

Tutorial 1: *Programming with JavaScript*

User Defined Function Examples

- I. User defined function that has no parameters and does not return a value
This will display “Hello” to the user in a dialog box

Function Declaration:

```
<head>
<script type="text/javascript">

function displayMessage( ) {
    // parameters: none
    // returns: nothing

    // display a message using a built in JavaScript function
    // note 1: the built in function is the JavaScript alert function
    // note 2: the argument to the built in function named alert is the string literal “Hello”
    alert( “Hello” );
}

</script>
</head>
```

Function Call:

```
<body>
<script type="text/javascript">

// call the user defined function
displayMessage( );

</script>
</body>
```

- II. User defined function that has one parameter and does not return a value
This will display “Hello” to the user in a dialog box

Function Declaration:

```
<head>
<script type="text/javascript">

function displayMessage( theMessage ) {
    // parameters: theMessage – the message to be displayed to the user in a dialog box
    // returns: nothing

    // display the contents of the passed parameter using a built in JavaScript function
    // note 1: the built in function is the JavaScript alert function
    // note 2: the argument to the built in function named alert is the parameter
    theMessage
    alert( theMessage );
}

</script>
</head>
```

Function Call:

```
<body>
<script type="text/javascript">

// call the user defined function and pass in a string literal as the argument
displayMessage( "Hello" );

</script>
</body>
```

- III. User defined function that has no parameters and returns a value
This will display “Hello” to the user in a dialog box

Function Declaration:

```
<head>
<script type="text/javascript">

function getMessage( ) {
    // parameters: none
    // returns: a message

    // declare a variable
    var myMessage;

    // assign a string literal to the variable
    myMessage = "Hello";

    // send the value back to the calling procedure
    return myMessage;
}

</script>
</head>
```

Function Call:

```
<body>
<script type="text/javascript">

// declare a variable
var theMessage;

// call the user defined function and assign the return value of the function to a local
variable
theMessage = getMessage( );

// display the message contained in the local variable that was returned back
// from the user defined function
alert( theMessage );

</script>
</body>
```

- IV. User defined function that has one parameter and returns a value
This will display “Hello John” to the user in a dialog box

Function Declaration:

```
<head>
<script type="text/javascript">

function buildMessage( yourName ) {
    // parameters: yourName – the name to build into the message
    // returns: a message

    // declare a variable
    var myMessage;

    // assign a string literal to the variable and add to it the name contained in the
    parameter
    myMessage = "Hello" + " " + yourName;

    // send the message back to the calling procedure
    return myMessage;
}

</script>
</head>
```

Function Call:

```
<body>
<script type="text/javascript">

// declare a variable
var theMessage;

// call the user defined function and pass to it the argument with a string literal of “John”
and
// assign the return value of the function to a local variable
theMessage = buildMessage( “John” );

// display the message contained in the local variable that was returned back
// from the user defined function
alert( theMessage );

</script>
</body>
```