



mootools Core

Full CheatSheet for Javascript Framework mootools 1.3
by mediavrog.net/blog/



Core

instanceOf(item m, type m)
typeOf(item m)
element, textnode, number, whitespace, function, date, arguments, array, object, string, boolean, regexp, class, collection, window, document, event, false

Object: Browser

ie, ie6, ie7, ie8,
firefox, firefox2, firefox3,
safari, safari3, safari4,
chrome, opera

Features

xpath, xhr, air, query, json

Request

Platform

mac, win, linux, ios, webos,
android, other, anyName

Plugins

Flash

Class

new Class(o | contructor fn)
special properties:
Extends: o | class l a,
Implements: o,
initialize: fn (=constructor)
implement(o)

Class.Extras

Class: Chain
new Class([Implements: Chain])
callChain([args])
chain(fn [, fn [, ...]])
clearChain()

Class: Events

new Class([Implements: Events])
addEvent(s, fn [, internal?])
addEvents(o, fn [, internal?])
fireEvent(s [, args, delay ms])
removeEvent(s, fn)
removeEvents([s])

Class: Options

new Class([Implements: Options])
setOptions([opt])

Type: Object

Static methods (O = Object)

- * O.each(fn(v, k, o){}, bn)
- * O.every(fn(v, k, o){}, bn)
- * O.filter(fn(v, k, o){}, bn)
- * O.keyOf(o, value m)
- * O.map(fn(v, k, o){}, bn)
- * O.some(fn(v, k, o){}, bn)
- * **mostly synonymous to Array fn**
- O.append(origin o, ext o)
- O.clone(o)
- O.contains(o, value m)
- O.getLength(o)
- O.keys(o)
- O.merge(o1, o2 [, o3, ...])
- O.subset(o, keys a)
- O.toQueryString(o)
- O.values(o)

Type: String

- String.from(m)
- String.uniqueID()
- camelCase()
- capitalize()
- clean()
- contains(s [, separator s])
- escapeRegExp()
- hyphenate()
- stripScripts(evaluate?)
- substitute(o [, regex])
- test(regex [, params])
- tolnt(),
toFloat()
- trim()
- rgbToHex(returnArray?)
- hexToRgb(returnArray?)

Type: Function

- Function.from(m)
- Function.attempt(fn [, fn [, ...]])
- attempt([args [, bn])
- bind([bn [, args]])
- delay([ms [, bn [, args]])
- extend(key s, value m)
- implement(key s, value m)
- pass([args [, bn])
- periodical([ms [, bn [, args]])
- replace: bindWithEvent
myEl.addEventListener("click",function(e){
myFunction.bind(bn [, el)])

replace: Run

myFn.apply(bn, arg)

Type: Array

- Array.each(iterable, fn [, bind])
- Array.clone(a)
- Array.from(o)
- * each(fn(el, i, a){}, bn)
- * every(fn(el, i, a){}, bn)
- * filter(fn(el, i, a){}, bn)
- * indexOf(el [, from n])
- * map(fn(el, i, a){}, bn)
- * some(fn(el, i, a){}, bn)
- * **only if not supported natively**
- append(a)
- associate(a)
- clean()
- combine(a)
- contains(el [, from n])
- erase(el)
- empty()
- flatten()
- getLast()
- getRandom()
- include(el)
- invoke(method [, arg, arg, ...])
- link(o)
- pick()
- rgbToHex(returnArray?)
- hexToRgb(returnArray?)

Type: Number

- Number.from(m)
- Number.random(min n, max n)
- limit(min n, max n)
- round([n])
- times(fn [, bn])
- tolnt(), toFloat()

Methods from 'Math'

- abs, acos, asin, atan2, ceil, cos, exp, floor, log, max, min, pow, sin, sqrt, tan
- Type: Event**
new Event([e [, win]])
- Properties
- alt, client.x, client.y, code, control, key, meta, page.x, page.y, shift, relatedTarget, rightClick, target, wheel
- 'key' can be:
enter, up, down, left, right, tab, space, backspace, delete, esc
- preventDefault()
- stop(), stopPropagation()
- Object: Event.Keys**
Event.Keys.key = keyCode

