

# Web Client Programming

## Assignment 4

**Due: Next Section.** (*one day before if you submit by email*)

Notes: This assignment is individual assignment, every student should complete it by himself.

---

### 1. True or False?

- a. The main purpose of creating JavaScript language was to handle some of the input validation.
- b. JavaScript 1.0 was complaint with ECMA-262 and used by many browsers such as Netscape, Internet Explorer and Firefox.
- c. JavaScript implementation is made up of 3 parts, ECMAScript, DOM, BOM.
- d. ECMAScript is a standard description of JavaScript not the actual implementation.
- e. ECMAScript allows developers an unprecedented level of control over its content and structure. Nodes can be removed, added, replaced, and modified easily by using the Dom API.
- f. BOM describe the JavaScript Syntax, Types, Statement, ... etc.
- g. Using DOM the developer can interact with the browser outside the context of its displayed page.
- h. BOM was the only part of JavaScript that has no standard until HTML5
- i. The <SCRIPT> tag is considered the most important JavaScript statement.
- j. The "defer" attribute of <SCRIPT> tag is valid only for external script files.
- k. Scripts marked as "async" are guaranteed to execute in the order in which they are specified.
- l. The XHTML pages is more restricted than HTML Pages
- m. In XHTML pages It's better to add JavaScript code in a CDATA section.
- n. Firefox introduced to document modes through the use of doctype, Quirks mode and Standards mode.
- o. The <noscript> element was created to provide alternate contend for browsers without JavaScript.

- p. JavaScript is case-sensitive language.
- q. The first character of Identifiers in JavaScript can be number.
- r. The Identifiers in JavaScript can include Unicode character.
- s. Statements in ECMAScript must terminate with semicolon.
- t. All keywords in ECMAScript are reserved words.
- u. You can name function as "eval" in ECMAScript.
- v. In JavaScript ,you must declare variables with "var" in restricted mode.
- w. ECMAScript has 6 main data types must specified explicitly when defining variables.

## 2. Fix errors in the following JavaScript codes:

a.

```
<script>
  function test(){
    var message = "hi";
  }
  test();
  alert(message);
</script>
```

b.

```
<script>
  "use strict";
  function test(){
    message = "hi";
  }
  test();
  alert(message);
</script>
```

c.

```
<script>
  function test(){
    arguments = "Hello every one";
```

```
}  
test();  
alert(arguments);  
</script>
```

d.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">  
  
<script type="text/javascript">  
function compare(a, b) {  
    if (a < b) {  
        alert("A is less than B");  
    } else if (a > b) {  
        alert("A is greater than B");  
    } else {  
        alert("A is equal to B");  
    }  
}  
}  
</script>
```

3. Visit the following link, and work through sections 2 to 5

<https://www.codecademy.com/en/tracks/javascript>