#### \* 学习目标

- \*能够掌握JavaScript事件
  - \* 监听机制:事件,事件源,监听器,注册监听
  - \* 事件: onclick,ondbclick,onload,onmouseover,onmouseout,onmousedown onmouseup,onmousemove,onkeydown,okeyup,onkeypress onchange,onselect, onfucos,onblur,...
- \*能够掌握和使用BOM
  - \* BOM:Browser Object Model
    - \* Window, Nivigator (cookie), Screen, History, Location
  - \* Window
    - \* 对话框 ( alert , confirm, prompt )
    - \* open,close
    - \* setTimeOut,setInterval,clear
  - \* History
    - \* forward().back(),go(),length
  - \* Location
    - \* href.reload
    - \* <meta charset="UTF-8" http-equav="refresh" content="5;url="">
- \*能够掌握和使用DOM
  - \* DOM:Document Object Model
  - \* W3C:三部分

核心DOM,XMLDOM,HTMLDOM

\*核心DOM

Document, Element, Node, Attribute, Comment, Text

\_\_\_\_\_

\* js:基本数据类型,运算符,变量,常量,条件语句,循环语句

<sup>\*</sup> 回顾

```
*基本数据类型: number, string, boolean, null, undefiend
* java 是强类型语言, js是弱类型的语言
* type of
* let , var , const
* 其他类型转换boolean
* == ===
* 条件语句: if else, switch--->表单校验
* 循环语句: while, do while, for
  * 九九乘法表
* 对象
 * 三种定义方式
  * let person =new Object();
  * let person={firstName:"xiao",lastName:"hei"};
  * function Person(firstName,lastName){
       this.firstName=fristName;
      this.lastName=lastName;
      function sayHello(){
          . . . . .
       }
     }
  * let person =new Person("","");
* 对象
  * Array
    * let arr=new Array(3);
    * let arr=new Array("xiaohei",48,true);
    * let arr=["xiaohei",48,true];
    * length
    * push,join
```

- \* for(let index in arr){}
- \* Boolean, Number, String
- \* Date : toLocalString();getTime(); get/set
- \* Global:encodeUri,decodeUri,parseInt,parseFloat,isNAN,eval,....
- \* Math:PI,round,ceil,floor,random,pow,sqrt,....
- \* RegExp
- \* 正则表达式
  - \* let reg=new RegExp("{6,}"); let reg=/{6,}/; reg.test(123456);
  - \* 常见符号
  - \* 单个字符: [0123],[0-9],[a-z][A-Z][a-zA-Z]\d,\w,\s,.....
  - \* 量词:\* , ? , + {m,n},{m,}{,n}.....
- \*能够掌握JavaScript事件
  - \*事件监听机制

概念 💿 某些组件被执行了某些操作后,触发某些代码的执行

事件 ⊙ 操作:单击,双击,键盘按下了,鼠标移动了

事件源 ◎ 组件:按钮,图片,文本框...

监听器 🏻 可以定义接口,单击事件就声明单击方法,...

将事件,事件源,监听器结合在一起。 注册监听 ©/

当事件源上发生了某个事件,则触发执行某个监听器代码

\* JS常见的事件

事件监听机制

```
onclick: 单击事件
点击事件 🤄
        ondblclick: 双击事件
        onblur:失去焦点
焦点事件
        onfocus:元素获得焦点
        onload:一张页面或一幅图像完成加载。
加载事件 ⊙
        onmousedown 鼠标按钮被按下
        onmouseup 鼠标按键被松开
鼠标事件
        onmousemove 鼠标被移动
        onmouseover 鼠标移到某元素之上
        onmouseout 鼠标从某元素移开
        onkeydown 某个键盘按键被按下
键盘事件 @
        onkeyup 某个键盘按键被松开
        onkeypress 某个键盘按键被按下并松开
            onchange 域的内容被改变
选择和改变事件 ◎
            onselect 文本被选中
        onsubmit 确认按钮被点击
表单事件 🧯
        onreset 重置按钮被点击
```

