



# JavaScript + HTML/CSS

## 基本概念

- 变量 **Variable**

### 实例

- `left = 100;`
- `image = document.getElementById('mouse');`
- `image.style.left = 100 + "px";`
- `image.onclick = function() { that.walk(); }`

- 方法 **Function/Method**

### 构成

- 方法名
- 方法参数列表：参数之间用“,”分隔，参数可设缺省值
- 方法体：用“{}”包围
- 方法返回值：可以 `return 变量名;` 返回结果，如不return，相当于返回 `undefined`

### 实例

```
function walkOneStep(distance = 0) {  
    this.left += distance;  
    this.image.style.left = this.left + "px";  
    console.log("cat.left = " + this.image.style.left);  
}
```

- 类型 **Type**

### 分类

- 数值型 **Number**：eg. `100`, `0`, `-0.5`
- 字符串型 **String**：包含方法eg.`substring()`, `indexOf()`, `lastIndexOf()`
- 对象型 **Object**：某个类的实例，eg.`document` 就是一个系统对象、提供了很多方法
- 方法型 **Function/Method**：输入参数，执行命令、输出结果
- 类 **Class** 与 对象实例 **Object Instance**

- 类的声明/定义 [Declaration/Definition](#)

#### 实例

```
class Mouse {
  speed = 10;
  left = 0;
  image = null;
  constructor(height=0, width=0) {
    //1.create an image, and append it to the 'body'
    this.image = document.createElement('img');
    this.image.src = 'mouse_right.png';
    if (height > 0) {
      this.image.height = height;
    }
    if (width > 0) {
      this.image.width = width;
    }
    this.image.style.position = "relative";
    document.getElementById('body').appendChild(this.image);
  }
  walk(){
    //1.increase the left position attribute/property of the object, by "speed"
    this.left += this.speed;
    //2.assign the position to the left attribute of the image
    this.image.style.left = this.left + 'px';
  }
}
```

- 类的实例化 ⇒ 对象 ⇒ 赋值给变量

#### 实例

```
var mouse1 = new Mouse(0, 48);
mouse1.walk();
```

### Jack Learns to Hack

