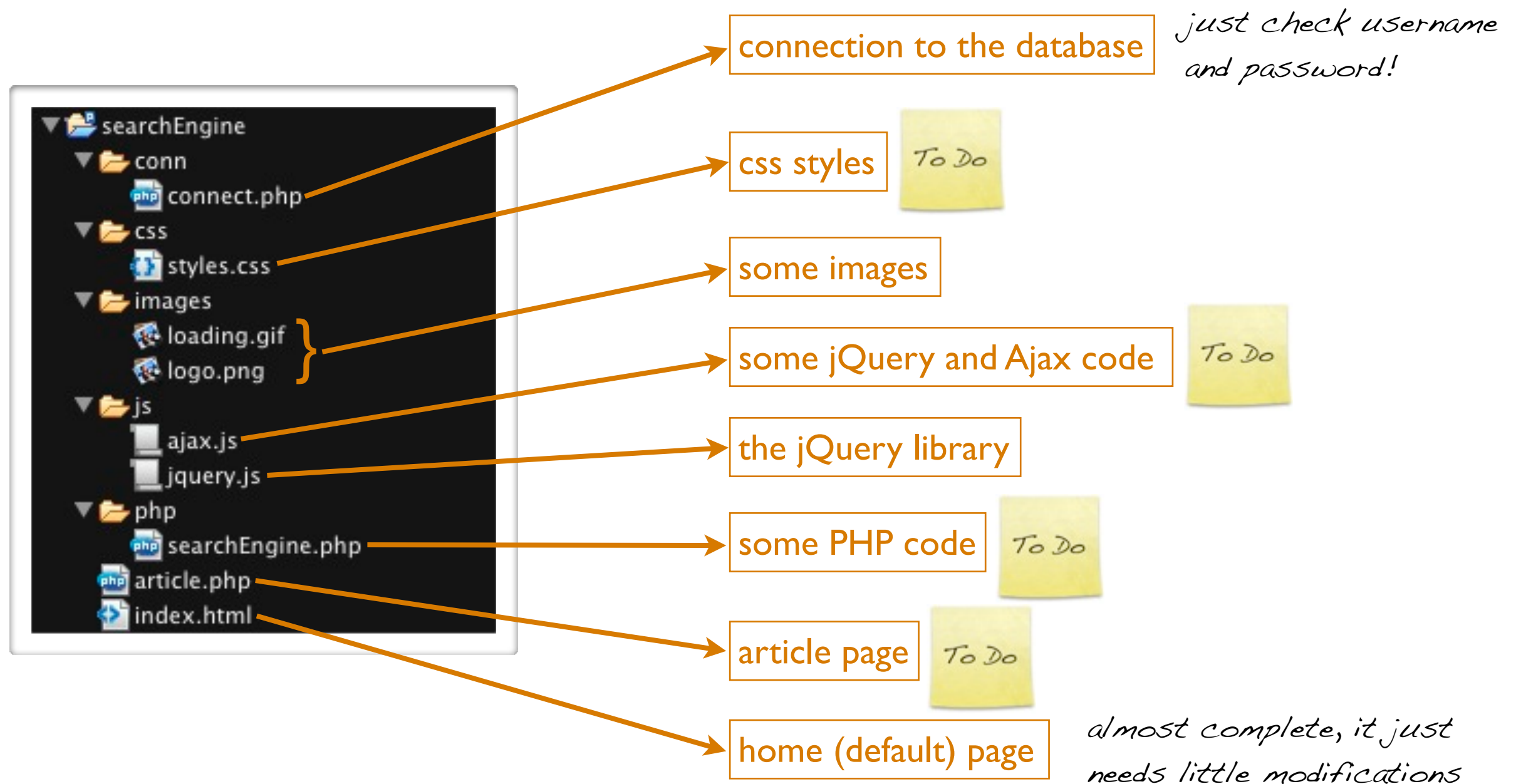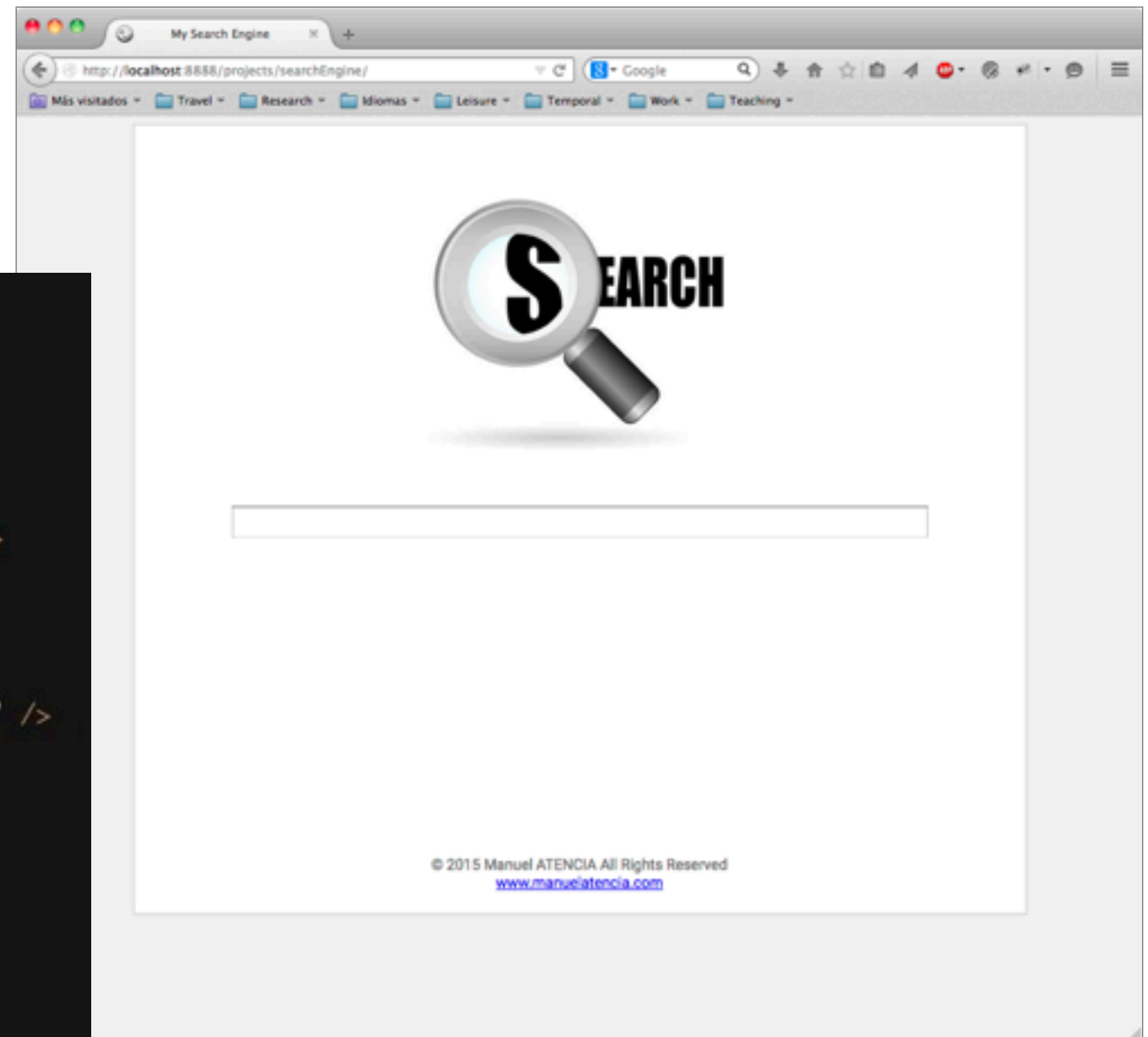# searchEngine (mini) project

The HTML skeleton

index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
    <div id="logo">
      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
    <div class="form">
      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel ATENCIA All Rights Reserved<br />
      <a href="http://www.manuelatencia.com">www.manuelatencia.com</a>
    </div>
  </div>
</body>
