

## 今日内容

- 拖放事件
- canvas

### ●拖放事件

- draggable :

- 设置为true，元素就可以拖拽了

- 拖拽元素事件 ：事件对象为被拖拽元素

- dragstart ,拖拽前触发

- drag ,拖拽前、拖拽结束之间，连续触发

- dragend ,拖拽结束触发

- 目标元素事件 ：事件对象为目标元素

- dragenter ,进入目标元素触发，相当于mouseover

- dragover ,进入目标、离开目标之间，连续触发

- dragleave ,离开目标元素触发，相当于mouseout

- drop , 在目标元素上释放鼠标触发

```
1 <!DOCTYPE html >
2 <html >
3 <head>
4 <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
5 <title>无标题文档</title>
6 <style>
7 li{ list-style:none; width:100px; height:30px; background:yellow;
  margin:10px;}
8 #div1{ width:100px; height:100px; background:red; margin:200px;}
9 </style>
10 <script>
11 window.onload = function(){
12     var ali = document.getElementsByTagName('li');
```

```
13 var oDiv = document.getElementById('div1');
14 var i = 0;
15
16 for(var i=0;i<aLi.length;i++){
17     aLi[i].ondragstart = function(){
18         this.style.background = 'green';
19     };
20
21     /*aLi[i].ondrag = function(){ //开始与结束连续触发
22         document.title = i++;
23     };*/
24
25     aLi[i].ondragend = function(){
26         this.style.background = 'yellow';
27     };
28 }
29
30 oDiv.ondragenter = function(){
31     this.style.background = 'blue';
32 };
33
34 oDiv.ondragover = function(ev){
35     //enter和leave之间连续触发
36     //要想触发drop事件，就 必须在dragover当中阻止默认事件
37     //document.title = i++;
38
39     ev.preventDefault();
40
41 };
42
43 oDiv.ondragleave = function(){
44     this.style.background = 'red';
45 };
46
47 oDiv.ondrop = function(){
48     alert(123);
49 };
50
51 };
52 </script>
53 </head>
54
```

```

55 <body>
56 <ul>
57     <li draggable="true">a</li>
58     <li draggable="true">b</li>
59     <li draggable="true">c</li>
60 </ul>
61 <div id="div1"></div>
62 </body>
63 </html>

```

## ● 拖放事件\_2

- 事件的执行顺序：drop不触发的时候
  - dragstart> drag
  - > dragenter > dragover > dragleave > dragend
- 事件的执行顺序：drop触发的时候(dragover的时候阻止默认事件)
  - dragstart> drag > dragenter > dragover > drop
  - > dragend
- 不能释放的光标和能释放的光标不一样

删除拖拽的元素：

```

1  <!DOCTYPE html>
2  <html>
3  <head>
4  <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
5  <title>无标题文档</title>
6  <style>
7  li{ list-style:none; width:100px; height:30px; background:yellow;
   margin:10px;}
8  #div1{ width:100px; height:100px; background:red; margin:200px;}
9  </style>
10 <script>
11 window.onload = function(){
12     var oUl = document.getElementsByTagName('ul')[0];

```

```
13  var aLi = oUl.getElementsByTagName('li');
14  var oDiv = document.getElementById('div1');
15  var i = 0;
16
17  for(var i=0;i<aLi.length;i++){
18
19      aLi[i].index = i;
20
21      aLi[i].ondragstart = function(ev){
22
23          var ev = ev || window.event;
24
25          //ev.dataTransfer.setData('name','hello');
26
27          ev.dataTransfer.setData('name',this.index);
28
29          this.style.background = 'green';
30      };
31
32      /*aLi[i].ondrag = function(){ //开始与结束连续触发
33          document.title = i++;
34      };*/
35
36      aLi[i].ondragend = function(){
37          this.style.background = 'yellow';
38      };
39  }
40
41  oDiv.ondragenter = function(){
42      this.style.background = 'blue';
43  };
44
45  oDiv.ondragover = function(ev){
46      //enter和leave之间连续触发
47      //要想触发drop事件，就 必须在dragover当中阻止默认事件
48      //document.title = i++;
49
50      ev.preventDefault();
51
52  };
53
54  oDiv.ondragleave = function(){
```

```

55     this.style.background = 'red';
56 };
57
58 oDiv.ondrop = function(ev){
59     //alert(123);
60
61     //alert( ev.dataTransfer.getData('name') );
62
63     oUl.removeChild( aLi[ev.dataTransfer.getData('name')] );
64
65     for(var i=0;i<aLi.length;i++){
66
67         aLi[i].index = i;
68
69     }
70
71 };
72
73 };
74 </script>
75 </head>
76
77 <body>
78 <ul>
79     <li draggable="true">a</li>
80     <li draggable="true">b</li>
81     <li draggable="true">c</li>
82 </ul>
83 <div id="div1"></div>
84 </body>
85 </html>