Element

- Type: Element**
new Element(tag s | el | selector s [, opt])
- each opt calls 'Element.set'
- getElement(match)
- getElements(match)
- getElementById(s)
- set(s, val | o)
- get(s)
- erase(s)
- match(match)
- contains(el)
- inject(el [, where])
- <el>myEl</el> (move myEl)
- grab(el [, where])
- <myEl>el</myEl> (move el)
- adopt(el [, el a | el [, ...]])
- <myEl>el</myEl> (move el's)
- wraps(el [, where])
- <myEl>el</myEl> (move myEl)
- appendText(s)
- empty() remove children
- destroy() trash, free memory
- dispose() remove from DOM
- clone([cloneContents?, keepId?])
- replaces(el)
- hasClass(s)
- addClass(s)
- removeClass(s)
- toggleClass(s)
- getPrevious([match])
- getAllPrevious([match])
- getNext([match])
- getAllNext([match])
- getFirst([match])
- getLast([match])
- getParent([match])
- getParents([match])
- getSiblings([match])
- getChildren([match])
- toQueryString()
- getSelected() (only on <select>)
- getProperty(s)
- getProperties(s [, s [, ...]])
- setProperty(s, val)
- setProperties(s: val, ...)
- removeProperty(s)
- removeProperties(s [, s [, ...]])
- store(s, val)
- retrieve(s [, default m])
- eliminate(s)

Type: IFrame

- Type: Window
document.id(el | s | o)
- Alias: \$
- (function(\$){
// \$ is safe in closure (compat!)})
- \$(document.id)
- \$\$(selector s | el | el [, el, ...])
- any combination; commaseparated

Object: Element.Properties

- html: htmlStr [, htmlStr [, ...]]
- text: textString
- prop: propValue
- tag (only getter)

Type: Elements

- new Elements(el a [, opt])
- filter(sel s)

Element.Style

- Type: Element**
setStyle(s, val)
- setStyles({s : val, ...})
- getStyle(s)
- getStyles(s [, s [, ...]])

Element.Event

- Type: Element**
addEvent(e, fn)
- addEvents({e: fn})
- removeEvent(e, fn)
- removeEvents([e])
- fireEvent(e [, args, delay])
- cloneEvents(from el [, type s])

Object: Element.Events

- Element.Events.key = o
- o = { base: e, condition: fn, onAdd: fn, onRemove: fn }

Custom Events

- mouseenter
- mouseleave
- mousewheel

Element.Dimensions

- Type: Element**
getCoordinates()
- getOffsetParent()
- getPosition(relative el)
- setPosition({x: posX, y: posY})
- getScroll(), getScrollSize()
- getSize()
- scrollTo(x,y)

Class: Request

- new Request([opt])
- opt = {
- url: s,
- method: post | get,
- data: s,
- link: ignore | cancel | chain,
- async: syncRequest?,
- encoding: s, (default: utf-8)
- headers: {name: content},
- evalScripts: eval<script>?,
- evalResponse: evalAll?,
- emulation: *put*_method?,
- urlEncoded: formUrlEncoding?,
- timeout: ms,
- noCache: forceNoCache?,
- user: basicAuthUser s,
- password: basicAuthPasswd s,
- isSuccess: fn,
- onRequest(),
- onLoadStart(event, xhr),
- onProgress(event, xhr),
- onComplete(),
- onCancel(),
- onSuccess(rText, rXml),
- onFailure(xhr),
- onException(hdName ,val),
- onTimeout()

Object: JSON

- JSON.encode(o)
- JSON.decode(s [, secure?])

Class: Swiff

- new Swiff(swfPath s [, opt])
- opt = {
- id: s
- width: n, height : n,
- container: el,
- params: swfParams,
- properties: o,
- vars: o,
- events: o

swfParams = {

- allowScriptAccess: s,
- quality: high | medium | low,
- swfLiveConnect: remoteScripting?,
- wMode: s

- Swiff.remote(mySwiff o, fn [, arg, arg, ...])

