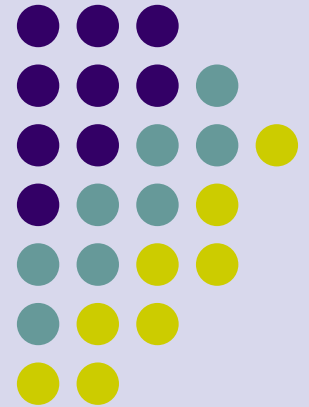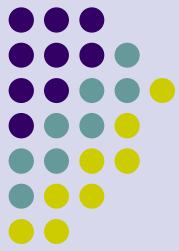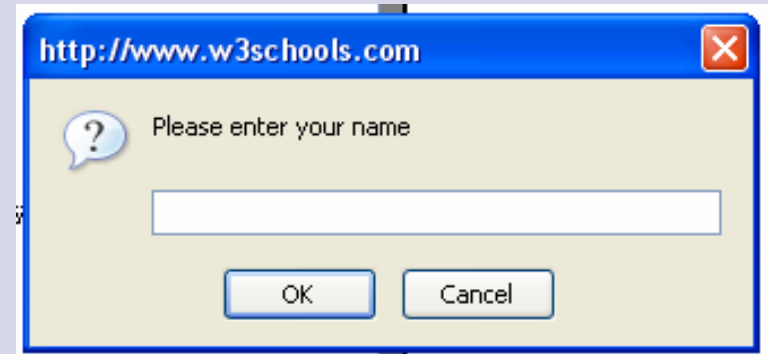# Javascript

Your key to funky buttons,
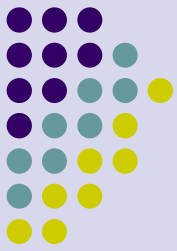
awesome textboxes,

and other crazy stuff.

What is a scripting language?

- A scripting language is a lightweight programming language that can be embedded in HTML code. i.e. you can add cool features to your webpages!

- JavaScript was designed to add interactivity to HTML pages

http://www.w3schools.com

Attention: I am totally awesome

OK

http://www.w3schools.com

Please enter your name

OK   Cancel

Javascript how to…

```
<html>

<body>

<script type="text/javascript">
document.write("Hello World!")

</script>

</body>

</html>
```
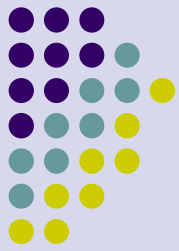
Looks familiar, eh?

document.write("Hello World!")
writes Hello World! to the
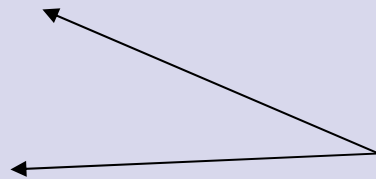screen wherever you have
specified the script in your
HTML document

Break it down, please.

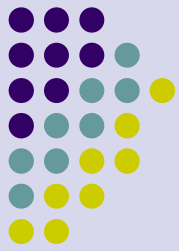`<script type="text/javascript">`

`…`

`</script>`

The script tags are just like any other HTML tag. It has a beginning tag and an end tag. Because we are using javascript, we must specify this as an attribute of the script tag.

How to make your scripts do cool things. The nitty gritty.

Variables

- Remember that a a variable is a "container" for information you want to store.

- Rules for variable names:
  - Variable names are case sensitive
  - They must begin with a letter or the underscore character
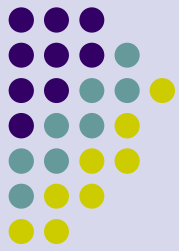
"Announce" that you're making a variable.

Give the variable a name.

Set the value of the variable

```
var myName = "Sarah"

var herName = "Hong"
```

In this example, `myName` is a place holder for "Sarah".

Remember conditionals? We can use them in Javascript, too!

- **If Statement**
  - You should use the if statement if you want to execute some code only if a specified condition is true.
- **Syntax**
  - if (*condition*)
    { *code to be executed if condition is true* }
  - Example:

```
<script type="text/javascript">
//Write a "Good morning" greeting
//if the time is less than 10
var d=new Date()
var time=d.getHours()
if (time<10)
{ document.write("<b>Good morning</b>") }
</script>
```
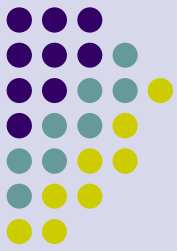
Script tag

Comments

Create variable *d* set to current date using method Date().
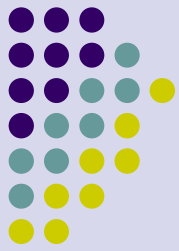
Extract the "hours" from the Date.

If the time is less than 10 hrs, print "Good Morning" to the screen

Functions

- Remember in Jython when we wrote functions? Well, in Javascript we can also write functions.

A function analyzed

```html
<html>
<head>
<script type="text/javascript">
function disp_alert()

{
alert("I am an alert box!!")
}
</script>
</head>
```

We are naming our function disp_alert()

We want the alert box to say what is in the "" when it pops up

HTML has a special way to specify that you want a button. You must put the <form> tags around the <input> tag

```html
<body>
<form>
<input type="button" onclick="disp_alert()" value="Display alert box">
</form>
</body>
```

We want a button.

That calls our function when you click it

The button says this!

```html
</html>
```

NOW YOU HAVE THE TOOLS TO INCORPORATE JAVASCRIPT INTO YOUR OWN WEBPAGE!!!