

YUI Library: Drag & Drop

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Simple Use Case: Making an Element Draggable

```
myDDObj = new YAHOO.util.DD("myDiv");
```

Makes the HTML element whose id attribute is "myDiv" draggable.

Constructor (YAHOO.util.DD, DDProxy, DDTarget)

```
YAHOO.util.DD(str target[, str group name, obj configuration]);
```

Arguments:

- (1) **Element id:** HTML ID of the element to make draggable; deferral is supported if the element is not yet on the page.
- (2) **Group Name:** An optional string indicating the DD group; DD objects only "interact with" other objects that share a group.
- (3) **Configuration:** An object containing name-value pairs, used to set any of the DD object's properties.

Properties & Methods of YAHOO.util.DragDrop

Properties:

available (b)
groups (ar)
id (s)
invalidHandle
Classes (s[])
invalidHandleIds
(obj)
isTarget (b)
maintainOffset (b)
padding (int[])
primaryButtonOnly
(b)
xTicks (int[])
yTicks (int[])

Methods:

addInvalidHandle
Class (s cssClass)
addInvalidHandleId (s id)
addInvalidHandle
Type (s tagName)
addToGroup (s groupName)
clearTicks()
clearConstraints()
getDragEl()
getEl()
isLocked()
lock()
removeFromGroup(o dd, s group)
removeInvalidHandleClass(s cssClass)
removeInvalidHandleId(s id)
removeInvalidHandle
Type (s tagName)
resetConstraints()
setDragElId(s id)
setHandleElId (s id)
setOuterHandleElId (s id)
setPadding(i top, i right, i bottom, i left)
setXConstraint(i left, i right, i tick size)
setYConstraint(i up, i down, i tick size)
unlock()
unreg()

Properties & Methods of YAHOO.util.DD & .DDProxy

Inherit from YAHOO.util.DragDrop and add the following:

YAHOO.util.DD Properties:
scroll (b)

YAHOO.util.DDProxy Properties:
centerFrame (b)
resizeFrame (b)

Interesting Moments in Drag & Drop

Moment	Point Mode	Intersect Mode	Event (e)
onMouseDown	e	e	mousedown
startDrag	x, y	x, y	n/a
onDrag	e	e	mousemove
onDragEnter	e, id	e, DDArray	mousemove
onDragOver	e, id	e, DDArray	mousemove
onDragOut	e, id	e, DDArray	mousemove
onDragDrop	e, id	e, DDArray	mouseup
endDrag	e	e	mouseup
onMouseUp	e	e	mouseup

These "moments" are exposed as events on your DD instances; they are methods of YAHOO.util.DragDrop. The table above identifies the arguments passed to these methods in Point and Intersect modes.

Solutions

Add a drag handle to an existing DD object:

```
myDDObj.setHandleElId('myDragHandle');
```

Set the "padding" or "forgiveness zone" of a DD object:

```
myDDObj.setPadding(20, 30, 20, 30); //units are pixels, top/rt/bt/left
```

Get the "best match" from an onDragDrop event in Intersect Mode where the dragged element is over more than one target:

```
myDDObj.onDragDrop = function(e, DDArray) {  
    oDDBestMatch =  
        YAHOO.util.DragDropMgr.getBestMatch(DDArray);  
}
```

Override an interesting moment method for a DD object instance:

```
myDDObj = new YAHOO.util.DD("myDiv");  
myDDObj.startDrag = function(x,y) {  
    this.iStartX = x; this.iStartY = y;  
}
```

Change the look and feel of the proxy element at the start of a drag event using YAHOO.util.DDProxy:

```
myDDObj.startDrag(x,y) {  
    YAHOO.util.Dom.addClass(this.getDragEl(),  
        "myCSSClass"); }  
}
```

Lock Drag and Drop across the whole page:

```
YAHOO.util.DragDropMgr.lock();
```

Switch to Intersect Mode:

```
YAHOO.util.DragDropMgr.mode =  
    YAHOO.util.DragDropMgr.INTERSECT;
```

Drag & Drop Manager:

Properties

clickPixelThresh (i)
clickTimeThresh (i)
mode (either
YAHOO.util.DragDropMgr.
POINT or .INTERSECT)
preventDefault (b)
stopPropagation (b)
useCache (b)

Drag & Drop Manager:

Methods

oDD=instance of DragDrop object

getBestMatch(a [oDDs])
getDDbyId(s id)
getLocation(oDD)
getRelated(oDD, b targets only)
isDragDrop(s id)
isHandle(s DDId, s HandleId)
isLegalTarget(oDD, oDD target)
isLocked()
lock()
refreshCache()
swapNode()
unlock()

*Note:

YAHOO.util.DragDropMgr is a singleton; changes made to its properties (such as locking or unlocking) affect Drag and Drop globally throughout a page.

Dependencies

Drag & Drop requires the YAHOO object, DOM, and Event.