Class: Slick (Selectors)

- 'Slick' engine FTW!
- <https://github.com/mootools/slick>

Class: Request.HTML

- new Request.HTML([opt])
- opt = { all opt from Request + update: el,
- append: el,
- evalScripts: eval<script>?,
- filter: fn,
- onSuccess(rTree, rElems,
- rHTML, rJS)

}

get(opt | url s)

post(opt | queryString | el)

Object: Element.Properties

load [, opt]

Type: Element

load(url s) > Request.HTML.get

Class: Request.JSON

new Request.JSON([opt])

- opt = { all opt from Request + secure: checkSyntax?
- onComplete(rJSON, rText)

}

Object: JSON

- JSON.encode(o)
- JSON.decode(s [, secure?])

Class: Swiff

new Swiff(swfPath s [, opt])

- opt = {
- id: s
- width: n, height : n,
- container: el,
- params: swfParams,
- properties: o,
- vars: o,
- events: o

swfParams = {

- allowScriptAccess: s,
- quality: high | medium | low,
- swfLiveConnect: remoteScripting?,
- wMode: s

- Swiff.remote(mySwiff o, fn [, arg, arg, ...])

Class: Slick (Selectors)

- 'Slick' engine FTW!
- <https://github.com/mootools/slick>

Class: Request.HTML

- new Request.HTML([opt])
- opt = { all opt from Request + update: el,
- append: el,
- evalScripts: eval<script>?,
- filter: fn,
- onSuccess(rTree, rElems,
- rHTML, rJS)

}

get(opt | url s)

post(opt | queryString | el)

Object: Element.Properties

load [, opt]

Type: Element


Class: FX

```
new Fx(opt)
opt = {
    fps: n (default: 50),
    unit: false | px | em | %,
    link: ignore | cancel | chain,
    duration: ms | short | normal | long,
    transition: Fx.Transitions,
    onStart(fxInstance),
    onComplete(fxInstance),
    onCancel(fxInstance),
    onChainComplete(fxInstance)
}
start(from n, [to n])
set(value m n)
cancel()
pause()
resume()
```

Class: Fx.Tween

```
new Fx.Tween(el, opt)
opt = { all opt from Fx +
    property: cssProp s }
set(cssProp s, value m)
start([cssProp s,] [from,] to)
```

Object: Element.Properties

```
tween, [ opt]
Type: Element
tween(cssProp s, from [, to])
fade([how])
how = in | out | show | hide | toggle
    or number between 0 and 1
highlight([start, end])
```

Class: FX.Morph

```
new Fx.Morph(el, opt)
opt = { all opt from Fx }
set( match | {cssProp: to} )
start( match | {cssProp: from,
    [to]} )
```

Object: Element.Properties

```
morph( match | {cssProp:
    from, [to]} )
```

Type: Element
Fx.Transitions

```
Class: Fx
adds possibility to use transition
option as string e.g. 'bounce:out'
```

Object: Fx.Transitions

```
Linear, Quad, Cubic, Quart,
Quint, Pow, Expo, Circ, Sine,
Back, Bounce, Elastic
each has easin,easeOut,easelnOut
```

Class: Fx.Transition

```
new Fx.Transition(trans [, opt])
```

mootools More

From here on you will find some selected plugins from More, I consider useful. It's not a complete list! Be sure to check out mootools.net/docs/more for latest up-to-date information.

Found typos?

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Class: Fx.Elements

```
new Fx.Elements(el a, opt)
```

```
opt = all opt from FX
```

```
set(to)
```

```
to =
```

```
    index of el: {cssProp: to}
```

```
}
start(obj)
```

```
obj = {
    index of el: {cssProp: [from, to]}
```

Class: Fx.Slide

```
new Fx.Slide(el, opt)
```

```
opt = { all opt from Fx +
    mode: horizontal | vertical,
    wrapper: el,
    hideOverflow: setHidden?,
    resetHeight: autoResetHeight?
}
```

```
slideIn([mode])
slideOut([mode])
toggle([mode])
hide([mode])
show([mode])
```

Hash: Element.Properties

```
slide, [ opt]
```

Type: Element

```
slide( [how] )
```

```
how = in | out | show | hide | toggle
```