```

## ● 拖放事件\_3

- 解决火狐下的问题

— 必须设置dataTransfer对象才可以拖拽除图片外的其他标签

—

## ● dataTransfer对象

- setData() : 设置数据 key和value(必须是字符串)

- getData() : 获取数据, 根据key值, 获取对应的value

## ●dataTransfer对象\_2

- effectAllowed

- effectAllowed : 设置光标样式(none, copy, copyLink,copyMove, link, linkMove, move, all 和 uninitialized)

- setDragImage

- 三个参数 : 指定的元素 , 坐标X , 坐标Y

- files

- 获取外部拖拽的文件 , 返回一个filesList列表
  - filesList下有个type属性 , 返回文件的类型

```
1 <!DOCTYPE html >
2 <html >
3 <head>
4 <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
5 <title>无标题文档</title>
6 <style>
7 li{ list-style:none; width:100px; height:30px; background:yellow;
margin:10px;}
8 #div1{ width:100px; height:100px; background:red; margin:200px;}
9 </style>
10 <script>
11 window.onload = function(){
12     var oUl = document.getElementsByTagName('ul')[0];
13     var aLi = oUl.getElementsByTagName('li');
14     var oDiv = document.getElementById('div1');
15     var oImg = document.getElementById('img1');
16     var i = 0;
17
18     for(var i=0;i<aLi.length;i++){
19
20         aLi[i].ondragstart = function(ev){
21
```

```
22     var ev = ev || window.event;
23
24     ev.dataTransfer.setData('name','hello');
25
26     ev.dataTransfer.effectAllowed = 'link';
27
28     ev.dataTransfer.setDragImage(oImg,0,0);
29
30 };
31
32
33     aLi[i].ondragend = function(){
34         this.style.background = 'yellow';
35     };
36 }
37
38 oDiv.ondragenter = function(){
39     this.style.background = 'blue';
40 };
41
42 oDiv.ondragover = function(ev){
43     //enter和leave之间连续触发
44     //要想触发drop事件，就 必须在dragover当中阻止默认事件
45     //document.title = i++;
46
47     ev.preventDefault();
48
49 };
50
51 oDiv.ondragleave = function(){
52     this.style.background = 'red';
53 };
54
55 oDiv.ondrop = function(ev){
56
57
58 };
59
60 };
61 </script>
62 </head>
63
```

```

64 <body>
65 <ul>
66     <li draggable="true">a</li>
67     <li draggable="true">b</li>
68     <li draggable="true">c</li>
69 </ul>
70 <div id="div1"></div>
71 
72 </body>
73 </html>

```

## •files

–获取外部拖拽的文件，返回一个filesList列表

–filesList下有个type属性，返回文件的类型

拖拽外部文件到一个框里面：

```

1  <!DOCTYPE html >
2  <html >
3  <head>
4  <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
5  <title>无标题文档</title>
6  <style>
7
8  #div1{ width:200px; height:200px; background:red; margin:100px;}
9  </style>
10 <script>
11 window.onload = function(){
12
13     var oDiv = document.getElementById('div1');
14
15
16     oDiv.ondragenter = function(){
17
18         this.innerHTML = '可以释放啦';
19
20     };
21

