Wrap Up

Topics

- Core vs. Object-Oriented JavaScript
- split () function
- GetValidNumberInput() function
- Exam Review
- SEQ’s – need a volunteer
Core vs. Object-Oriented

- The JavaScript language is divided in two basic components, the core and the object-oriented parts of the language.

- The core part of the language consists of things such as loops, control flow constructs, functions, variables and is derived from C.
Object-Oriented JavaScript

- The object-oriented part consists of complex objects such as windows, frames, documents and buttons, each of which has **properties**, **methods**, and **events** associate with them.
  - A **property** is a characteristic of an object.
  - A **method** is an action carried out by the object
  - An **event** is an object generated as a result of user interaction with object.
Core vs. OO Example

```html
<head>
<title> Example </title>
<script type="text/javascript">
<!--
var name = "Patti";
function printName(num){
    for(i = 0; i < num; i++)
    {
        document.write("<br>" + name);
    }
}
//-->
</script>
</head>
<body>
<script type="text/javascript">
<!--
    printName(5);
//-->
</script>
</body>
```

Core JavaScript (global variable 😃)

Core JavaScript

Object-Oriented JavaScript  ->

write method of document object
Split Method for String Objects

/**************************
** split - divides the string object calling the method on a delimiter 
** Inputs: can vary, in this example parameter is delimiter used to break up the string 
** Outputs: an array of string objects 
**************************/

var fullname = "John Edward Doe";
var names = fullname.split("d");

document.write(names[0] + "<br/>"); // prints "John E"
document.write(names[1] + "<br/>"); // prints "war"
document.write(names[2] + "<br/>"); // prints "Doe"

Object-Oriented JavaScript =>

split method of string object returns array object
Length Property of Array Objects

```html
<head>
<title> Example </title>
<script type="text/javascript">
  <!--
  function printArray(array){
    for(i = 0; i < array.length; i++)
    {
      document.write("<br>" + array[i]);
    }
  }
  //-->  
</script>
</head>
<body>
<script type="text/javascript">
  <!--
    var fullname = prompt("Enter full name");
    names = fullname.split(" ");
    printArray(names);
  //-->  
</script>
</body>
```

Object-Oriented JavaScript =>
length property of array object

Core JavaScript

Core JavaScript
OnClick Event of Button Objects

```html
<html>
<head>
<title> Example</title>
<script type="text/javascript">
<!--
  function pressed(){
    alert(“You have pressed the button!”);
  }
//-->
</script>
</head>
<body>
  <button type="button" onclick="pressed()">Click me!</button>
</body>
</html>
```
GetValidNumberInput()

/**
 * GetValidNumberInput - This function prompts user for an integer
 * Inputs: promptString - message to be displayed to user
 *          lowerNum - lowest possible value for integer returned
 *          upperNum - highest possible value for integer returned
 * Output: an integer
 */
function GetValidNumberInput(promptString, lowerNum, upperNum) {
    var num = parseInt(prompt(promptString));
    while(isNaN(num) || num < lowerNum || num > upperNum) {
        alert(num + " is not an integer between " + lowerNum + " and " + upperNum);
        num = parseInt(prompt(promptString));
    }
    return num;
}