## Javascript Forms

Web Authoring and Design

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#### Outline

- Review
- ■What do we mean Javascript Forms?
- Object Orientated Concepts
- Summary
- Review/Discussion

### Defining functions

#### **Function Declarations:**

```
function functionName(parameters (optional))
{
    FunctionBody
}
```

### Arguments

### Calling a Function

You can call Javascript functions by simply call the function name

```
function greetings()
{
     alert("Good Morning");
}
greetings(); //just give the function name on:
```

#### Return Values

```
    function findSum(x,y)
    {
        var result = x+y;
        return result;
    }
    var sum = findSum(25,30);
    alert ("Sum is : "+ sum);
</script>
```

#### Question

Is Javascript an Object Orientated Language?

- a) Yes
- b) No

#### Answer

a) Yes

JavaScript is an object oriented programming language

## How to create and use objects in Javascript

```
var student = {
    name: "Jack",
    age: 12,
    getName: function()
    {
        alert(this.name);
    }
};
```

### Call Object function

```
var student = {
          name: "Jack",
          age: 12,
          getName: function()
          {
                alert(this.name);
          }
};
```

```
student.getName();
```

### Object constructor

```
function studentConstructor() {
    this.name = "Jack";
    this.age = 12;
    this.getName = function()
    {
        alert(this.name);
    }
}
```

## How to create a New Instance from a Constructor

```
var student = new studentConstructor();
student.getName(); // will alert "Jack"
```

## Literal notation in Javascript Object

## Object.create() in Javascript Object

```
var student = {
          name: "Jack",
          age: 12,
          getName: function()
          {
                alert(this.name);
          }
};
var st = Object.create(student);
st.getName();
```

## Accessing Object Properties in JavaScript

We can access Object Properties in JavaScript using either the dot(.) notation or the bracket[] notation

```
var student = {};
student.name = "Jack"; // access via . notation
student["age"] = 12; // access via [] brackets
alert(student["name"]); // will alert "Jack"
alert(student.age); // will alert 12
alert(student.name); // will alert "Jack"
alert(student["age"]); // will alert 12
```

### Object contain another Object

```
var student = {
        name: "Jack",
        age: 12,
        classTeacher: {
        firstname: "John",
        lastname: "Peter"
};
alert(student.classTeacher.firstname);
alert(student['classTeacher']['firstname']);
alert(student.classTeacher['firstname']);
alert(student['classTeacher'].firstname);
```

# Forms Trigger/Call Javascript

```
<!DOCTYPE html>
<html>
<body>
Enter value and click "Submit" to submit the form:
<form id="frm1">
  Enter value: <input type="text" name="fname"><br>
  <input type="button" onclick="myFunction()">
</form>
<script>
function myFunction() {
    //.....
</script>
</body>
</html>
```

#### This Week

- Review Slides
- Read Associated Chapters
- Work through Javascript Examples
  ▷ Update GitHub Account/Webpage
- **Group Project (Christmas Theme)** 
  - Website & Javascript Game
- Demonstrate Individual Projects

### Summary

- Overview of Objects in Javascript
- Javascript Forms
- Hands-On/Practical

#### Questions/Discussion