

# Basics

# jQuery & jQuery UI Installation

- ❖ Installing jQuery and jQuery UI is fairly simple. Each one of them can be downloaded as a single Java Script file.

# jQuery & jQuery UI Installation

```
http://code.jquery.com/jquery-1.4.2.min.js
File Edit View History Bookmarks Window Help
http://code.jquery.com/jquery-1.4.2.min.js
Apple Yahoo! Google Maps YouTube Wikipedia News (39) Popular
Haim (3) - Google Wave http://code.jquery.com/j...
/*!
 * jQuery JavaScript Library v1.4.2
 * http://jquery.com/
 *
 * Copyright 2010, John Resig
 * Dual licensed under the MIT or GPL Version 2 licenses.
 * http://jquery.org/license
 *
 * Includes Sizzle.js
 * http://sizzlejs.com/
 * Copyright 2010, The Dojo Foundation
 * Released under the MIT, BSD, and GPL Licenses.
 *
 * Date: Sat Feb 13 22:33:48 2010 -0500
 */
(function(A,w){function
ma(){if(!c.isReady){try{s.documentElement.doScroll("left")}catch(a){setTimeout(ma,1);return}c.ready()}function
Qa(a,b){b.src?
c.ajax({url:b.src,async:false,dataType:"script"}):c.globalEval(b.text||b.textContent||b.innerHTML||"");b.parentNode&&b.pare
ntNode.removeChild(b)}function X(a,b,d,f,e,j){var i=a.length;if(typeof b=="object"){for(var o in
b)X(a,o,b[o],f,e,d);return a}if(d!==w){f=!j&&f&&c.isFunction(d);for(o=0;o<i;o++)e(a[o],b,f?
d.call(a[o],o,e(a[o],b)):d,j);return a}return i?
e(a[o],b):w}function J(){return(new Date).getTime()}function Y(){return false}function Z(){return true}function
na(a,b,d){d[0].type=a;return c.event.handle.apply(b,d)}function oa(a){var
b,d=[],f=[],e=arguments,j,i,o,k,n,r;i=c.data(this,"events");if(!(a.liveFired===this||!i||!i.live||a.button&&a.type=="click
")){a.liveFired=this;var u=i.live.slice(0);for(k=0;k<u.length;k++){i=u[k];i.origType.replace(O,"")===a.type?
f.push(i.selector):u.splice(k--,1)}j=c(a.target).closest(f,a.currentTarget);n=0;for(r=
j.length;n<r;n++)for(k=0;k<u.length;k++){i=u[k];if(j[n].selector===i.selector){o=j[n].elem;f=null;if(i.preType=="mouseente
r"||i.preType=="mouseleave")f=c(a.relatedTarget).closest(i.selector)[0];if(!f||f!==o)d.push({elem:o,handleObj:i})}n=0;for
(r=d.length;n<r;n++){j=d[n];a.currentTarget=j.elem;a.data=j.handleObj.data;a.handleObj=j.handleObj;if(j.handleObj.origHandl
er.apply(j.elem,e)===false){b=false;break}}return b}function pa(a,b){return"live."+a&&a!="*"?
a+"."+"":b.replace(/\.\/g,"").replace(/ /g,
"&")}function qa(a){return!a||!a.parentNode||a.parentNode.nodeType===11}function ra(a,b){var
d=0;b.each(function(){if(this.nodeName===a[d]&&a[d].nodeName){var
f=c.data(a[d++],e=c.data(this,f));if(f=f&&f.events){delete a.handle;e.events={};for(var j in f)for(var i in
f[j])c.event.add(this,j,f[j][1],f[j][1].data)}})}function sa(a,b,d){var f,e,j;b=b&&b[0]?
b[0].ownerDocument|b[0]:s;if(a.length===1&&typeof
a[0]!="string"&&a[0].length<512&&b===s&&!ra.test(a[0])&&(c.support.checkClone||!ra.test(a[0]))){e=
```

# jQuery & jQuery UI Installation

- ❖ Once we download each one of the Java Script files we can place it within our web application folder and refer it from within the HTML file using the script tag.

```
<script src="jquery-1.4.2.min.js" type="text/javascript">  
</script>
```

# jQuery & jQuery UI Installation

- ❖ We can customize the jQuery UI download by selecting the version and specific modules we need.