</html>
```

The HTML skeleton

index.html

```html
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
    <div id="logo">
      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
    <div class="form">
      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel ATENCIA All Rights Reserved<br />
      <a href="http://www.manuelatencia.com">www.manuelatencia.com</a>
    </div>
  </div>
</body>
</html>
```
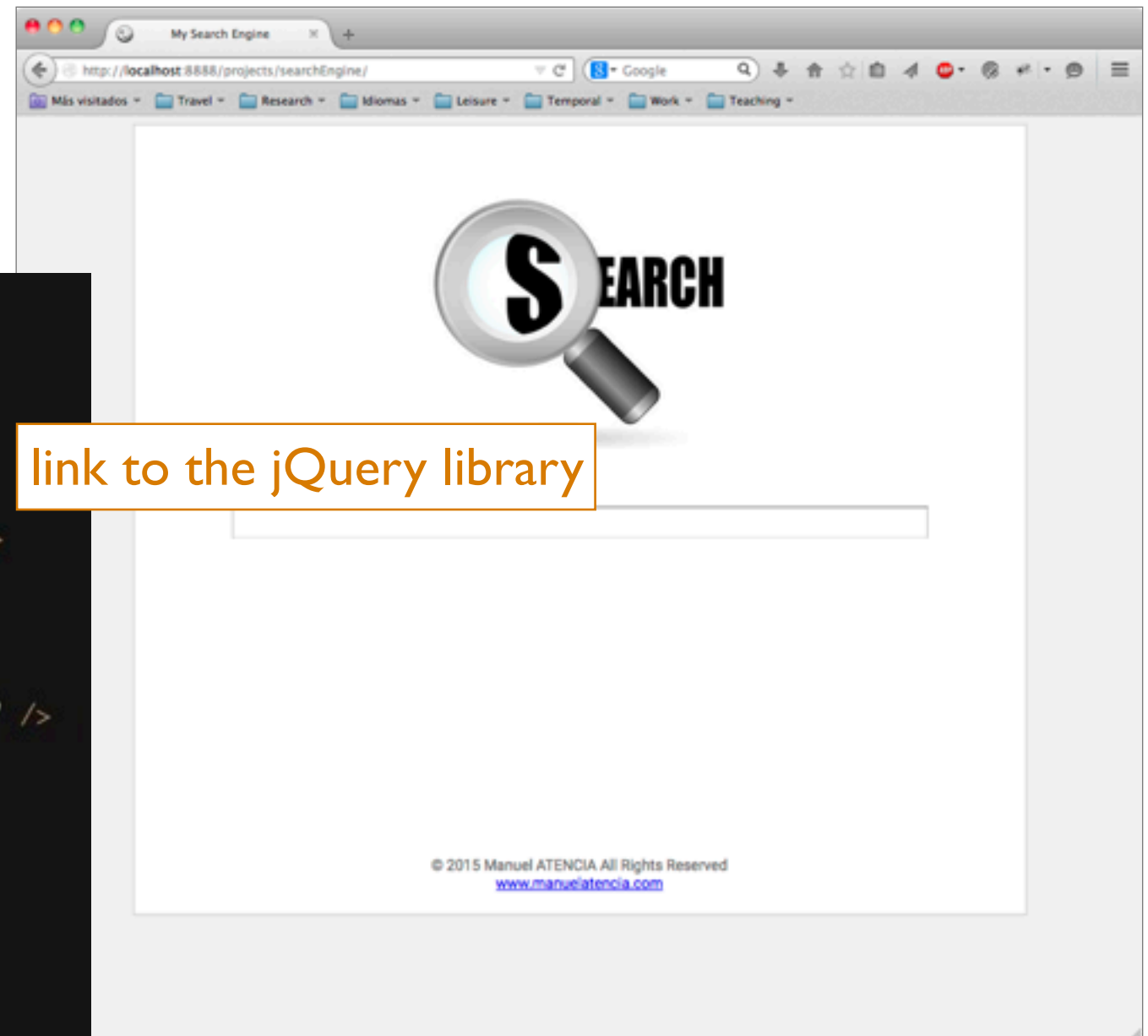
link to the jQuery library

