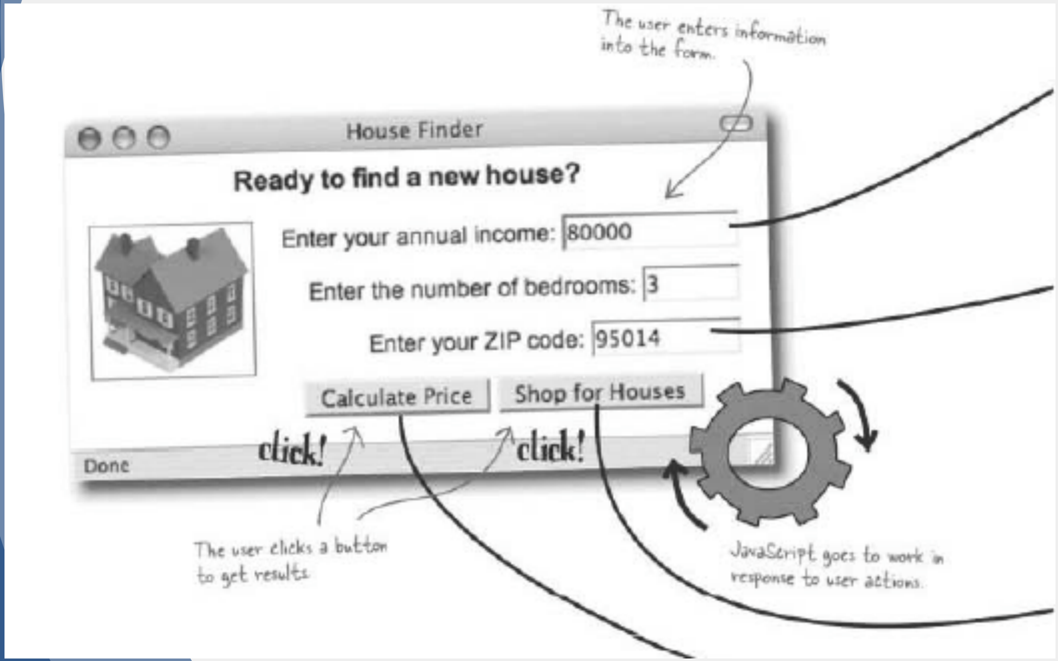
Javascript {

the interactive web

Javascript
Interattività: è nato per questo

I browser web sono predisposti nativamente per la sua interpretazione, rendendo dinamiche le azioni


The user enters information into the form.

House Finder

Ready to find a new house?

Enter your annual income: 80000

Enter the number of bedrooms: 3

Enter your ZIP code: 95014

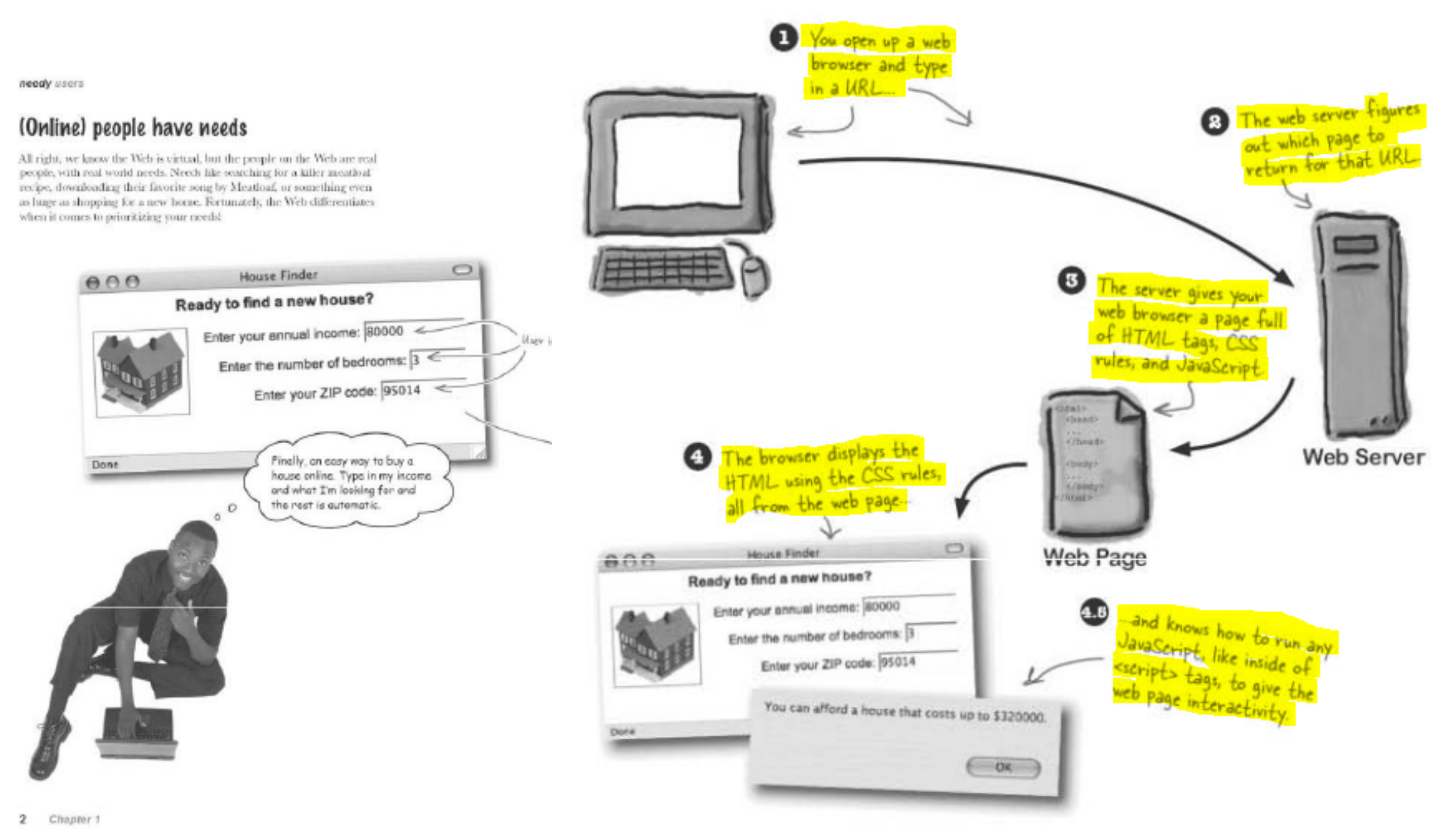
The user clicks a button to get results.