# jQuery & jQuery UI Installation



The screenshot shows a web browser window titled "jQuery UI - Configure your download" at the URL "http://jqueryui.com/download". The page features the jQuery logo and navigation links for "jQuery", "Plugins", "UI", "Blog", "About", and "Donate". Below the logo are buttons for "Download", "Demos & Documentation", "Themes", "Development", and "Support".

## Build Your Download

Customize your jQuery UI download by selecting the version and specific modules you need in the form below or select a quick download package. A range of current and historical jQuery UI releases are also hosted on [Google's CDN](#).

**Quick downloads:** [Latest](#) (1.8rc3: for jQuery 1.4+) | [Stable](#) (1.7.2: for jQuery 1.3+)

**Components** (30 of 30 selected) [Deselect all components](#)

Component	Selected	Description
UI Core	<input checked="" type="checkbox"/>	The core of jQuery UI, required for all interactions and widgets.
Core	<input checked="" type="checkbox"/>	The core of jQuery UI, required for all interactions and widgets.
Widget	<input checked="" type="checkbox"/>	The widget factory, base for all widgets
Mouse	<input checked="" type="checkbox"/>	The mouse widget, a base class for all interactions and widgets with heavy mouse interaction.
Position	<input checked="" type="checkbox"/>	A utility plugin for positioning elements relative to other elements.

**Theme**  
Select the theme you want to include or [design a custom theme](#)  
UI lightness  
[Advanced Theme Settings](#)

**Version**  
Select the release version you want to download.  
 **1.8rc3**  
(Latest, for jQuery 1.4+)

The Windows taskbar at the bottom shows the Start button, several open applications (Windows Explorer, Notepad, Internet Explorer, Java EE simulator, Safari, OpenOffice), and the system tray with the time 3:17 AM.

# jQuery & jQuery UI Installation

- ❖ The download includes both the jQuery and the jQuery UI libraries. In addition, it includes easy to use code samples that include the required script tags as well as a link for the required CSS file.

# jQuery & jQuery UI Installation

...

```
<link type="text/css" href="../../themes/base/jquery.ui.all.css"
      rel="stylesheet" />
```

```
<script type="text/javascript" src="../../jquery-1.4.2.js"></script>
<script type="text/javascript" src="../../ui/jquery.ui.core.js"></script>
<script type="text/javascript" src="../../ui/jquery.ui.widget.js"></script>
<script type="text/javascript" src="../../ui/jquery.ui.accordion.js"></script>
```

```
<link type="text/css" href="../../demos.css" rel="stylesheet" />
```

...



# The \$ ( ) Function

- ❖ This function is used for multiple purposes. One of them is selecting a specific object of the document object model.
- ❖ We can call various methods on the object this function returns.