The HTML skeleton

index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
    <div id="logo">
      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
    <div class="form">
      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel ATENCIA All Rights Reserved<br />
      <a href="http://www.manuelatencia.com">www.manuelatencia.com</a>
    </div>
  </div>
</body>
</html>
```
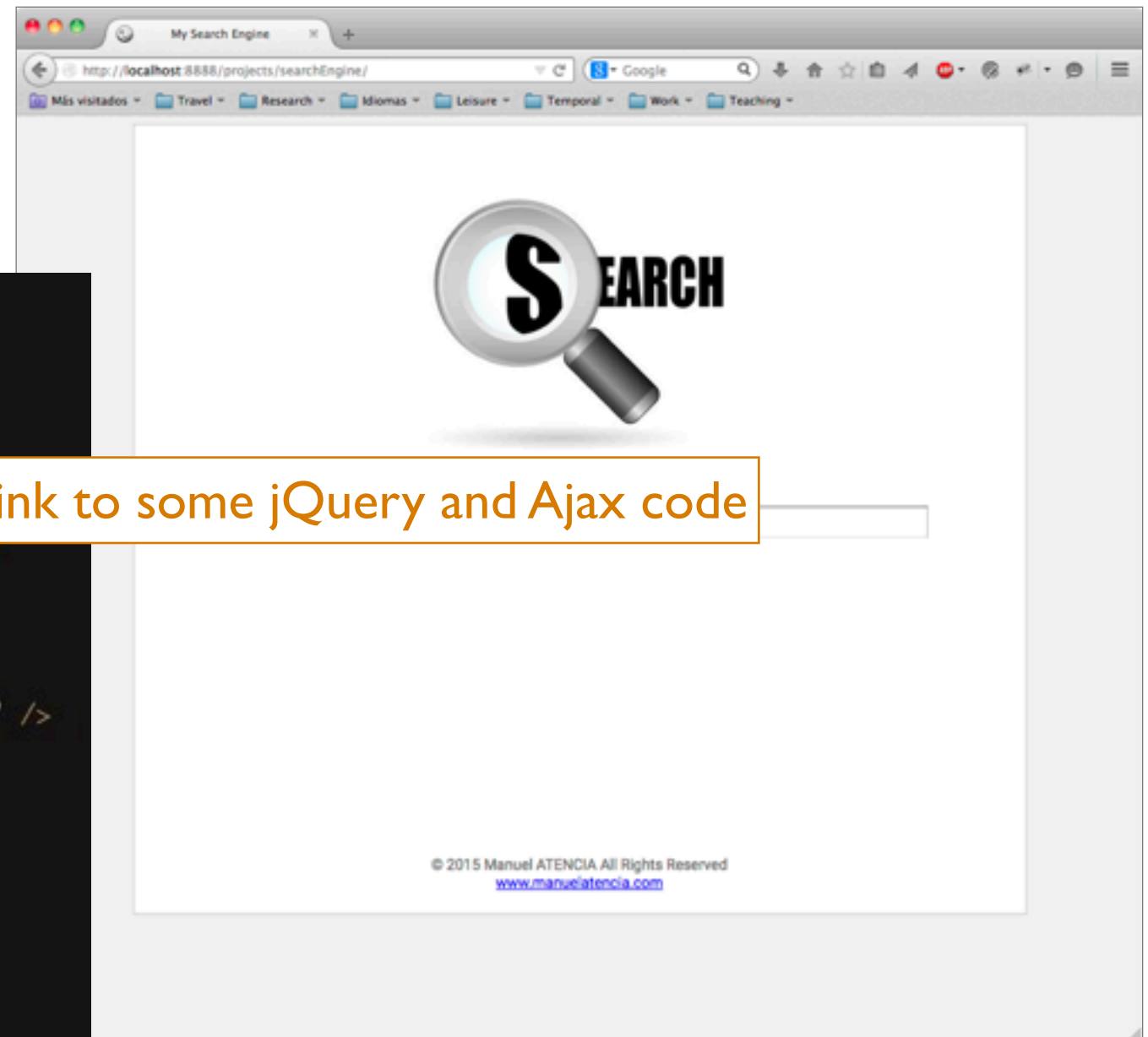
link to some jQuery and Ajax code

The HTML skeleton

