香港科技大學
THE HONG KONG
UNIVERSITY OF SCIENCE
AND TECHNOLOGY

MORE ON FUNCTIONS

PROF. DAVID ROSSITER

THE DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING
計算機科學及工程學系

AFTER THIS PRESENTATION

- You'll know how to assign a function to a variable

- You'll be able to pass a function to a function

- You'll be able to return a function from a function

WE WILL LOOK AT

Events	onload
Functions	function
	return

TWO WAYS TO DECLARE A FUNCTION

```
function functionOne() {
```

. . . code here . . .

```
}
```

This function is defined when the web page is loaded.

```
var functionTwo = function() {
```

…code here…

```
}
```

```
var functionTwo = function thisFunc() {
```

…code here…

```
}
```

Here we give a function to a variable

The function is defined when the browser reaches that point in the code

PASSING A FUNCTION TO A FUNCTION

You can pass a function to a function

```
<!doctype html>
<html>
    <head>
        <script>

function check(a, b){
        if (b!=0) return true;
        else return false;
}

function myDivide( fn, num, div ) {
        if (fn(num, div)) {          ←──── pass a function to a function
                alert("It's OK!");
                return num/div;
        } else {
                alert("Not OK!");
        }
}

result=myDivide(check, 44, 1);

        </script>
    </head>
</html>
```

RETURNING A FUNCTION FROM A FUNCTION

You can return a function from a function

```
<!doctype html>
<html>
    <head>
        <script>

            function counter() {
                var count = 0;

                return function() {    return a function
                    count++;
                    alert(count);
                }

            }

            var count = counter();
            count();
            count();
            count();
        </script>
    </head>
</html>
```