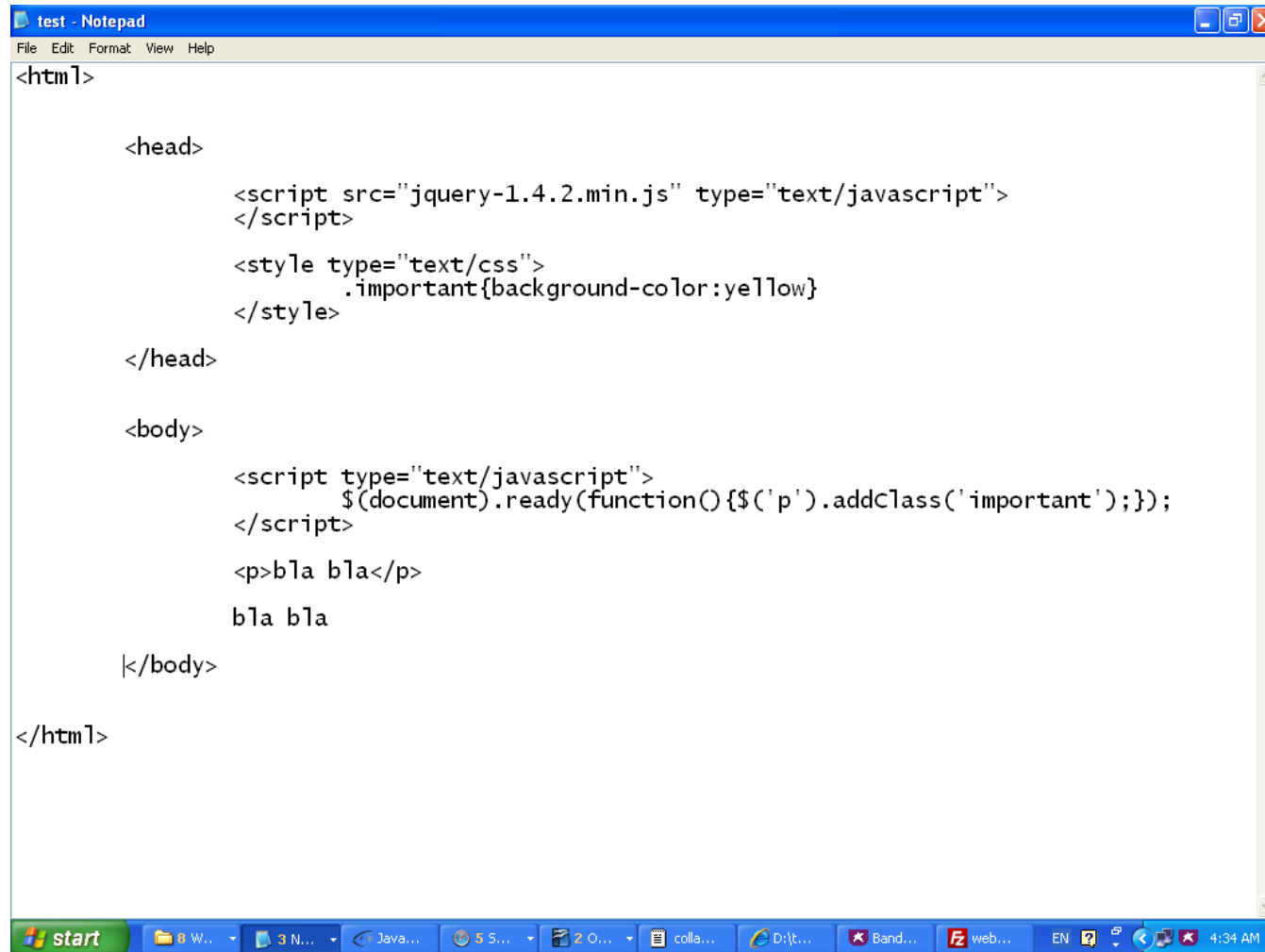
# The `ready()` Function

- ❖ This is one of the functions we can call on the object returned when calling the `$()` function. We can pass over a function that will be called when the DOM object(s) are loaded.
- ❖ Calling `$(document).ready(function() { ... });` will execute the anonymous passed function when the document is loaded and ready for use.

# The `addClass()` Function

- ❖ Calling this method on a jQuery object we can apply a CSS class to those elements of the page the jQuery object represents.
- ❖ Calling this method we should pass over the name of the CSS class we want to apply to the selected part of the page.