Class: Fx.Scroll

```
new Fx.Scroll(el, opt)
opt = { all opt from Fx +
    offset: {x: n, y: n},
    overflow: a,
    wheelStops: wheelStopsTrans?
}
set(x, y)
start(x, y)
toTop(), toBottom()
toLeft(), toRight(),
toElement(el)
```

Class: Drag

```
new Drag(el, opt)
```

```
opt = {
    grid: pixels n,
    handle: el,
    invert: invertValuesOnDrag?,
    limit: {x: n, y:n},
    modifiers: {x: cssProp, y: cssProp}
    snap: distance n,
    style: setModifiersAsStyleProp?
    unit: s (default: px),
    preventDefault: b?, > Event
    stopPropagation: b?, > Event
    onStart(el),
    onSnap(el),
    onDrag(el),
    onComplete(el),
    onCancel(el)
}
```

```
}
attach()
detach()
stop([event])
```

Type: Element

```
makeResizable([opt])
```

```
opt = all opt from Drag
```

Class: Drag.Move

```
new Drag.Move(el, opt)
opt = { all opt from Drag +
    container: el,
    droppables: el a,
    precalculate: b?,
    includeMargins: b?,
    checkDroppables: b?,
    onDrop(el, droppable, event),
    onLeave(el, droppable),
    onEnter(el, droppable)
}
```

```
}
stop()
```

Type: Element

```
makeDraggable([opt])
```

```
opt = all opt from Drag / Drag.Move
```

Module: Types

```
Array.Extras (Type: Array)
min()
max()
average()
shuffle()
sum()
unique()
reduce(fn [, firstCallVal m])
reduceRight(fn [, firstCallVal m])
fn(previousVal, currentVal, i, a)
```

String.Extras (Type: String)

```
pad(length, padString, dir)
dir = left | right | both
repeat(times n)
tidy() common special-chars to ascii
standardize() remove non-ascii
getTags([tagType, contents])
stripTags([tagType, contents])
```

Object.Extras (Type: Object)

```
O.getFromPath(o, path s)
path like 'key1.sub1.sub3'
O.cleanValues(o, fn(val))
O.erase(o, key)
O.run(o [, arg [, arg [, ...]]])
```

Number.Format (Type: Number)

```
format([opt])
opt = {
    decimal: separator s,
    group: separator s,
    decimals: numOfDecimals n,
    precision: significantNum n,
    scientific: replace'e+4'?,
    prefix: s, suffix: s
}
```

```
formatCurrency() > Locale
formatPercentage()
```

Hash: Asset

```
Asset.javascript(source s [, opt])
```

```
Asset.css(source s [, opt])
opt = { all opt from Element +
    onLoad()
```

```
}
Asset.image(source s [, opt])
opt = { all opt from Element +
    onLoad(), onError(), onAbort()
}
```

```
}
Asset.images(sources a [, opt])
opt = { all opt from Element +
    onComplete(),
    onProgress(counter, index),
    onError(counter, index)
}
```

Note: Don't use Mootools events!

Type: Date

```
get(key)
set(key, val) / set({key: val})
key = Date, Day,FullYear / year,
Hours / hr, Milliseconds / ms,
Minutes / min, Month / mo,
Seconds / sec, Time, UTCDate,
UTCFullYear, UTHours,
UTCMilliseconds, UTCMinutes,
UTCMonth, UTCSeconds
for 'get(key)' key may also be:
TimezoneOffset, Week, Timezone,
GMTOffset, Ordinal, DayOfYear,
LastDayOfMonth, UTCDay, AMPM
clone()
```

```
increment(resolution, times n)
decrement(resolution, times n)
diff(date [, resolution])
resolution = year, month, week,
day, hour, minute, second, ms
```

```
isLeapYear()
```

```
clearTime()
```

```
toISOString()
```

```
parse(date | s)
```

