttribute()	Set or change the specified attribute to a specified value
setAttributeNS()	Add a new attribute or change the value of an attribute with the given namespace and name
setAttributeNode()	Set or change the specified attribute node
setAttributeNodeNS()	Add a new namespaced attribute node to an element

Browser Window Properties

closed	Check whether a window has been closed or not and return true or false
defaultStatus	Set or return the default text in the statusbar of a window
document	Return the document object for the window
frames	Return all <iframe> elements in the current window
history	Provide the History object for the window
innerHeight	Inner height of a window's content area
innerWidth	Inner width of the content area
length	Return the number of <iframe> elements in the window
location	Return the location object for the window
name	Set or return the name of a window
navigator	Return the Navigator object for the window
opener	Return a reference to the window that created the window
outerHeight	Outer height of a window, including toolbars/scrollbars
outerWidth	Outer width of a window, including toolbars/scrollbars
pageXOffset	Number of pixels by which the document has been scrolled horizontally
pageYOffset	Number of pixels by which the document has been scrolled vertically
parent	Parent window of the current window
screen	Return the Screen object for the window
screenLeft	Horizontal coordinate of the window (relative to screen)
screenTop	Vertical coordinate of the window
screenX	Same as screenLeft but needed for some browsers
screenY	Same as screenTop but needed for some browsers
self	Return the current window
status	Set or return the text in the statusbar of a window
top	Return the topmost browser window

Browser Window Methods

alert()	Display an alert box with a message and an OK button
blur()	Remove focus from the current window
clearInterval()	Clear a timer set with setInterval()
clearTimeout()	Clear a timer set with setTimeout()
close()	Close the current window
confirm()	Display a dialog box with a message and OK and Cancel buttons
focus()	Set focus to the current window
moveBy()	Move a window relative to its current position
moveTo()	Move a window to a specified position
open()	Open a new browser window
print()	Print the content of the current window
prompt()	Display a dialog box that prompts the visitor for input
resizeBy()	Resize the window by the specified number of pixels
resizeTo()	Resize the window to a specified width and height
scrollBy()	Scroll the document by a specified number of pixels
scrollTo()	Scroll the document to specified coordinates
setInterval()	Call a function or evaluate an expression at specified intervals
setTimeout()	Call a function or evaluate an expression after a specified interval
stop()	Stop the window from loading

Screen Properties

availHeight	Return the height of the screen (excluding the Windows Taskbar)
availWidth	Return the width of the screen (excluding the Windows Taskbar)
colorDepth	Return the bit depth of the color palette for displaying images
height	The total height of the screen
pixelDepth	The color resolution of the screen in bits per pixel
width	The total width of the screen

JavaScript Events

JavaScript Mouse Events

onclick	When user clicks on an element
oncontextmenu	When user right-clicks on an element to open a context menu
ondblclick	When user double-clicks on an element
onmousedown	When user presses a mouse button over an element
onmouseenter	When user moves pointer onto an element
onmouseleave	When user moves pointer away from an element
onmousemove	When user moves pointer while it is over an element
onmouseover	When user moves pointer onto an element or one of its children
onmouseout	When user moves pointer away from an element or one of its children
onmouseup	When user releases a mouse button while over an element

JavaScript Keyboard Events

onkeydown	When user is pressing a key down
onkeypress	When user starts pressing a key
onkeyup	When user releases a key

JavaScript Frame Events

onabort	When loading of media is aborted
onbeforeunload	Before the document is about to be unloaded
onerror	When an error occurs while loading an external file
onhashchange	When the anchor part of a URL has changed
onload	When an object has loaded
onpagehide	When user navigates away from a webpage
onpageshow	When user navigates to a webpage
onresize	When user resizes document view
onscroll	When user is scrolling an element's scrollbar
onunload	When a page has unloaded

JavaScript Form Events

onblur	When an element loses focus
onchange	When the content of a form element changes (for <input>, <select>and <textarea>)
onfocus	When an element gets focus
onfocusin	When an element is about to get focus
onfocusout	When an element is about to lose focus
oninput	User input on an element
oninvalid	When an element is invalid
onreset	When a form is reset
onsearch	When a user types something in a search field (for <input="search">)
onselect	When user selects some text (for <input> and <textarea>)
onsubmit	When a form is submitted

JavaScript Drag Events

ondrag	When user drags an element
ondragend	When user has finished dragging the element
ondragenter	When the dragged element enters a drop target
ondragleave	When the dragged element leaves the drop target
ondragover	When the dragged element is on top of the drop target
ondragstart	When user starts to drag an element
ondrop	Dragged element is dropped on the drop target

JavaScript Clipboard Events

oncopy	When user copies content of an element
oncut	When user cuts an element's content
onpaste	When user pastes content in an element

JavaScript Media Events

onabort	When media loading is aborted
oncanplay	When browser can start playing media (e.g. a file has buffered enough)
oncanplaythrough	When browser can play through media without stopping
ondurationchange	When duration of media changes
onended	When media has reached its end
onerror	When an error occurs while loading an external file

onloadeddata	When media data is loaded
onloadedmetadata	When metadata (like dimensions and duration) is loaded
onloadstart	When browser starts looking for specified media
onpause	When media is paused either by user or automatically
onplay	When media has been started or is no longer paused
onplaying	When media is playing after having been paused or stopped for buffering
onprogress	When browser is in the process of downloading media
onratechange	When playing speed of media changes
onseeked	When user has finished moving/skipping to a new position in media
onseeking	When user starts moving/skipping
onstalled	When browser is trying to load unavailable media
onsuspend	When browser is intentionally not loading media
ontimeupdate	The playing position has changed (e.g. because of fast forward)
onvolumechange	When media volume has changed (including mute)
onwaiting	When media has paused but is expected to resume (for example, buffering)

Animation

animationend	When CSS animation is complete
animationiteration	When CSS animation is repeated
animationstart	When CSS animation has started

Miscellaneous

transitionend	When CSS transition is complete
onmessage	When a message is received through the event source
onoffline	When browser starts to work offline
ononline	When browser starts to work online
onpopstate	When the window's history changes
onshow	When a <menu> element is shown as a context menu
onstorage	When a Web Storage area is updated
ontoggle	When user opens or closes the <details> element
onwheel	When mouse wheel rolls up or down over an element
ontouchcancel	When screen touch is interrupted
ontouchend	When user's finger goes off touch screen
ontouchmove	When user drags a finger across the screen