常见的事件

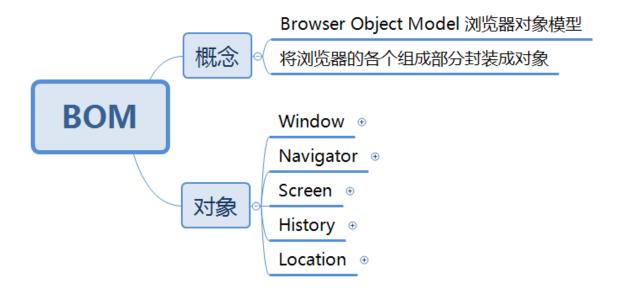
```
1 * 事件测试
 2 <!DOCTYPE html>
 3 <html lang="en">
4 <head>
      <meta charset="UTF-8">
 5
      <title>常见事件</title>
6
 7
      <script>
          function load() {
8
              alert("页面加载完成");
9
10
11
          function imgOnload() {
              alert("图片加载完成");
12
13
          function clickMe() {
14
              alert("按钮单击事件触发");
15
16
          function doubleClickMe() {
17
```

```
18
              alert("按钮双击事件触发");
          }
19
          var flag=true;
20
          function testFocus() {
21
22
              if(flag){
                  alert("文本框获得焦点");
23
24
                  flag=false;
25
          }
26
          function testBlur() {
27
              alert("文本框失去焦点");
28
29
          }
          function mouseDown() {
30
              console.log("鼠标按钮被按下");
31
32
          }
          function mouseUp() {
33
              console.log("鼠标按键被松开");
34
35
          }
          function mouseover() {
36
              console.log("鼠标移到某元素之上");
37
          }
38
          function mouseout() {
39
              console.log("鼠标从某元素移开");
40
41
          }
          function mousemove() {
42
              console.log("鼠标从某元素移开");
43
44
          function keydown() {
45
              // console.log("某个键盘按键被按下");
46
              //let code=event.code;
47
              //let codeKey=event.keyCode;
48
              //alert(codeKey+":"+code);
49
          }
50
          function keyup() {
51
              // console.log("某个键盘按键被松开");
52
          }
53
          function keypress() {
54
              // console.log("某个键盘按键被按下并松开");
55
56
          function change() {
57
```

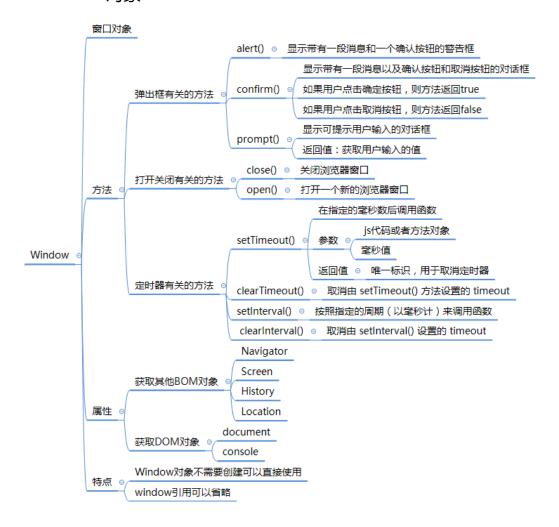
```
58
               //内容改变并且失去焦点的时候
               let username=document.getElementById("username").value;
59
               console.log("内容改变:"+username);
60
61
           }
           function showMsg() {
62
               console.log("文本被选中");
63
           }
64
           function checkForm() {
65
               alert("表单提交");
66
               return false;
67
68
69
           function mreset() {
               alert("重置表单");
70
71
               return true;
72
73
       </script>
74 </head>
   <body onload="load();" onkeydown="keydown();" onkeyup="keyup();" onkeypress="ke</pre>
75
       <img src="images/pic_bulbon.gif" onload="imgOnload();"/><br>
76
       <input type="button" value="单击事件" onclick="clickMe();"/><br>
77
       <input type="button" value="双击事件" ondblclick="doubleClickMe();"/><br>
78
       <input id="username" type="text" placeholder="请输入用户名" onfocus="testFoc</pre>
79
80
       <input type="text" placeholder="请输入用户名" onblur="testBlur();"><br>
       <a href="#" onmouseover="mouseover();" onmouseout="mouseout();"</pre>
81
          onmouseup="mouseUp();" onmousedown="mouseDown();" onmousemove="mousemove"
82
       <br>
83
       <input type="text" value="亮哥教育" onselect="showMsg(event);"><br>
84
85
       <form action="http://www.baidu.com/" onsubmit="return checkForm();" onreset</pre>
86
           <input type="submit" value="提交" />
87
           <input type="text"/>
88
           <input type="reset" value="重置"/>
89
       </form>
90
91 </body>
92 </html>
```



