

JAVASCRIPT

WHY USE JAVASCRIPT??

- ⦿ Javascript enhances web pages with dynamic and interactive features.
- ⦿ Javascript runs in client software.
- ⦿ Javascript runs in the browser not on the web server.
- ⦿ Javascript enables mathematical calculations, image swapping, form data validation, animations and more.

CHARACTERISTICS OF JAVASCRIPT

- ⦿ Javascript is a case sensitive language.
- ⦿ Javascript statements should end with semicolon(;).
- ⦿ Scripts execute in Javascript as they appear in HTML document.
- ⦿ There is no need to specify data types of the variables

LANGUAGE ELEMENTS

- ◉ Variables
- ◉ Literals
- ◉ Operators
- ◉ Control Structure
- ◉ Functions
- ◉ Objects

VARIABLES

- ◎ Variables contain values and use the equal sign to specify their value.
- ◎ Variables are created by declaration using the **var** command with or without an initial value state.
 - e.g. **var num=5 ;**
 - e.g. **var month = April;**

LITERALS

- ◉ Literals are used to represent a value that does not change during the execution of scripts.
- ◉ Different types are :-
 - Integers
 - Floating-point
 - Boolean
 - Strings
 - Array

OPERATORS

- ◉ Arithmetic (+, -, *, /, %, ++, --)
- ◉ Comparison (<, <=, >, >=, ==, !=)
- ◉ Logical (&&, ||)
- ◉ Assignment (+=, -=, *=, /=, %=, &=)
- ◉ Conditional (expr1 ? Expr2 : expr3)
- ◉ Bitwise (&, |, ^, ~, <<, >>)

CONTROL STRUCTURE

- ◉ if statement

```
if(condition)
{ statement(s); }
```

- ◉ if-else statement

```
if(condition)
{ statement(s); }
else
{ statement(s); }
```

- ◉ if-else-if

```
if(condition1)
statement[s];
else if(condition2)
statement[s];
. . .
else
default statement;
```


- Switch statement

```
switch(expression)
{
  case constant1 : statement[s]; [break;]
  case constant2 : statement[s]; [break;]
  .....
  case constantn : statement[s]; [break;]
  default : statement(s);
}
```

- While loop

```
while(condition)
{
  statement[s];
}
```

- Do-while loop

```
do
{
  statement(s);
}
while(condition);
.....
```

- ◉ for loop

```
for(initialization; condition;increment/decment)
{
    statement(s);
}
```

- ◉ with statement

```
with(statement)
```

- ◉ continue

```
continue;
```

FUNCTION

➤ Functions are named statements that performs tasks.

e.g., `function doWhatever () {statement here}`

The curly braces contain the statements of the function.

➤ JavaScript has built-in functions, and you can write your own.

parseInt function

parseInt(value,12)

- Converts the value into a number

DOCUMENT METHOD

- ▶ `document.write()` is like a print statement - the output goes into the HTML document.

e.g.

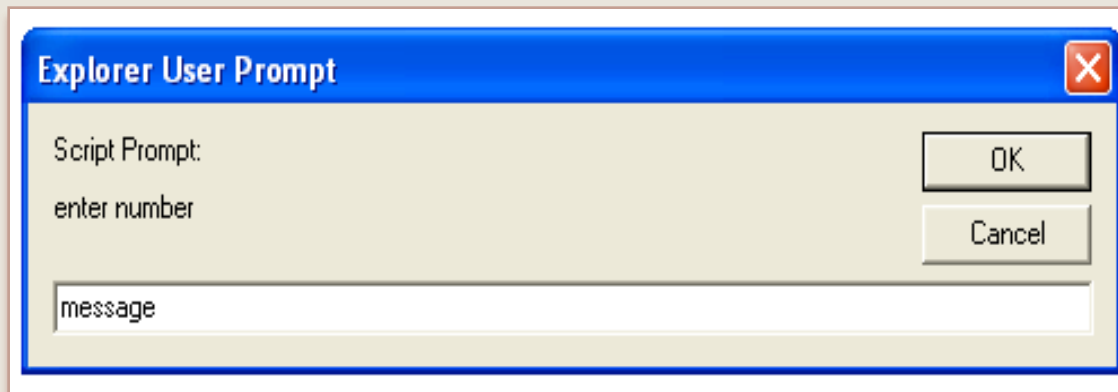
```
document.write("My title is" +title);
```

PROMPT

- ◉ The javascript prompt box prompts the user to input text
- ◉ This method returns the string the user has entered

Syntax :-

```
prompt("enter number");
```

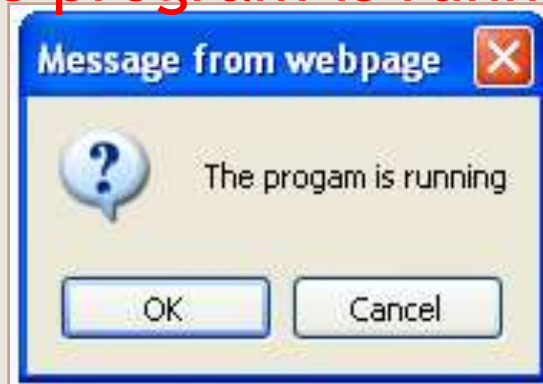


CONFIRM

- ⦿ A confirm box is often used if we want the user to accept or verify something
- ⦿ The user clicks “ok” or “cancel” to proceed

Syntax :-

`confirm(“The program is running”);`



ALERTS

- ◉ A Javascript alert is a little window that contains some messages
- ◉ Alerts are generally used for warnings

```
function display()
```

```
{
```

```
    alert("Welcome to javascript");
```

```
}
```