# The addClass () Function



```
test - Notepad
File Edit Format View Help
<html>

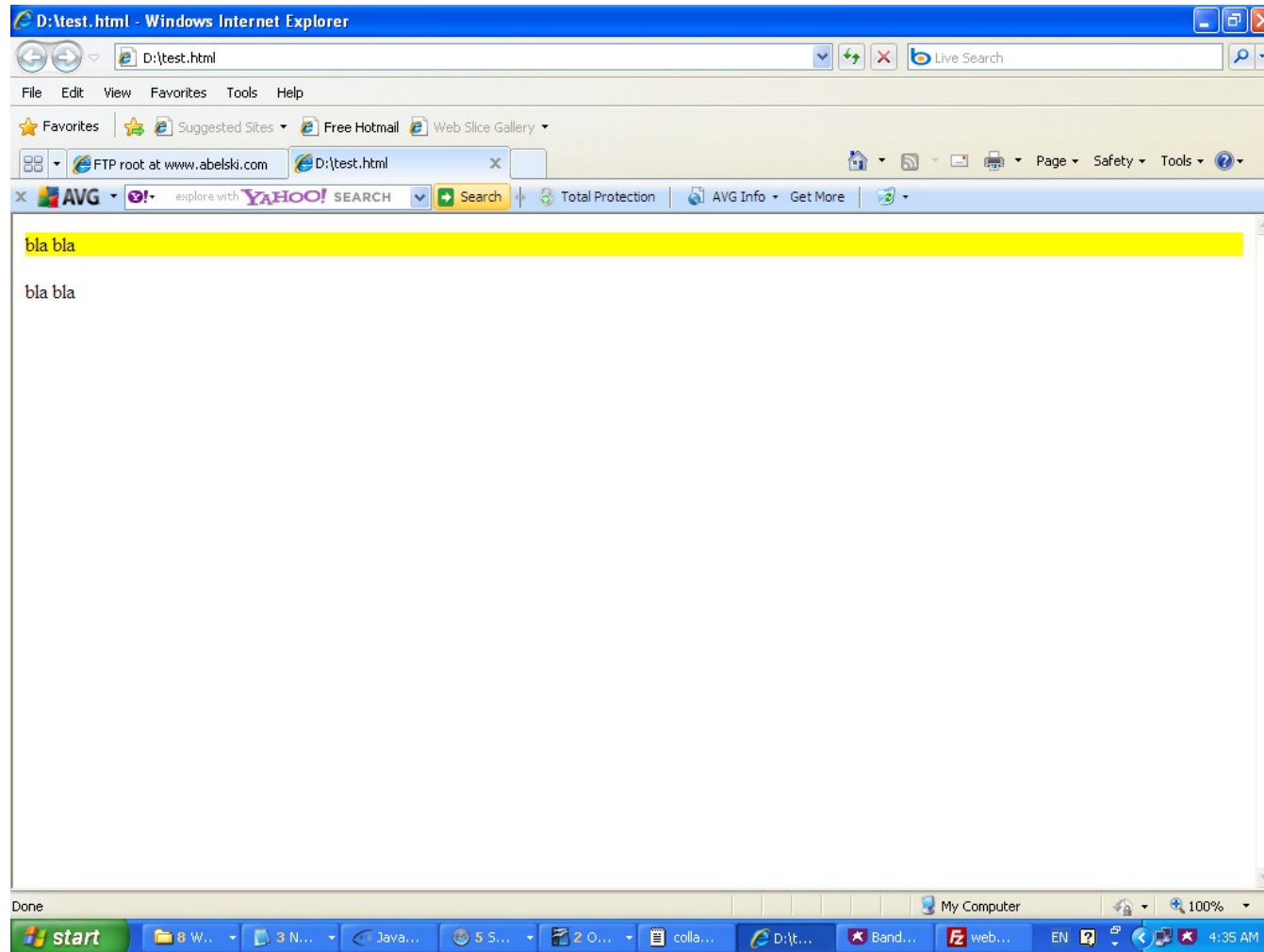
  <head>
    <script src="jquery-1.4.2.min.js" type="text/javascript">
    </script>
    <style type="text/css">
      .important{background-color:yellow}
    </style>
  </head>

  <body>
    <script type="text/javascript">
      $(document).ready(function(){ $('p').addClass('important');});
    </script>
    <p>bla bla</p>
    bla bla
  </body>

</html>
```

The screenshot shows a Notepad window titled "test - Notepad" with a menu bar (File, Edit, Format, View, Help). The main text area contains HTML code. The code includes a head section with a jQuery script and a CSS rule for a class named "important" with a yellow background. The body section contains a script that uses jQuery's addClass() function to add the "important" class to all paragraphs, followed by a paragraph containing "bla bla". The Windows taskbar at the bottom shows the start button and several open applications, with the system clock displaying 4:34 AM.

# The addClass () Function



# The `children()` Function

- ❖ Calling the `children()` method on a jQuery object we shall get a `NodeList` object that holds all nodes that each one of them represents a specific child.