JavaScript goes to work in response to user actions.

server

<->

utente



(Online) people have needs

All right, we know the Web is virtual, but the people on the Web are real people, with real world needs. Needs like searching for a killer meatloaf recipe, downloading their favorite song by Meatloaf, or something even as huge as shopping for a new house. Fortunately, the Web differentiates when it comes to prioritizing your needs!

House Finder

Ready to find a new house?

Enter your annual income: 80000

Enter the number of bedrooms: 3

Enter your ZIP code: 95014

Done

Finally, an easy way to buy a house online. Type in my income and what I'm looking for and the rest is automatic.

1 You open up a web browser and type in a URL...

2 The web server figures out which page to return for that URL.

3 The server gives your web browser a page full of HTML tags, CSS rules, and JavaScript.

4 The browser displays the HTML using the CSS rules, all from the web page...

4.5 ...and knows how to run any JavaScript, like inside of <script> tags, to give the web page interactivity.

House Finder

Ready to find a new house?

Enter your annual income: 80000

Enter the number of bedrooms: 3

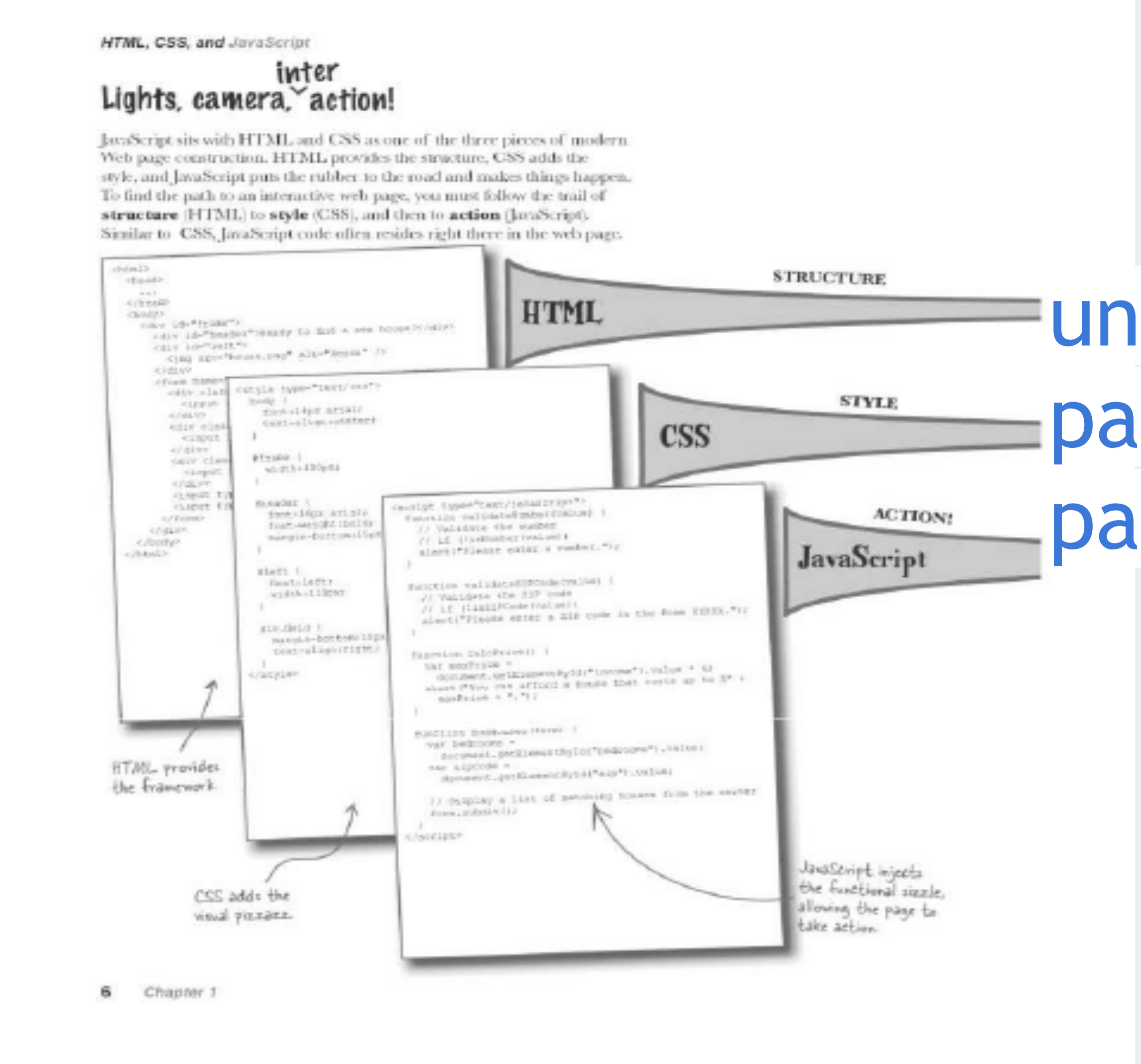
Enter your ZIP code: 95014

Done

You can afford a house that costs up to $320000.

Come funziona?

Gli standard



HTML, CSS, and JavaScript

Lights, camera, inter action!

JavaScript sits with HTML and CSS as one of the three pieces of modern Web page construction. HTML provides the structure, CSS adds the style, and JavaScript puts the rubber to the road and makes things happen. To find the path to an interactive web page, you must follow the trail of **structure** (HTML) to **style** (CSS), and then to **action** (JavaScript). Similar to CSS, JavaScript code often resides right there in the web page.

STRUCTURE
HTML
STYLE
CSS
ACTION!
JavaScript
HTML provides the framework
CSS adds the visual pizzazz
JavaScript injects the functional sizzle, allowing the page to take action.

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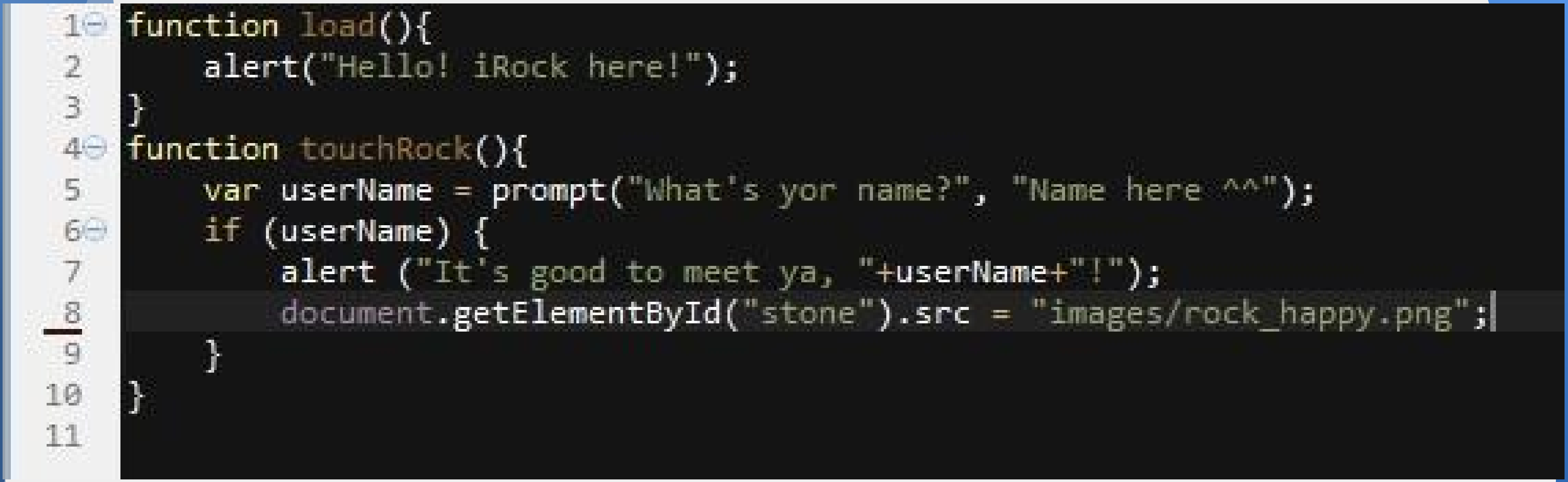
un foglio per ogni parte della pagina web!

