

# ICT26 Web Development

## Tutorial 4 JavaScript and DOM

### Overview

- Adding interactivity in HTML pages using JavaScript
- Understand the JavaScript syntax
- Use JavaScript to verify form fields

### Guidelines

Start by putting everything into a folder named “ict726\_tutorial3”.

Note: Since absolute links will only work on your computer, we recommend checking your website to make sure all the links work and use the same structure on your home computer.

### Introduction

- JavaScript was designed to add interactivity to HTML pages.
- JavaScript is a scripting language
- A scripting language is a lightweight programming language
- JavaScript is usually embedded directly into HTML pages
- JavaScript is an interpreted language (means that scripts execute without preliminary compilation)
- Everyone can use JavaScript without purchasing a license

### Exercise 1:

Create one html page with JavaScript code that generate one heading and few paragraphs. To add those elements into your page you can use the following example:

```
<script>  
    document.write("<h1>Heading</h1>")  
</script>
```

## Exercise 2:

In the last lab, we created forms to get user data. It is very important to validate that data. In this question you need to write a JS code to verify that username is not empty and password is eight characters long. For creating a form you can use the following code

```
<form name="myform" method="post" action="#" onsubmit="return validateform()" >
  Name: <input type="text" name="name"><br/>
  Password: <input type="password" name="password"><br/>
  <input type="submit" value="register">
</form>
```

Make sure the function name in your script should be validateform.

## Exercise 3:

Read the following code and discuss what is the purpose of the code. Modify it to make a small login form with two fields, username and password. Validate your user name and password against an existing username and password of your choosing.

```
<script type="text/javascript">
  function matchpass(){
    var firstpassword=document.f1.password.value;
    var secondpassword=document.f1.password2.value;

    if(firstpassword==secondpassword){
      return true;
    }
    else{
      alert("password must be same!");
      return false;
    }
  }
</script>

<form name="f1" action="register.jsp" onsubmit="return matchpass()">
  Password:<input type="password" name="password" /><br/>
  Re-enter Password:<input type="password" name="password2"/><br/>
  <input type="submit">
</form>
```

## Exercise 4:

JavaScript increases the interactivity with the user by responding to different events. Read the following code and create an event when mouseover the input field the background colour is changed.

```
<html>
<head> Javascript Events</head>
<body>
<h2> Enter something here</h2>
<input type="text" id="input1" onfocus="focusevent()"/>
<script>
<!--
    function focusevent()
    {
        document.getElementById("input1").style.background=" aqua
";
    }
//-->
</script>
</body>
</html>
```

~~~~~The END~~~~~