- \*事件监听机制:事件,事件源,监听器,注册监听
- \* 事件: onclick,ondbclick,onload,onmouseover,onmouseout,onmousedown,onmouseup onmousemove,onkeydown,onkeyup,onkeypress,onchage,onselect onsubmit,onreset
- \*能够掌握和使用BOM



#### \* Window 对象



```
1 案例一(测试window对象)
2 <!DOCTYPE html>
3 <html lang="en">
4 <head>
5 <meta charset="UTF-8">
```

```
6
      <title>window对象</title>
7
      <script>
         /*弹出框相关的方法*/
8
         alert("警告");
9
         let isDel=confirm("真的要删除嘛?");
10
11
         if(isDel){
             console.log("删除");
12
13
         }else{
             console.log("不删除");
14
         }
15
         let name=prompt("请输入姓名");
16
17
         console.log(name);
         var newWindow;
18
19
         function mopen() {
             newWindow= open("http://www.baidu.com/");
20
         }
21
         function mclose() {
22
23
             newWindow.close();
24
         }
         var t1=setTimeout(mopen, 2000);
25
         function mclear() {
26
27
             clearTimeout(t1);
         }
28
         var t2=setInterval(mopen,2000);
29
         function mclear2() {
30
             clearTimeout(t2);
31
         }
32
      </script>
33
34 </head>
35 <body>
      <input type="button" value="打开新窗口" onclick="mopen();"/>
36
      <input type="button" value="关闭窗口" onclick="mclose();"/>
37
      <br>
38
      <input type="button" value="清除定时一" onclick="mclear();"/>
39
      <input type="button" value="清除定时二" onclick="mclear2();"/>
40
41 </body>
42 </html>
43
44 案例二(轮播图)
45 <!DOCTYPE html>
```

```
46 <html lang="en">
   <head>
47
       <meta charset="UTF-8">
48
       <title>轮播图</title>
49
50
       <script>
51
           var num=1;
52
           function lunbo() {
53
                num++;
54
                if(num>3){
55
                    num=1;
56
                let image=document.getElementById("image");
57
                image.src="images/banner"+num+".jpg";
58
59
           function load() {
60
                setInterval(lunbo,3000);
61
           }
62
       </script>
63
64 </head>
   <body onload="load();">
       <img id="image" src="images/banner1.jpg" width="100%"/>
66
67
   </body>
68 </html>
```

#### \* Navigator



```
2 <html lang="en">
 3
   <head>
       <meta charset="UTF-8">
4
       <title>Navigator</title>
 5
6
       <script>
 7
           document.write("浏览器代号:"+navigator.appCodeName+"<br>");
          document.write("浏览器名称:"+navigator.appName+"<br>");
8
           document.write("浏览器版本:"+navigator.appVersion+"<br>");
9
          document.write("是否启动cookie:"+navigator.cookieEnabled+"<br>");
10
          document.write("硬件平台:"+navigator.platform+"<br>");
11
       </script>
12
13 </head>
14 <body>
15 </body>
16 </html>
```

浏览器代号:Mozilla 浏览器名称:Netscape 浏览器版本:5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/77.0.3865.120 Safari/537.36 是否启动cookie:true 硬件平台:Win32



#### \* Screen对象

# 显示器屏幕对象 Screen 可用的屏幕宽度 ○ availWidth 「可用的屏幕高度 ○ availHeight

```
1 <!DOCTYPE html>
 2 <html lang="en">
  <head>
4
       <meta charset="UTF-8">
       <title>Navigator</title>
 5
       <script>
 6
           document.write("可用的屏幕宽度:"+screen.availWidth+"<br>");
 7
           document.write("可用的屏幕高度:"+screen.availHeight+"<br>");
8
9
       </script>
10 </head>
11 <body>
12 </body>
13 </html>
```

可用的屏幕宽度:1280可用的屏幕高度:680

#### \* History 对象



```
1 <!DOCTYPE html>
 2 <html lang="en">
 3 <head>
       <meta charset="UTF-8">
 4
 5
       <title>history演示</title>
       <script>
 6
 7
           console.log(history.length);
           function forword() {
 8
 9
               history.forward();
               // history.go(1);
10
           }
11
       </script>
12
13 </head>
14 <body>
       <a href="test20.html">test20</a><br>
15
       <input type="button" value="前进" onclick="forword();"/><br>
16
17 </body>
18 </html>
19
20 test20.html:
21
22 <!DOCTYPE html>
23 <html lang="en">
24 <head>
25
       <meta charset="UTF-8">
       <title>history2</title>
26
27
       <script>
28
           console.log(history.length)
29
           function back() {
               history.back();
30
               // history.go(-1);
31
32
            }
       </script>
33
34 </head>
35 <body>
36
       <input type="button" value="后退" onclick="back();">
37
38 </body>
39 </html>
```