# The `each()` Function

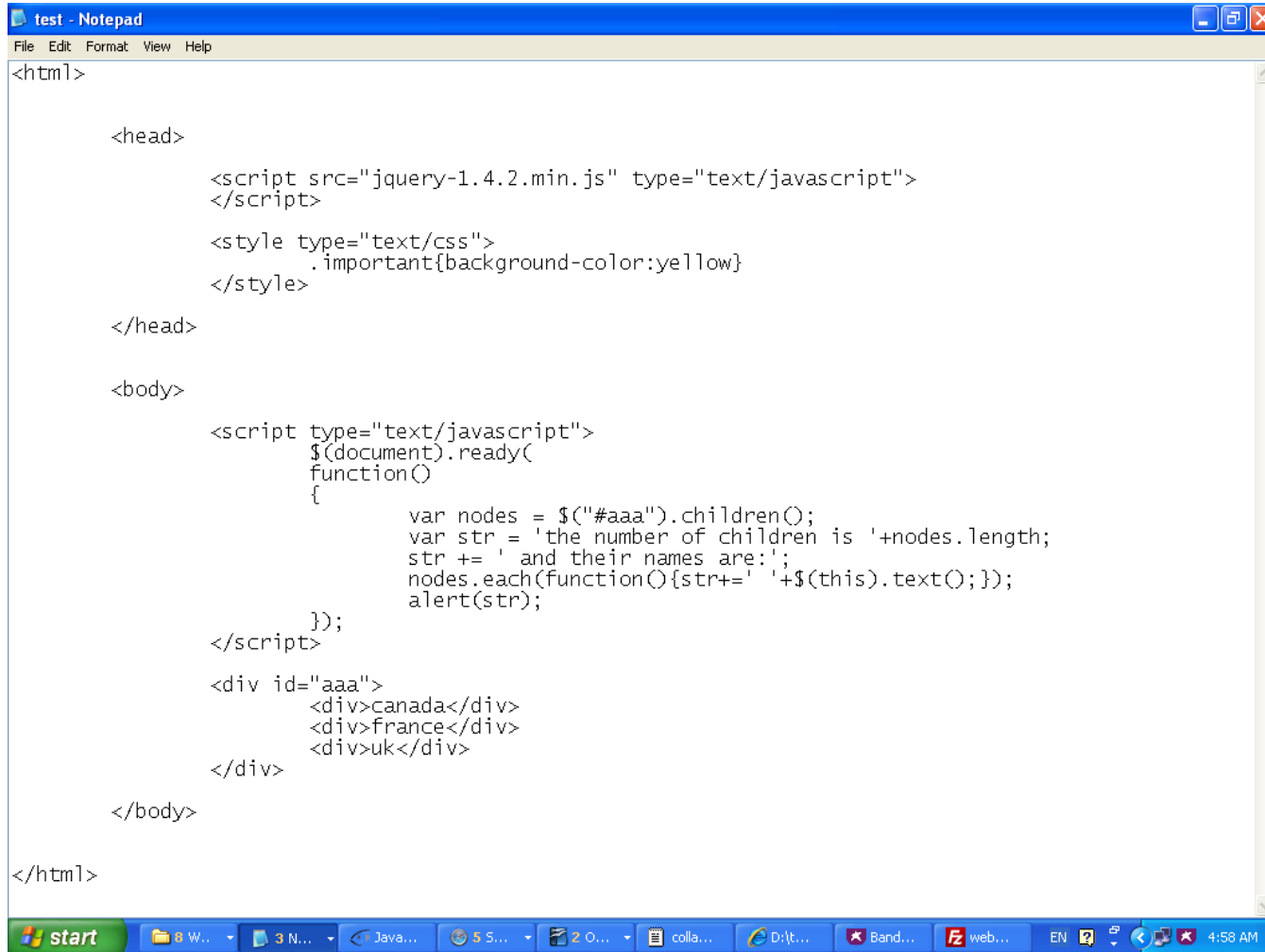
- ❖ Calling the `each()` method on a `NodeList` object we can pass over a function that will be called on each one of the nodes.

# The `text()` Function

- ❖ Calling the `text()` method on a jQuery object we shall get the text it holds.