caricati grazie al tag <script src="PATH/code.js"></script> direttamente nell'HTML tramite indirizzo relativo, dopo esser stati validati!

Struttura



```
function load(){
     alert("Hello! iRock here!");
}
function touchRock(){
     var userName = prompt("What's yor name?", "Name here ^^");
     if (userName) {
          alert ("It's good to meet ya, "+userName+"!");
          document.getElementById("stone").src = "images/rock_happy.png";
     }
}
```

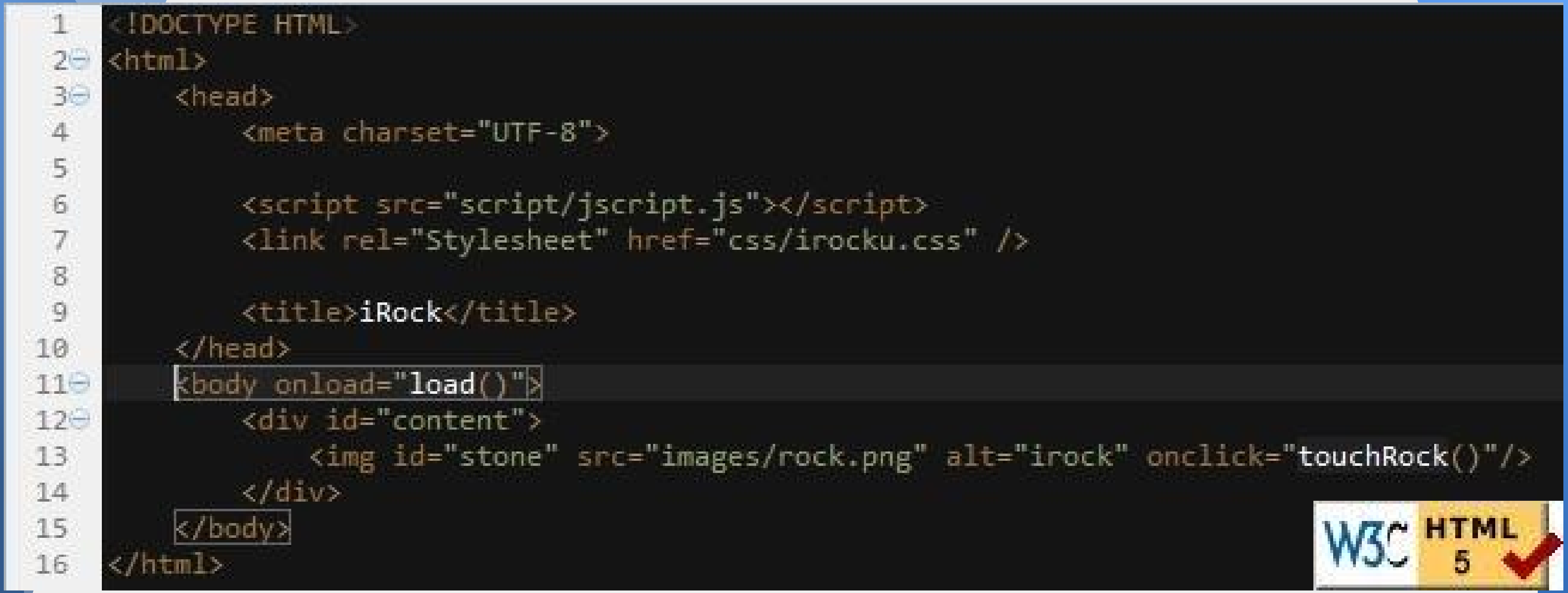
tipo nome(parametri){ ... }

Molto simile allo standard ORACLE per Java, è un tipo di codice orientato ad oggetti

oggetto.proprietà("nome id").src

.src sarà l'attributo DOM che andrà a cambiare, non è sintatticamente obbligatorio