index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
    <div id="logo">
      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
    <div class="form">
      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel ATENCIA All Rights Reserved<br />
      <a href="http://www.manuelatencia.com">www.manuelatencia.com</a>
    </div>
  </div>
</body>
</html>
```
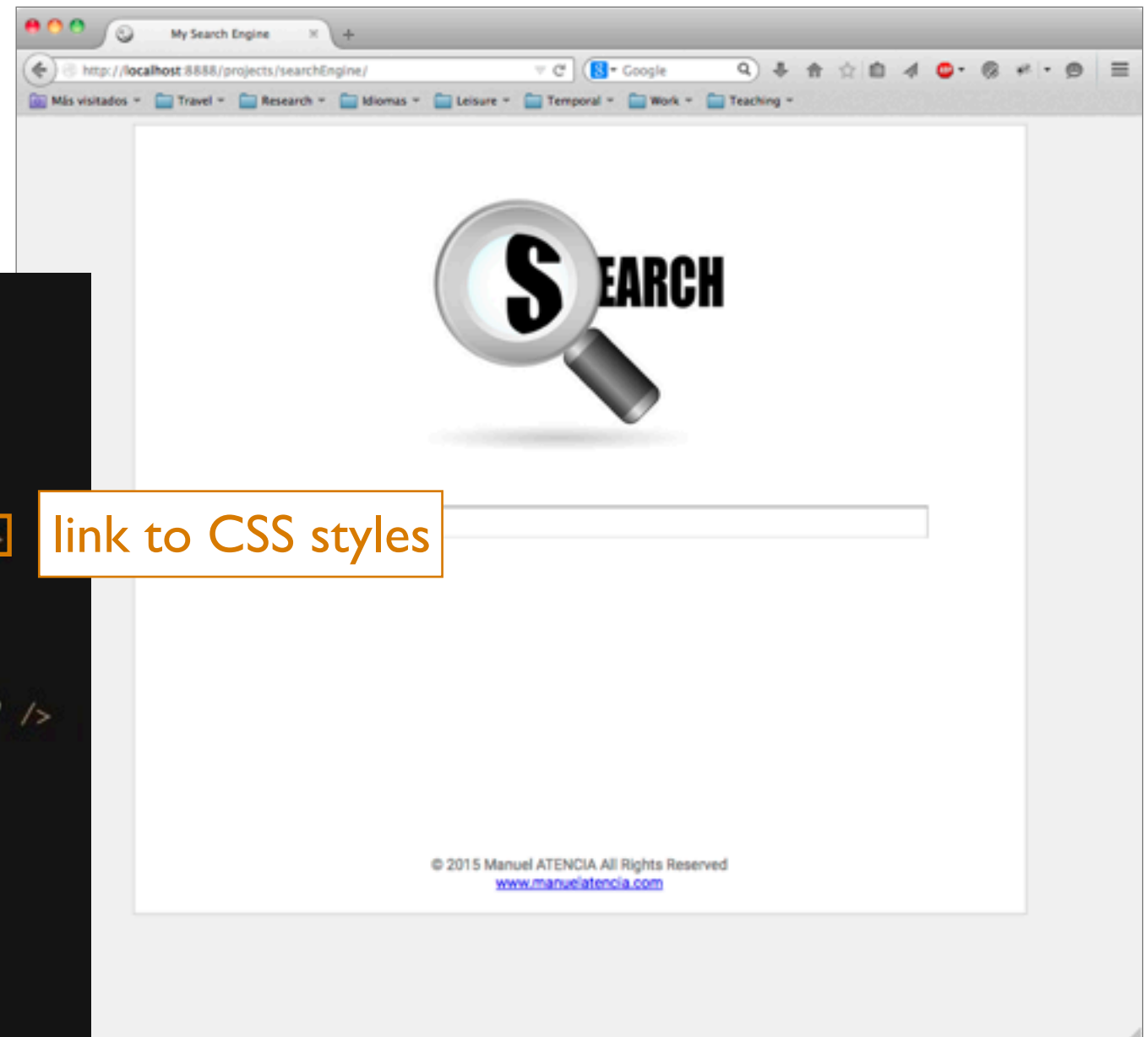
link to CSS styles

The HTML skeleton

index.html

```html
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