# Sample



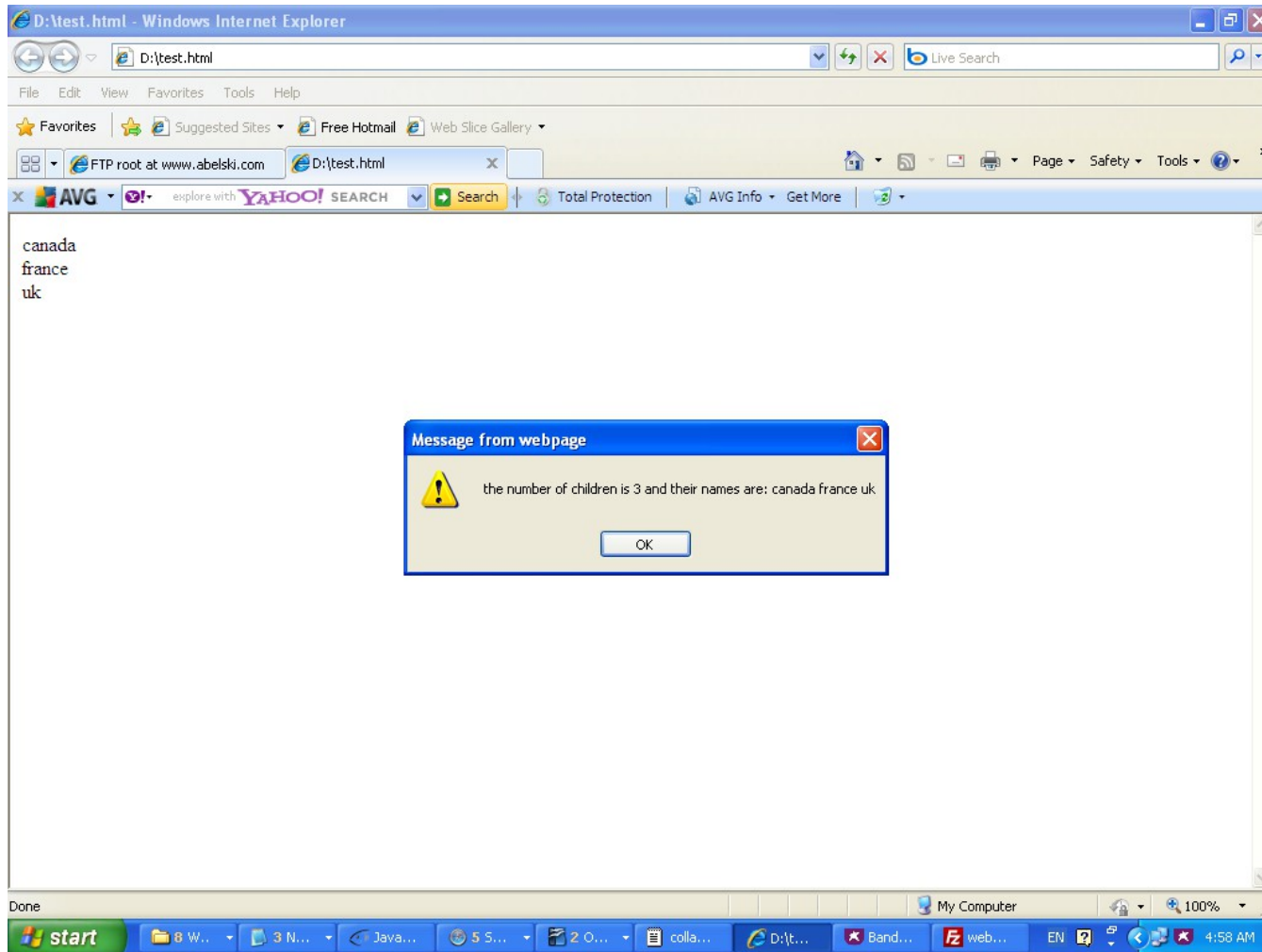
```
test - Notepad
File Edit Format View Help
<html>

  <head>
    <script src="jquery-1.4.2.min.js" type="text/javascript">
    </script>
    <style type="text/css">
      .important{background-color:yellow}
    </style>
  </head>

  <body>
    <script type="text/javascript">
      $(document).ready(
      function()
      {
        var nodes = $("#aaa").children();
        var str = 'the number of children is '+nodes.length;
        str += ' and their names are: ';
        nodes.each(function(){str+= ' '+$(this).text();});
        alert(str);
      });
    </script>
    <div id="aaa">
      <div>canada</div>
      <div>france</div>
      <div>uk</div>
    </div>
  </body>

</html>
```

# Sample



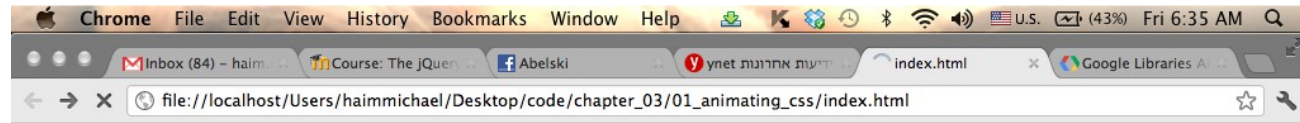
# The `css()` Function

- ❖ Calling the `css()` function on a jQuery object we can get the value of the css property its name is passed over to the function.

