

8.11.2 Review Questions

1. What is JavaScript? What are its relative advantages and disadvantages?
2. How is a browser plug-in different from a browser extension?
3. How do AJAX requests differ from normal requests in the HTTP request-response loop?
4. What are some reasons a user might have JavaScript disabled?
5. What kind of variable typing is used in JavaScript? What benefits and dangers arise from this?
6. What do the terms *truthy* and *falsy* refer to in JavaScript? What does *undefined* mean in JavaScript?
7. Create an array that contains the titles of four sample books. Write a loop that iterates through that array and outputs each title in the array to the console.
8. Define an object that represents a sample book, with two properties (*title* and *author*) using object literal notation. The *author* property should also be an object consisting of two properties (*firstName* and *lastName*).
9. How are function declarations different from function expressions? Why are function expressions often the preferred programming approach in JavaScript?
10. What is a callback function?
11. What is an anonymous function? What is a nested function? What are some of the reasons for using these two types of function?
12. Identify and define the two types of scope within JavaScript. Provide a short example that demonstrates these two types of scope.
13. Define an object that represents a car, with two properties (*name* and *model*) using a function constructor. Add a function to the object named *drive()* that displays its name and model to the console. Instantiate two car objects and call the *drive()* function for each one.
14. Define and use an immediately-invoked function expression that uses a loop to output to the console all the numbers between 1 and 20.
15. Why are prototypes more efficient than other techniques for creating objects with methods in JavaScript?

8.11.3 Hands-On Practice

PROJECT 1: Art Store

DIFFICULTY LEVEL: Beginner

Overview

Demonstrate your proficiency with loops, conditionals, arrays, and functions in JavaScript. The final project will look similar to that shown in Figure 8.26.

Instructions

1. You have been provided with the HTML file (`chapter08-project01.html`) that includes the markup for the finished version. Preview the file in a browser.



HANDS-ON
EXERCISES

Project 8.1