

## javascript

## what is javascript?

- an object-oriented programming language
- embedded in HTML
- enables you to create interactive web pages

## examples

- **mouseover:**  
see <http://www.cs.ubc.ca/~hoos/cpsc101/Labs/JavaScript/mysample20.html>
- **quiz:**  
see <http://www.cs.ubc.ca/~hoos/cpsc101/Labs/JavaScript/wmst201quiz.html>

## mouseover

```
<html>
<head> <title>Shelly Zhao's simple Web Page</title>
</head>

<body>
<h1>Welcome to Shelly's Web Page </h1>
<p> <a onMouseOver="document.images[0].src = 'logoUBC.jpg';"
onMouseOut="document.images[0].src = 'monkey.gif';">
</a></p>
</body>
</html>
```

javascript is case sensitive

**onMouseOver="document.images[0].src = 'logoUBC.jpg';"**

- this part of the code instructs the web browser to display the picture "logoUBC.jpg" when the mouse is moved over the first image of the html page
- images are numbered 0,1,2,...

**onMouseOut="document.images[0].src = 'monkey.gif';"**

- this part of the code instructs the web browser to display the picture "monkey.gif" when the mouse is moved off the first image of the html page

```

```

- this is standard html code that places an image in the html page; this image appears until the first time that the mouse rolls over the image

## quiz using javascript

- see <http://www.cs.ubc.ca/~hoos/cpsc101/Labs/JavaScript/wmst201quiz.html>
- when "wmst201quiz.html" is opened in the web browser, the quiz is presented
- when the "submit" button is clicked, a new page, "wmst201quiz\_result.html", is opened

## wmst201quiz.htm

- this file uses familiar HTML code for generating a table
- new things to note:
  - HTML forms
  - input buttons for receiving inputs for the form

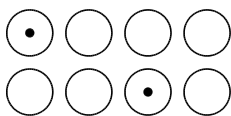
## typical row of quiz table

type, name, and value are *attributes* of an input

```
<tr>
  <td height="24"></td>
  <td height="24"><input type=radio name=2 value=0>
  Word</td>
  <td height="24"><input type=radio name=2 value=1>
  &nbsp;   Excel</td>
  <td height="24"><input type=radio name=2 value=2>
  &nbsp;   PowerPoint</td>
  <td height="24"><input type=radio name=2 value=3>
  &nbsp;   Internet Explorer</td>
</tr>
```

## input type = radio

- circular buttons resemble old car radios where exactly one button can be pressed at any time



- in the quiz, for each name, at most one button with that name can be selected

## submit button

```
<tr>
  <td height="28"></td>
  <td colspan=3 height="28">
  <input type=submit value="Hand it in!"
  name=submit></td>
</tr>
```

- when the submit button is clicked, processing of the information collected begins

## html forms

- the file “wmst201quiz.html” contains the line  
`<form name=wmst201quiz method=get action=wmst201quiz_result.html>`
- this line tells the browser that
  - the document contains a form
  - the information should be collected by extending the URL
  - when the information is collected, the file “wmst201quiz.html” should be opened

## submitting the quiz answers

- clicking the submit button causes the “wmst201quiz\_results.html” to be opened
- (extended) URL looks like:
  - `http://www.cs.ubc.ca/~hoos/cpsc101/Labs/JavaScript/wmst201quiz_result.html?0=0&1=1&2=1&4=2&submit=Hand+it+in%21`
- note that after the file name, the quiz answers are listed as part of the extended URL!

## information flow in quiz example