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      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
    <div class="form">
      <form action="" method="post" id="search_form">
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      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel ATENCIA All Rights Reserved<br />
      <a href="http://www.manuelatencia.com">www.manuelatencia.com</a>
    </div>
  </div>
</body>
</html>
```
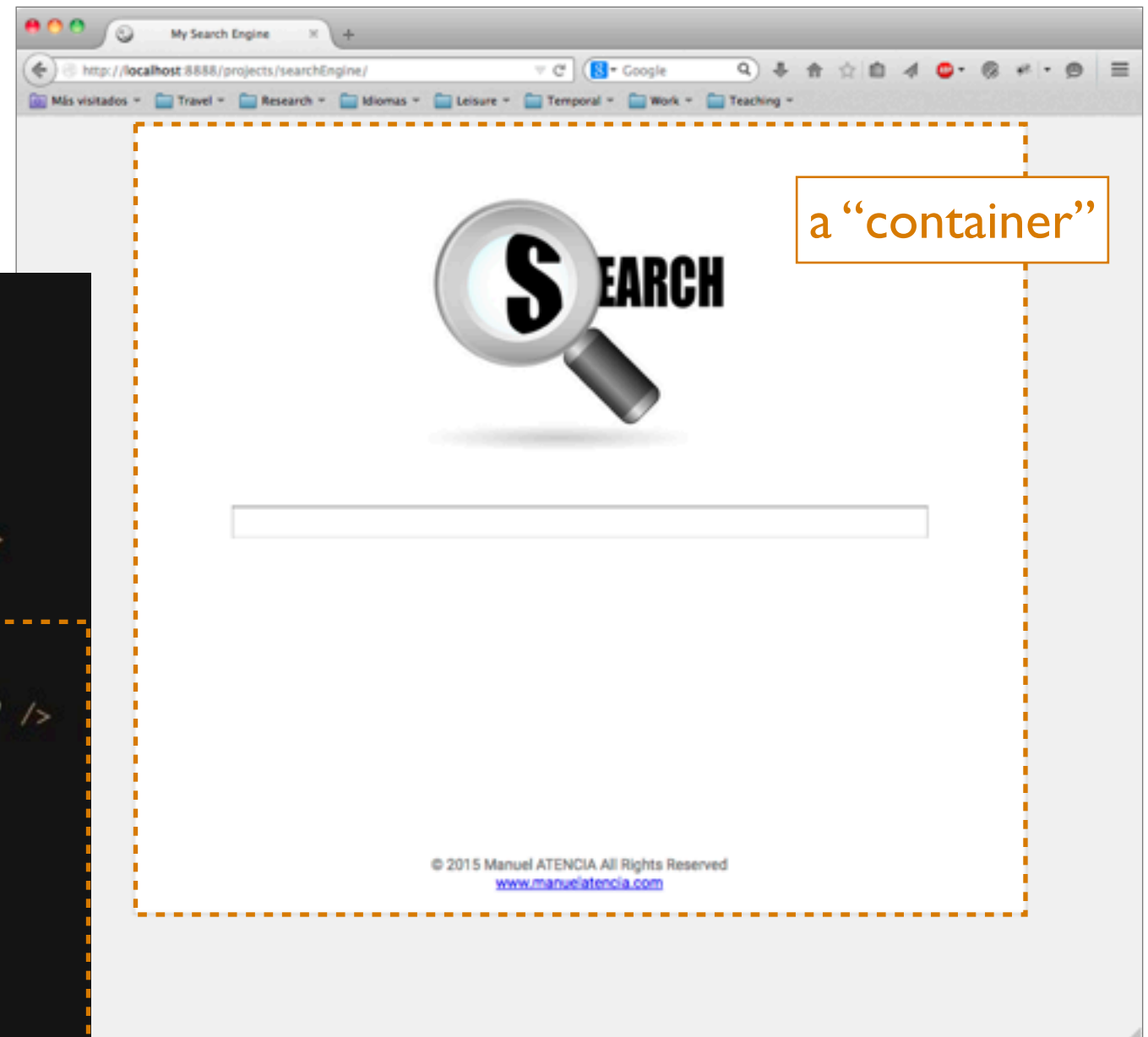
a "container"

The HTML skeleton

`index.html`

```html
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
    <div id="logo">
      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
    <div class="form">
      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel ATENCIA All Rights Reserved<br />
      <a href="http://www.manuelatencia.com">www.manuelatencia.com</a>
    </div>
  </div>
</body>
</html>
```
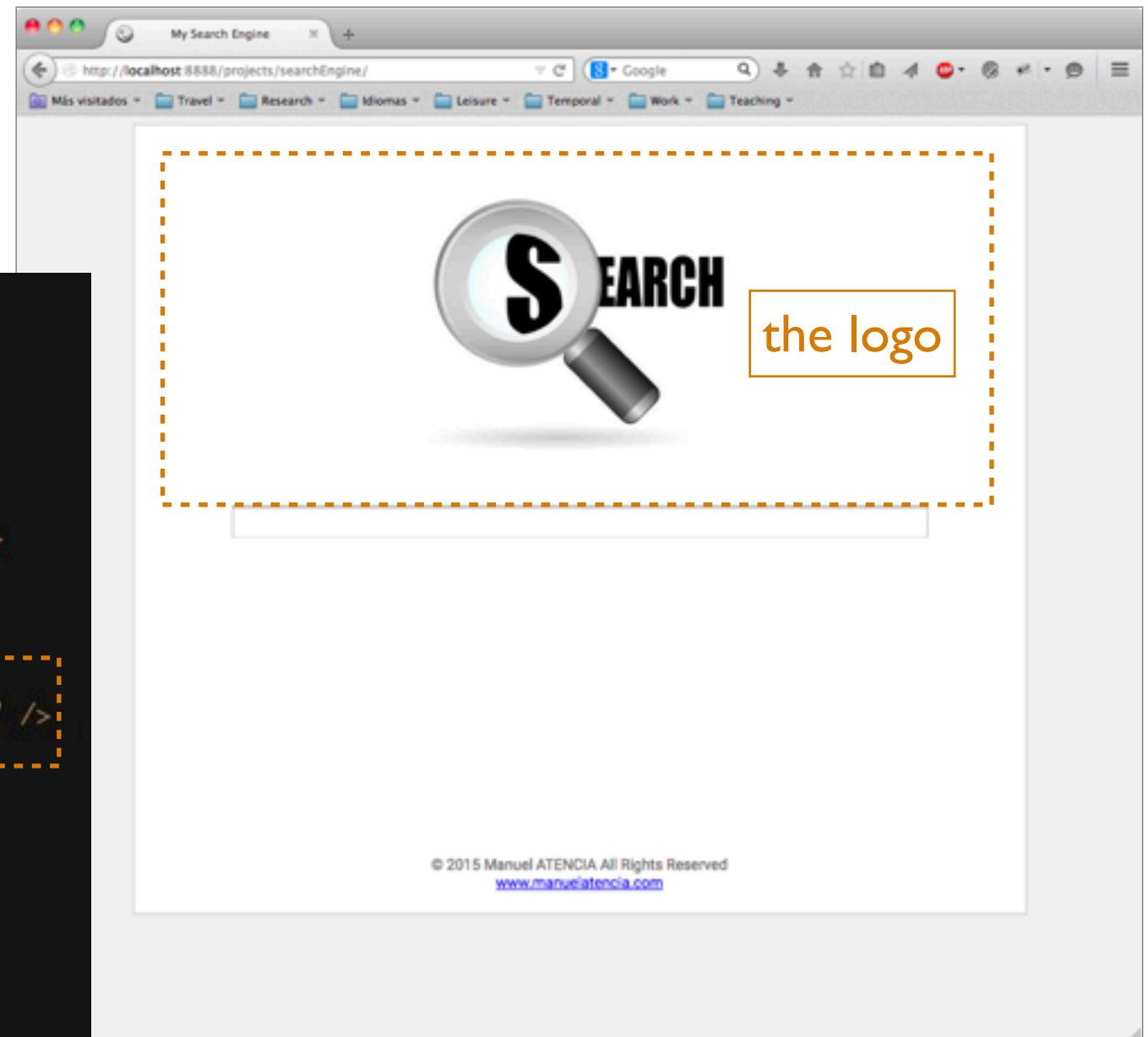
