JavaScript Objects

Constructing the World Around Us

One Object at a Time

Objects - Review

Initialization

- Empty block
- Using "new Object()"

```
var student = { };
var instructor = new Object( );
```

Objects - Review

Variables - Called 'Properties'

- Similar to arrays square brackets with names
- Dot syntax: object.variable

```
var student = { };
student["name"] = "John Doe";
var instructor = new Object( );
instructor.name = "Jane Expert";
```

Objects - Review

Functions - Called 'Methods'

- Syntax of declaration is reversed
- Function is assigned to a name

```
var student = { };
student["name"] = "John Doe";
var instructor = new Object( );
instructor.name = "Jane Expert";
student.sayGreeting = function( ) {
    alert("Hello. I'm " + student.name);
}
instructor.sayGreeting = function( ) {
    alert("Hello. I'm " + instructor.name);
}
student.sayGreeting( );
instructor.sayGreeting( );
```

Objects - Review

Initialization - All at once

- Within the curly braces (similar to array)
- Scope of variables is local to object, but can be access via dot syntax

```
var student = {
    name: "John Doe",
    sayGreeting: function() {
        alert("Hello. I'm " + this.name);
    }
};
var instructor = {
    name: "Jane Expert",
    sayGreeting: function() {
        alert("Hello. I'm " + this.name);
    }
};
```

Objects - Next Step

Constructor

- Builds a template that can be used as the basis of objects
- Initialization uses the 'new' keyword
- Keyword 'this' references the object being defined

```
var Person = function(suppliedName) {
    this.name = suppliedName;
    this.sayGreeting = function() {
        alert("Hello. I'm " + this.name);
    }
}
var student = new Person("John Doe");
var instructor = new Person("Jane Expert");
student.sayGreeting();
instructor.sayGreeting();
```