="inserisce il percorso dell'immagine che voglio inserire in seguito all'intervento dell'utente";



```
<!DOCTYPE HTML>
<html>
    <head>
        <meta charset="UTF-8">

        <script src="script/jscript.js"></script>
        <link rel="Stylesheet" href="css/irocku.css" />

        <title>iRock</title>
    </head>
    <body onload="load()">
        <div id="content">
            <img id="stone" src="images/rock.png" alt="irock" onclick="touchRock()"/>
        </div>
    </body>
</html>
```

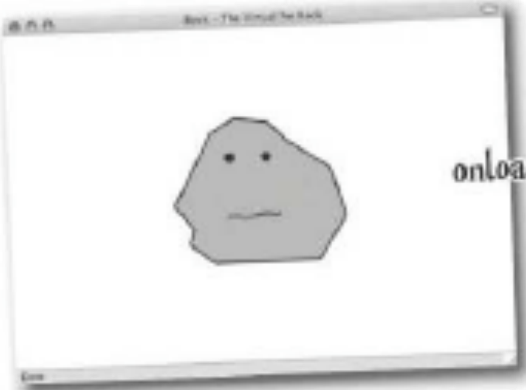
Nell'HTML si specificano le tag e gli id per gli elementi da gestire nel .*css* insieme a:

onload nel *body* che permette di eseguire la funzione specificata nel JS al caricamento completo della pagina, immagini comprese
onclick all'interno dell'oggetto che viene cliccato

JavaScript events: giving the iRock a voice

To use JavaScript to greet the user when the page first loads, we'll have to solve two main JavaScript-related problems: knowing when the page finishes loading and knowing how to display a greeting so that the user can see it.

The first problem involves responding to an event (the page load event), while the second problem involves using a built-in JavaScript feature, the "alert" box. *Events* are JavaScript notifications that let you know when something of interest has happened, such as a page loading (`onload`) or a button getting clicked (`onclick`). You can respond to events with your own custom JavaScript code.



onload!

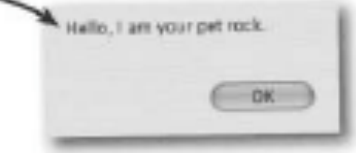
The onload event is triggered when the iRock page finishes loading in the browser.

The code for the onload event is set using the onload attribute of the <body> tag in the iRock web page.

```
<body onload="alert('Hello, I am your pet rock.');">
```

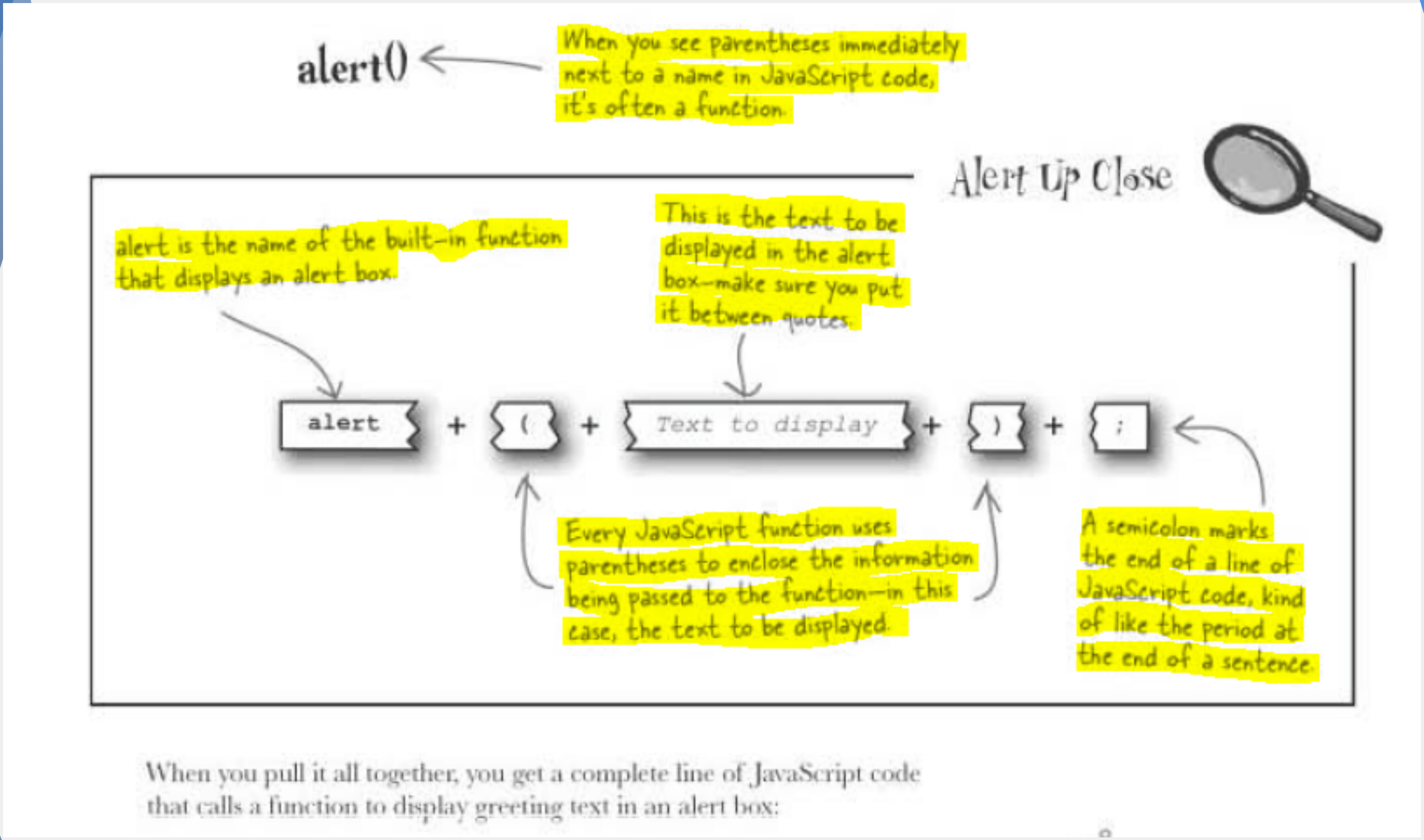
Events are notifications that you can respond to with JavaScript code.