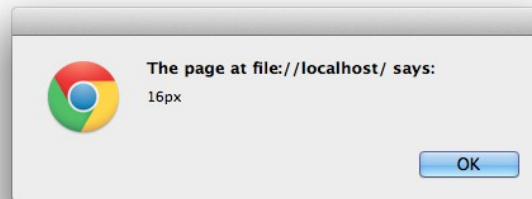
# The `css()` Function

```
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/1.7.2/jquery.min.js"
type="text/javascript" charset="utf-8">
</script>
<script type="text/javascript">
$(document).ready(function(){
    alert($('#txt').css('font-size'));
});
</script>
bla bla bla...
<div id='txt'>
this text is animated using jquery
</div>
```

# The `css()` Function



bla bla bla...  
this text is animated using jquery



Waiting for ajax.googleapis.com...

# The `css()` Function

- ❖ Calling the `css()` function on a jQuery object we can set the value of the css property its name is passed over to the function. The value should be passed over as the second argument.

# The `css()` Function

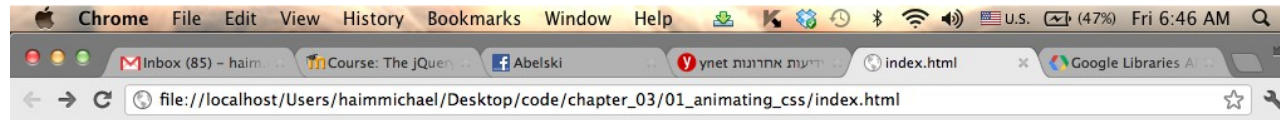
```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.7.2/jquery.min.js"
type="text/javascript" charset="utf-8"></script>
<script type="text/javascript">
$(document).ready(function() {
    $('#txt').css('font-size',14);
});
function getinfo()
{
    alert($('#txt').css('font-size'));
}
function setfontsize()
{
    $('#txt').css('font-size',document.myform.fntsz.value);
}
</script>
```

# The `css()` Function

```
bla bla bla...
<div id='txt'>
this text is animated using jquery
</div>
<form name='myform'>
<input type=button value="get font size" onclick='getinfo()' />
<br/>
<input type=button value="set font size" onclick='setfontsize()' /> <input
type='text' id='fntsz' name='fntsz' />
</form>
```



# The `css()` Function



bla bla bla...

this text is animated using jquery

get font size

set font size

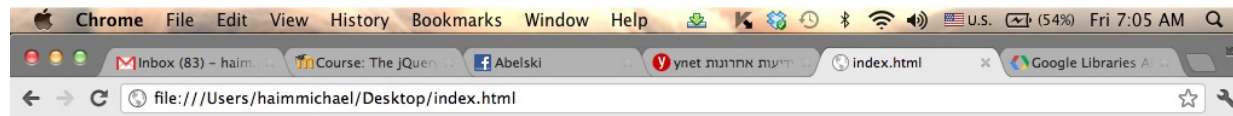
# The `hide()` & `show()` Functions

- ❖ Calling the `hide()` function on a jQuery object we hide the element from the screen.
- ❖ Calling the `show()` function on a jQuery object we show the element on screen.

# The hide () & show () Functions

```
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/1.7.2/jquery.min.js"
type="text/javascript" charset="utf-8"></script>
<script type="text/javascript">
function showtext()
{
    $('#txt').show();
}
function hidetext()
{
    $('#txt').hide();
}
</script>
bla bla bla...
<div id='txt'>
this text visibility is controlled using jquery
</div>
<p>
<input type='button' id='show_bt' onclick='showtext()' value='show the text' />
<input type='button' id='hide_bt' onclick='hidetext()' value='hide the text' />
```

# The `hide()` & `show()` Functions



bla bla bla...  
this text visibility is controlled using jquery

show the text

hide the text