```



```
22     oDiv.ondragover = function(ev){
23
24         ev.preventDefault();
25
26     };
27
28     oDiv.ondragleave = function(){
29
30         this.innerHTML = '将文件拖拽到此区域';
31
32     };
33
34     oDiv.ondrop = function(ev){
35
36         ev.preventDefault();
37
38         var fs = ev.dataTransfer.files;
39
40         //alert(fs.length);
41
42         //alert( fs[0].type );
43
44         var fd = new FileReader();
45
46         fd.readAsDataURL( fs[0] );
47
48         fd.onload = function(){
49             alert( this.result );
50         };
51
52     };
53
54 };
55 </script>
56 </head>
57
58 <body>
59
60 <div id="div1">将文件拖拽到此区域</div>
61
62 </body>
63 </html>
```

## FileReader(读取文件信息)

- readAsDataURL
  - 参数为要读取的文件对象，将文件读取为DataUrl
- onload
  - 当读取文件成功完成的时候触发此事件
  - this.result，来获取读取的文件数据，如果是图片，将返回base64格式的图片数据
- 实例
  - 拖拽删除列表
  - 拖拽购物车
  - 上传图片预览功能

[http://www.w3school.com.cn/jsref/jsref\\_indexOf.asp](http://www.w3school.com.cn/jsref/jsref_indexOf.asp) indexOf()方法是使用

```
1 <!DOCTYPE html >
2 <head>
3 <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
4 <title>无标题文档</title>
5 <style>
6
7 #div1{ width:200px; height:200px; background:red; margin:100px;}
8 </style>
9 <script>
10 window.onload = function(){
11
12     var oDiv = document.getElementById('div1');
13     var oUl = document.getElementById('ul1');
14
15
16     oDiv.ondragenter = function(){
17
18         this.innerHTML = '可以释放啦';
19
20     };
```

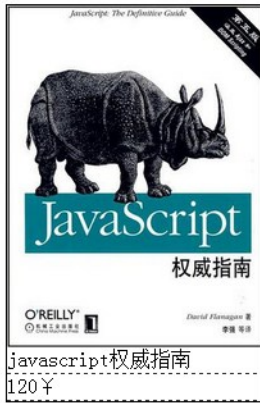
```
21
22 oDiv.ondragover = function(ev){
23
24     ev.preventDefault();
25
26 };
27
28 oDiv.ondragleave = function(){
29
30     this.innerHTML = '将文件拖拽到此区域';
31
32 };
33
34 oDiv.ondrop = function(ev){
35
36     ev.preventDefault();
37
38     var fs = ev.dataTransfer.files;
39
40     //alert(fs.length);
41
42     //alert( fs[0].type );
43
44     /*if(fs[0].type.indexOf('image')!=-1){
45         var fd = new FileReader();
46
47         fd.readAsDataURL( fs[0] );
48
49         fd.onload = function(){
50
51             var oLi = document.createElement('li');
52             var oImg = document.createElement('img');
53             oImg.src = this.result;
54             oLi.appendChild(oImg);
55             oUl.appendChild(oLi);
56
57         };
58     }
59     else{
60         alert('亲，请上传图片类型');
61     }*/
62
```

```

63     for(var i=0;i<fs.length;i++){
64         if(fs[i].type.indexOf('image')!=-1){
65             var fd = new FileReader();
66
67             fd.readAsDataURL( fs[i] );
68
69             fd.onload = function(){
70
71                 var oLi = document.createElement('li');
72                 var oImg = document.createElement('img');
73                 oImg.src = this.result;
74                 oLi.appendChild(oImg);
75                 oUl.appendChild(oLi);
76
77             };
78         }
79         else{
80             alert('亲，请上传图片类型');
81         }
82     }
83
84
85 };
86
87 };
88 </script>
89 </head>
90
91 <body>
92
93 <div id="div1">将文件拖拽到此区域</div>
94 <ul id="ul1">
95 </ul>
96 </body>
97 </html>