The alert() function tells the browser to display an alert box that greets the user.



Hello, I am your pet rock.

alert()



When you see parentheses immediately next to a name in JavaScript code, it's often a function.

alert is the name of the built-in function that displays an alert box.

This is the text to be displayed in the alert box—make sure you put it between quotes.

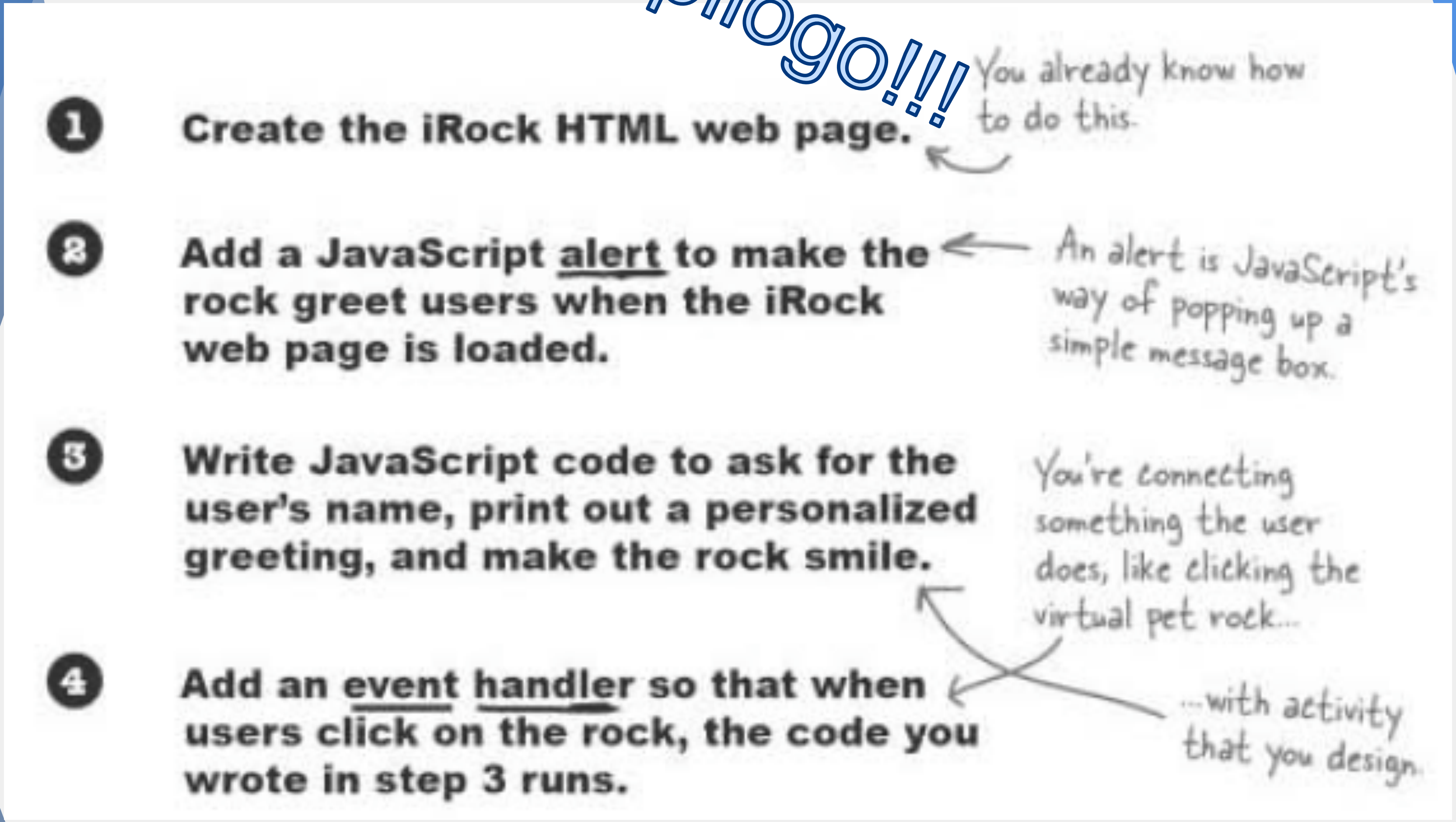
Every JavaScript function uses parentheses to enclose the information being passed to the function—in this case, the text to be displayed.

