Advanced JavaScript

Lecture Number:

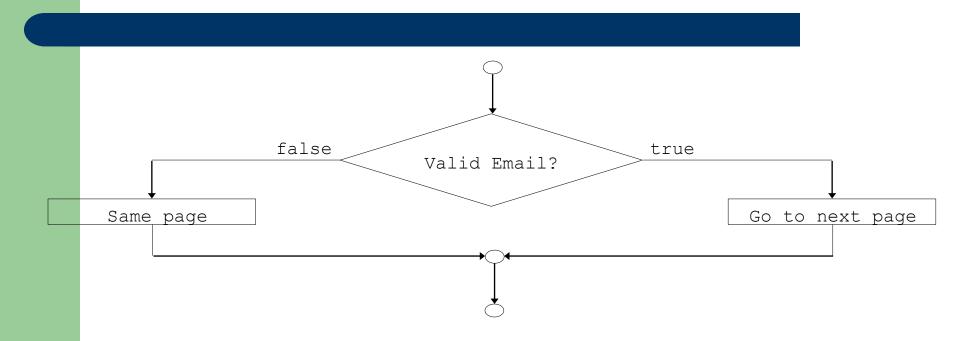
Today's Aim:

- Decision making, the if-else structure
- Looping, performing a task multiple times dynamically.

Taking decisions: The if-else structure

- Most of the times we need to take decisions, e.g., 'if the email entered is not valid, don't proceed' etc.
- The 'if-else' selection structure is used for this purpose

'if-else' selection structure



Flow Chart for the 'if-else' selection structure

'if-else' selection structure

Psuedocode

```
If email address is valid, go to the next page print "Passed" else reload the current page
```

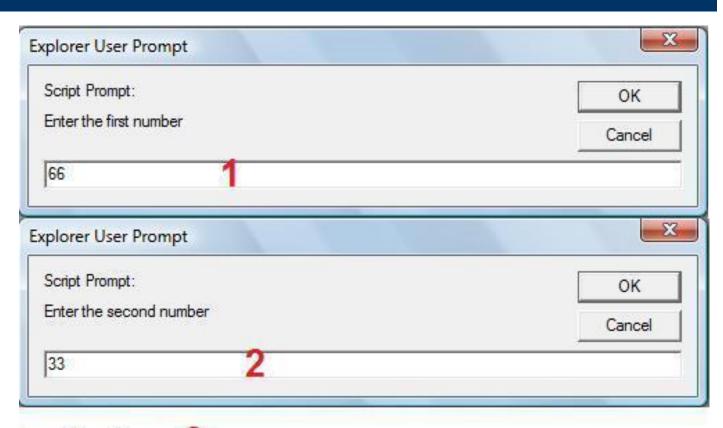
Example

 Let's take two numbers from the user and tell them which one is greater

```
<html>
<head></head>
<title>TELL THE GREATER</title>
<body>
<script language="javascript">

var num1 = window.prompt("Enter the first number");
var num2 = window.prompt("Enter the second number");

if(num1 > num2)
document.write(num1 +" > " +num2);
else if(num1 < num2)
document.write(num1 +" < " +num2);
else
document.write(num1 +" = " +num2);
else
document.write(num1 +" = " +num2);
</script>
</body>
</html>
```



Repetitions Structures (Loops)

- Most of the times, we need to do a job repetitively; here we use loops
- JavaScript provides us with four different repetition structures
 - do-while
 - while
 - for

Example

- Suppose we want to add four numbers entered by the user
- Let's do it by using different loops

do-while

```
<html>
<head></head>
<title>TELL THE GREATER</title>
<body>
<script language="javascript">
var numbers = 4;
var sum = 0;
do
var input = parseInt(window.prompt("Enter the number"));
sum = sum + input;
numbers = numbers - 1;
while(numbers >= 1);
window.alert("The sum is " +sum);
</script>
</body>
</html>
```

while

```
<html>
<head></head>
<title>TELL THE GREATER</title>
<body>
<script language="javascript">
var numbers = 4;
var sum = 0;
while(numbers >= 1)
var input = parseInt(window.prompt("Enter the number"));
sum = sum + input;
numbers = numbers - 1;
window.alert("The sum is " +sum);
</script>
</body>
</html>
```

for

```
<html>
<head></head>
<title>TELL THE GREATER</title>
<body>
<script language="javascript">
var sum = 0;
for(var i=1; i<=4; i++)
var input = parseInt(window.prompt("Enter the number"));
sum = sum + input;
window.alert("The sum is " +sum);
</script>
</body>
</html>
```