### test20 前进

后退

#### \* Location 对象



```
1 案例一:
 2 <!DOCTYPE html>
 3 <html lang="en">
 4 <head>
 5
       <meta charset="UTF-8">
       <title>location</title>
 6
 7
       <script>
           function clickMe() {
 8
               location.href="http://www.baidu.com";
 9
           }
10
       </script>
11
12 </head>
13 <body>
       <input type="button" value="去百度" onclick="clickMe();"/>
14
```

```
15 </body>
16 </html>
17
18 案例二:
19 注册
20 <!DOCTYPE html>
21 <html lang="en">
  <head>
22
       <meta charset="UTF-8">
23
       <title>表单校验</title>
24
       <script>
25
           function checkForm() {
26
               let username= document.getElementById("username");
27
               // 校验用户名
28
               if(username.value == ""){
29
                   alert("用户名不能为空");
30
                   return false;
31
               }else if(username.value.length<6){</pre>
32
                   alert("用户名长度不能小于6");
33
                   return false;
34
35
               }
36
               // 校验密码
               let password=document.getElementById("password");
37
               if(password.value == ""){
38
                   alert("密码不能为空");
39
                   return false;
40
               }else if(password.value.length<6){</pre>
41
                   alert("密码长度不能小于6");
42
                   return false;
43
44
               }
               let repassword=document.getElementById("repassword");
45
               if(repassword.value == ""){
46
                   alert("确认密码不能为空");
47
                   return false;
48
               }else if(repassword.value.length<6){</pre>
49
                   alert("确认密码不能小于6");
50
                   return false;
51
52
               }
               if(password.value!=repassword.value){
53
                   alert("密码和确认密码不一致");
54
```

```
55
                   return false;
               }
56
               // 校验成功之后,返回true,表示可以提交表单
57
               return true;
58
           }
59
       </script>
60
61 </head>
62 <body>
63 <h3>注册新用户</h3>
64 <hr>
  <form action="test23.html" method="get">
       <label for="username">账号</label>
66
       <input id="username" type="text" placeholder="请输入用户名" name="username"/</pre>
67
       <label for="password">密码</label>
68
       <input id="password" type="password" name="password"/><br>
69
       <label for="repassword">重新输入密码</label>
70
       <input id="repassword" type="password" name="password"/><br>
71
       <input type="reset" value="重置"/>
72
       <input type="submit" value="注册" onclick="return checkForm();"/>
73
74 </form>
75 </body>
76 </html>
77 第一种方式: 注册成功,5秒跳转到首页
78 <!DOCTYPE html>
79 <html lang="en">
   <head>
80
       <meta charset="UTF-8">
81
       <title>注册成功</title>
82
83
       <style>
84
           div{
               color: red;
85
               font-size: 24px;
86
               text-align: center;
87
           }
88
       </style>
89
       <script>
90
91
           function load() {
92
               var time=document.getElementById("time");
           var second=5;
93
           function showTime(){
94
```

