Department of Computer Science City University of Hong Kong CS2204 Fundamentals of Internet Application Development Tutorial 9 – JavaScript

Learning Outcomes:

- Able to write basic Javascript
- Able to execute Javascript in HMTL pages
- Able to use tools to find out and fix Javascript errors

1. Creating Your First JavaScript

- a. Create a new document in your tool.
- b. Type the script into the body section exactly as shown below:

```
<br/><body>
<script type="text/javascript">
document.write("This is my first JavaScript.");
</script>
</body>
```

- c. Save the document with the name script1.html.
- d. Switch to your browser, choose Open File from the file menu and select script1.html

2. Running and Debugging Your JavaScript

Use the same page in question (1) and change the Javascript statements to test different statements in question (3), find out the errors by running your scripts, using debugging techniques discussed in lecture. For question (4), print out the values of the variable someVal after each operation by either alert() or document.write().

3. Variable Declaration

Which of the following variable declarations or initializations are valid? Explain why each one is or is not valid. If it is invalid, how would you fix it?

```
a. my_name = Cindy";b. var the number = 34;c. var 2address = "12 Onslow Ave. Epsom";
```

4. JavaScript Operators

For each of the statements in the following sequence, write down how the someVal expression evaluates after the statement executes in JavaScript.

```
var someVal = 2;
someVal = someVal + 2;
someVal = someVal * 10;
someVal = someVal + "20";
someVal = "Robert";
```

5. JavaScript Testing

Use the test page in question (1) or a new page, put in the following Javascript and explain the result.

```
<head>
<script type="text/javascript">
s1="Hi, I am a CityU student. My student number is:"
s2="20005"
s3=25
</script>
</head>
<body>
<script type="text/javaScript">
document.write(s1+s2+"<br/>document.write(s2+ " minus " + s3 + " is: ")
document.write(s2-s3)
</script>
```

6. Study different operations with different data types

- e. Referring to the example in lecture notes, use document.write() or alert() to study the following combinations of operands and operators:
- f. multiplication –

	string	integer	boolean
string	test	test	test
boolean	n/a	test	test

for example: a string multiplies with a string (try two strings: "2500" and "abc"); a string with an integer, etc.

g. repeat the tests for addition