Static methods (D = Date)

```
D.defineFormat(name, format)
D.defineFormats({name, format})
```

```
D.parse(date | s)
```

```
D.defineParser(pattern s)
```

```
D.defineParsers(pattern a)
```

```
pattern = hybrid of format keys &
regular expressions
```

```
%key - match key
```

```
? - optional
```

```
() - groups
```

```
e.g. "%d%o( %b( %Y)?)(%X)?"
```

```
    ~14th
```

```
    ~31st October
```

```
    ~1 Jan 2000
```

```
    ~1 Jan 12:00am
```

```
D.define2DigitYearStart(year)
```

```
example:
```

```
D.parse('01/01/00'); //Year 2000
D.parse('12/31/99'); //Year 1999
D.define2DigitYearStart(2000);
```

```
D.parse('01/01/00'); //Year 2000
D.parse('12/31/99'); //Year 2099
```

Class: Date.Extras
Extra Date Parsers

```
Date.parse("today")
```

```
Date.parse("next monday") ...
```

Type: Date

```
timeDiff([date, joiner])
timeDiffInWords([date])
```

Info: Date.format

```
format(format)
```

```
keys: ("%key %key2%key3")
```

```
a short day ("Mon", "Tue")
```

```
A full day ("Monday")
```

```
b short month ("Jan", "Feb")
```

```
B full month ("January")
```

```
c full date to string ("Mon Dec 10 14:35:42 2007")
```

```
d date to two digits (01, 05, ...)
```

```
e date as one digit (1, 5, 12, ...)
```

```
H hour to two digits / 24h (00 - 24)
```

```
I hour as decimal / 12h (01 - 12)
```

```
j day of the year to three digits (001 - 366, is Jan 1st)
```

```
k hour / 24h as a digit (0 - 23)
```

```
Single digits preceded by space
```

```
l hour / 12h as digit (1 to 12).
```

```
Single digits preceded by space
```

```
L time in milliseconds to 3 digits
```

```
m numerical month to two digits (01 is Jan, 12 is Dec)
```

```
M minutes to two digits (01 - 59)
```

```
O ordinal of the day of the month in the current language ("st" for 1st, "nd" for 2nd, etc.)
```

```
p current language equivalent of either AM or PM
```

```
s Unix Epoch Time timestamp
```

```
S seconds to two digits (01 - 59)
```

```
U week to two digits (01 - 52)
```

```
W numerical day of week one digit (0 is Sunday, 1 is Monday)
```

```
X date in the current language preferred format
```

```
en-US: %m/%d/%Y (12/10/2007)
```

```
en-US: %I:%M%p (02:45PM)
```

```
y short year in two digits ("07")
```

```
Y full year in four digits ("2007")
```

```
Z GMT offset ("-0800")
```

```
Z time zone ("GMT")
```

```
% returns % (%y% = 07%)
```

shortcuts:

```
db
```

```
    %Y-%m-%d %H:%M:%S
```

```
compact
```

```
    %Y%m%dT%H%M%S
```

```
iso8601
```

```
    %Y-%m-%dT%H:%M:%S%T
```

```
rfc822
```

```
    %a, %d %b %Y %H:%M:%S %Z
```

```
short
```

```
    %d %b %H:%M
```

```
long
```

```
    %B %d, %Y %H:%M
```

Module: Request

```
Class: Request.Periodical
extends Request, Request.HTML
& Request.JSON
```

```
opt = { all opt from Request +
    initialDelay: ms,
    delay: ms,
    limit: ms
}
startTimer(m)
stopTimer()
```

Class: Request.Queue

```
new Request.Queue(opt)
opt = {
    stopOnFailure: b?,
    autoAdvance: b?,
    concurrent: parallelReq n
} + Events from Request like so:
onComplete(name, inst, rText, rXml)
addRequest(name, request)
addRequests({name, request})
cancel(name)
clear([name])
getName(request)
getRunning()
hasNext([name])
removeRequest(name | request)
resume()
runAll()
runNext([name])
```

Type: URI

```
new URI([strUri, opt])
```

```
opt = {
    base: baseHref s
}
```

```
toString()
```

```
set(part, value)
```

```
part = scheme, user, password,
host, port, directory, file, query,
fragment, data
```

```
get(part)
```

```
setData(o [, merge?, part])
```

```
getData([key, part])
```

```
clearData()
```

```
go()
```

```
toURL()
```

Type: String

```
toURI()
```

Module: URI.Relative
Type: URI

```
toAbsolute()
```

```
toRelative()
```