A semicolon marks the end of a line of JavaScript code, kind of like the period at the end of a sentence.

When you pull it all together, you get a complete line of JavaScript code that calls a function to display greeting text in an alert box:

Gli alert aprono delle finestre di dialogo dette implicite che bloccano le azioni dell'utente fino a che non viene dedicata attenzione al messaggio

Riepilogo!!!



1. **Create the iRock HTML web page.**

You already know how to do this.

2. **Add a JavaScript alert to make the rock greet users when the iRock web page is loaded.**

An alert is JavaScript's way of popping up a simple message box.

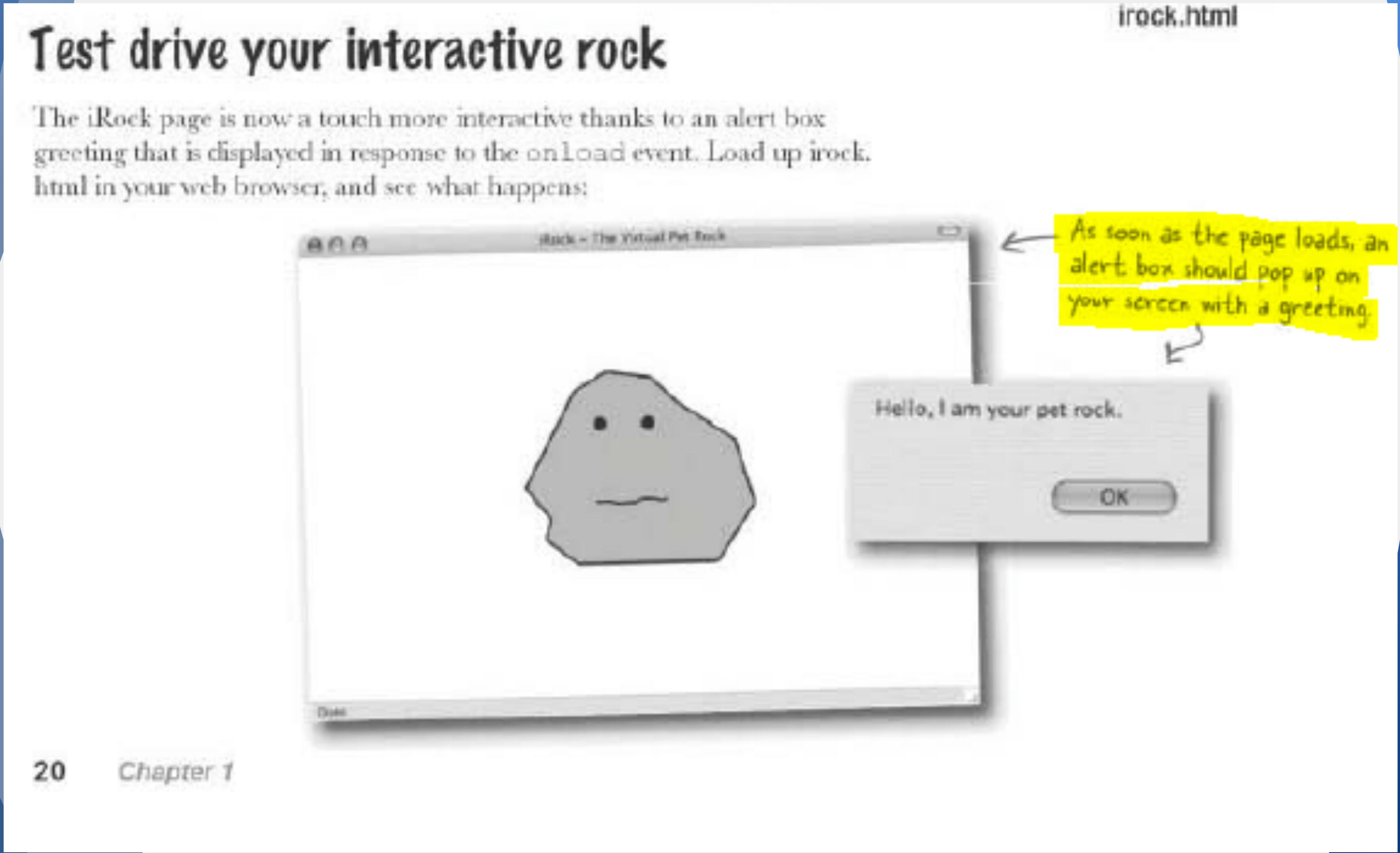
3. **Write JavaScript code to ask for the user's name, print out a personalized greeting, and make the rock smile.**