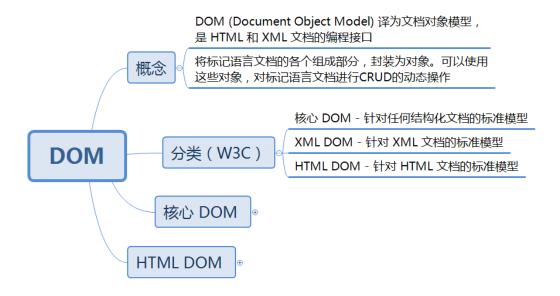
```
95
                second--;
                if(second<=0){</pre>
 96
                    location.href="http://www.baidu.com";
 97
                    second=0;
 98
                    clearInterval(timeId)
 99
                }
100
                time.innerHTML=second+"";
101
102
103
            var timeId=setInterval(showTime,1000);
            }
104
        </script>
105
106
107 </head>
108 <body onload="load();">
109
        <div>注册成功,<span id="time">5</span>秒之后,自动跳转到首页...</div>
110 </body>
111 </html>
112
113 第二种方式: 注册成功,5秒跳转到首页
114 <!DOCTYPE html>
115 <html lang="en">
116 <head>
117
        <meta charset="UTF-8"</pre>
              http-equiv="refresh"
118
              content="5;url=http://www.baidu.com">
119
        <title>注册成功</title>
120
121
        <style>
            div {
122
123
                color: red;
                font-size: 24px;
124
125
                text-align: center;
            }
126
        </style>
127
        <script>
128
            function load() {
129
                var time = document.getElementById("time");
130
                var second = 5;
131
                function showTime() {
132
                    second--;
133
                    time.innerHTML = second + "";
134
```

```
135
                    if (second <= 0) {
136
                        second = 0;
                        clearInterval(timeId)
137
138
                    }
139
                }
140
                var timeId = setInterval(showTime, 1000);
            }
141
142
        </script>
143 </head>
144 <body onload="load();">
145 | <div>注册成功, <span id="time">5</span>秒之后,自动跳转到首页...</div>
146 </body>
147 </html>
148
149 案例三(每2秒刷新页面)
150 第一种写法:
151 <!DOCTYPE html>
152 <html lang="en">
153 <head>
154
        <meta charset="UTF-8">
        <title>location</title>
155
156
        <script>
157
            function mrefresh(){
158
                location.reload();
159
            }
            setInterval(mrefresh,2000);
160
161
        </script>
162 </head>
163 <body>
164
165 </body>
166 </html>
167 第二种写法:
168 <!DOCTYPE html>
169 <html lang="en">
170 <head>
        <meta charset="UTF-8" http-equiv="refresh" content="2">
171
        <title>location</title>
172
173 </head>
174 <body>
```

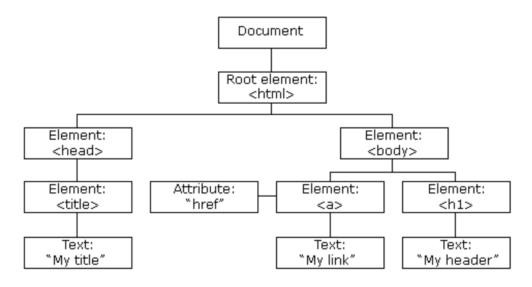
175 </body>
176 </html>

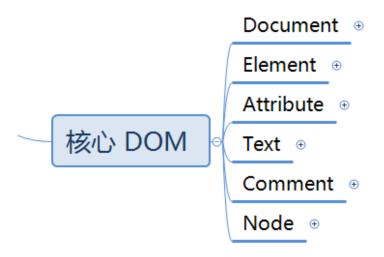
#### \*能够掌握和使用DOM

\* DOM的概述

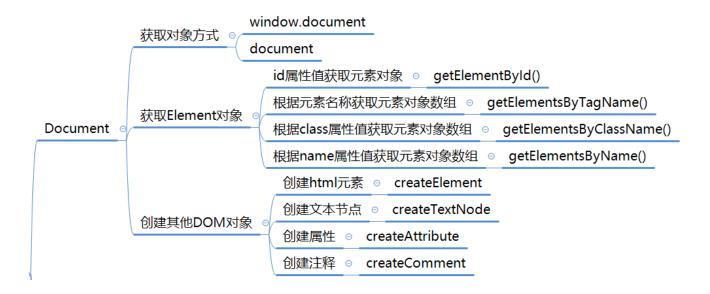


#### HTML DOM 树形结构:





#### \* Document



#### \* Element



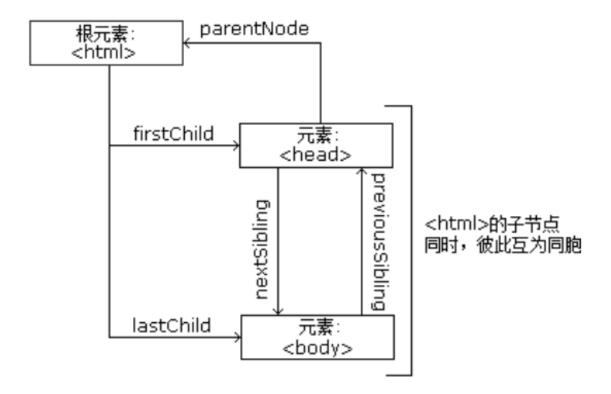
<sup>\*</sup> Attribute, Text, Comment

## Attribute © 属性对象 Text © 文本对象 Comment © 注释对象

#### \* Node



<sup>\*</sup> 节点与节点的关系



#### \* HTML DOM