```

实例：购物车拖放计算价格



1	javascript权威指南	120 ¥
1	精通 javascript	35 ¥
1	DOM编程艺术	45 ¥
		200 ¥

```
1 <!DOCTYPE html>
2 <head>
3 <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
4 <title>无标题文档</title>
5 <style>
6 *{ margin:0; padding:0;}
7 li{ list-style:none;}
8 li{ float:left; width:200px; border:1px #000 solid; margin:10px;}
9 li img{ width:200px;}
10 p{ height:20px; border-bottom:1px #333 dashed;}
11 #div1{ width:600px; border:1px #000 solid; height:300px; clear:both;}
12 .box1{ float:left; width:200px;}
13 .box2{ float:left; width:200px;}
14 .box3{ float:left; width:200px;}
15 #allMoney{ float:right;}
16 </style>
17 <script>
18
19 window.onload = function(){
20     var aLi = document.getElementsByTagName('li');
21     var oDiv = document.getElementById('div1');
22 }
```

```
23     var obj = {};  
24     var iNum = 0;  
25     var allMoney = null;  
26  
27     for(var i=0;i<aLi.length;i++){  
28         aLi[i].ondragstart = function(ev){  
29  
30             var aP = this.getElementsByTagName('p');  
31  
32             ev.dataTransfer.setData('title',aP[0].innerHTML);  
33             ev.dataTransfer.setData('money',aP[1].innerHTML);  
34  
35             ev.dataTransfer.setDragImage(this,0,0);  
36  
37         };  
38     }  
39  
40     oDiv.ondragover = function(ev){  
41         ev.preventDefault();  
42     };  
43  
44     oDiv.ondrop = function(ev){  
45         ev.preventDefault();  
46  
47         var sTitle = ev.dataTransfer.getData('title');  
48         var sMoney = ev.dataTransfer.getData('money');  
49  
50  
51         if( !obj[sTitle] ){  
52  
53             var oP = document.createElement('p');  
54             var oSpan = document.createElement('span');  
55             oSpan.className = 'box1';  
56             oSpan.innerHTML = 1;  
57             oP.appendChild( oSpan );  
58             var oSpan = document.createElement('span');  
59             oSpan.className = 'box2';  
60             oSpan.innerHTML = sTitle;  
61             oP.appendChild( oSpan );  
62  
63             var oSpan = document.createElement('span');  
64             oSpan.className = 'box3';
```

```

65         oSpan.innerHTML = sMoney;
66         oP.appendChild( oSpan );
67
68         oDiv.appendChild( oP );
69
70         obj[sTitle] = 1;
71
72     }
73     else{
74
75         var box1 = document.getElementsByClassName( 'box1' );
76         var box2 = document.getElementsByClassName( 'box2' );
77
78         for(var i=0;i<box2.length;i++){
79
80             if(box2[i].innerHTML == sTitle){
81                 box1[i].innerHTML = parseInt(box1[i].innerHTML) +
1;
82             }
83
84         }
85
86     }
87
88     if(!allMoney){
89         allMoney = document.createElement( 'div' );
90         allMoney.id = 'allMoney';
91     }
92
93     iNum += parseInt(sMoney);
94
95     allMoney.innerHTML = iNum + '¥';
96
97     oDiv.appendChild( allMoney );
98
99
100 };
101
102 };
103
104 </script>
105 </head>

```

```
106
107 <body>
108 <ul>
109     <li draggable="true">
110         
111         <p>javascript语言精粹</p>
112         <p>40¥</p>
113     </li>
114     <li draggable="true">
115         
116         <p>javascript权威指南</p>
117         <p>120¥</p>
118     </li>
119     <li draggable="true">
120         
121         <p>精通javascript</p>
122         <p>35¥</p>
123     </li>
124     <li draggable="true">
125         
126         <p>DOM编程艺术</p>
127         <p>45¥</p>
128     </li>
129 </ul>
130 <div id="div1">
131     <!--<p>
132         <span class="box1">1</span>
133         <span class="box2">DOM编程艺术</span>
134         <span class="box3">45¥</span>
135     </p>
136     <p>
137         <span class="box1">1</span>
138         <span class="box2">DOM编程艺术</span>
139         <span class="box3">45¥</span>
140     </p>
141     <div id="allMoney">90¥</div>-->
142 </div>
143 </body>
144 </html>
```