You're connecting something the user does, like clicking the virtual pet rock...

4. **Add an event handler so that when users click on the rock, the code you wrote in step 3 runs.**

...with activity that you design.

> iRock online <



irock.html

Test drive your interactive rock

The iRock page is now a touch more interactive thanks to an alert box greeting that is displayed in response to the `onload` event. Load up irock.html in your web browser, and see what happens:

Hello, I am your pet rock.

As soon as the page loads, an alert box should pop up on your screen with a greeting.

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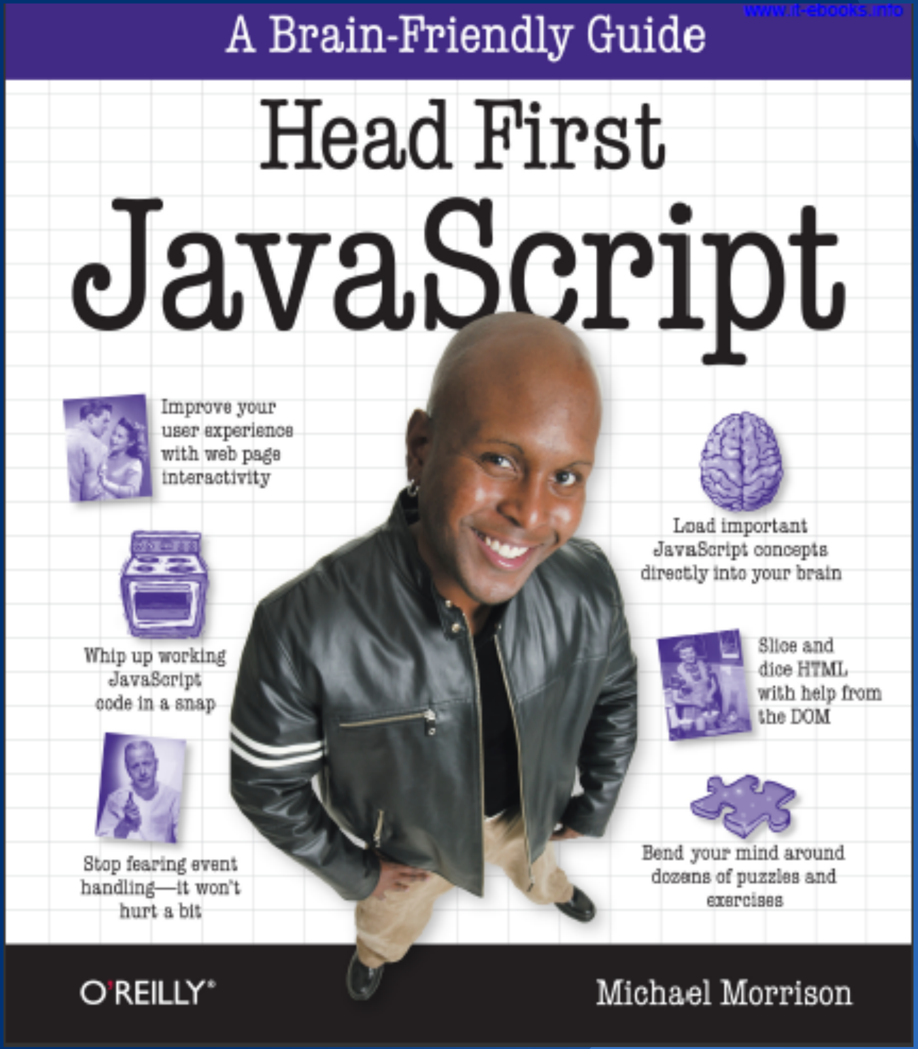
tratto dal cap #1 del libro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