the logo

The HTML skeleton

index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
    <div id="logo">
      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
    <div class="form">
      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel ATENCIA All Rights Reserved<br />
      <a href="http://www.manuelatencia.com">www.manuelatencia.com</a>
    </div>
  </div>
</body>
</html>
```
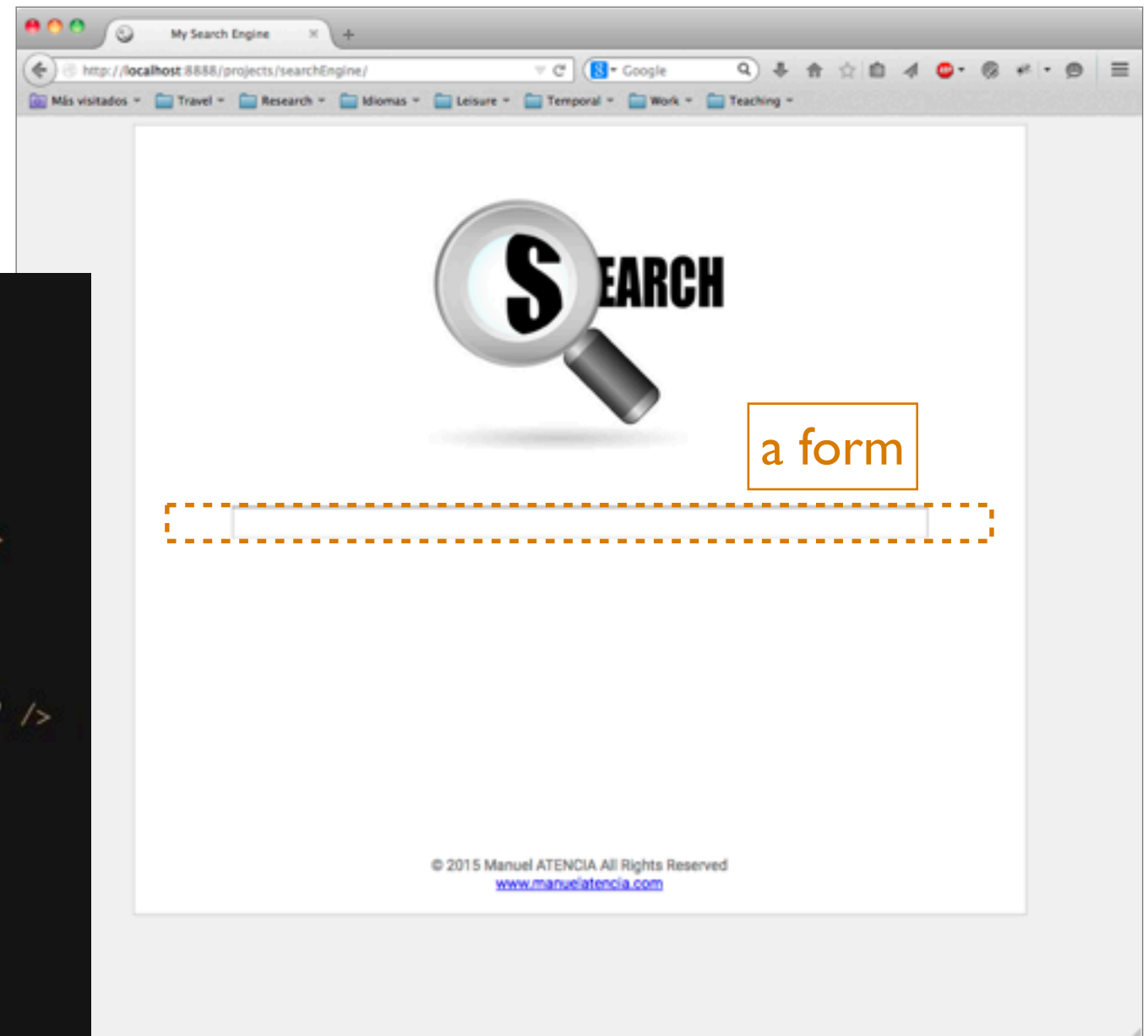
a form

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www.manuelatencia.com

The HTML skeleton

index.html

```html
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
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      <form action="" method="post" id="search_form">
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      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel ATENCIA All Rights Reserved<br />
      <a href="http://www.manuelatencia.com">www.manuelatencia.com</a>
    </div>
  </div>
</body>
</html>
```
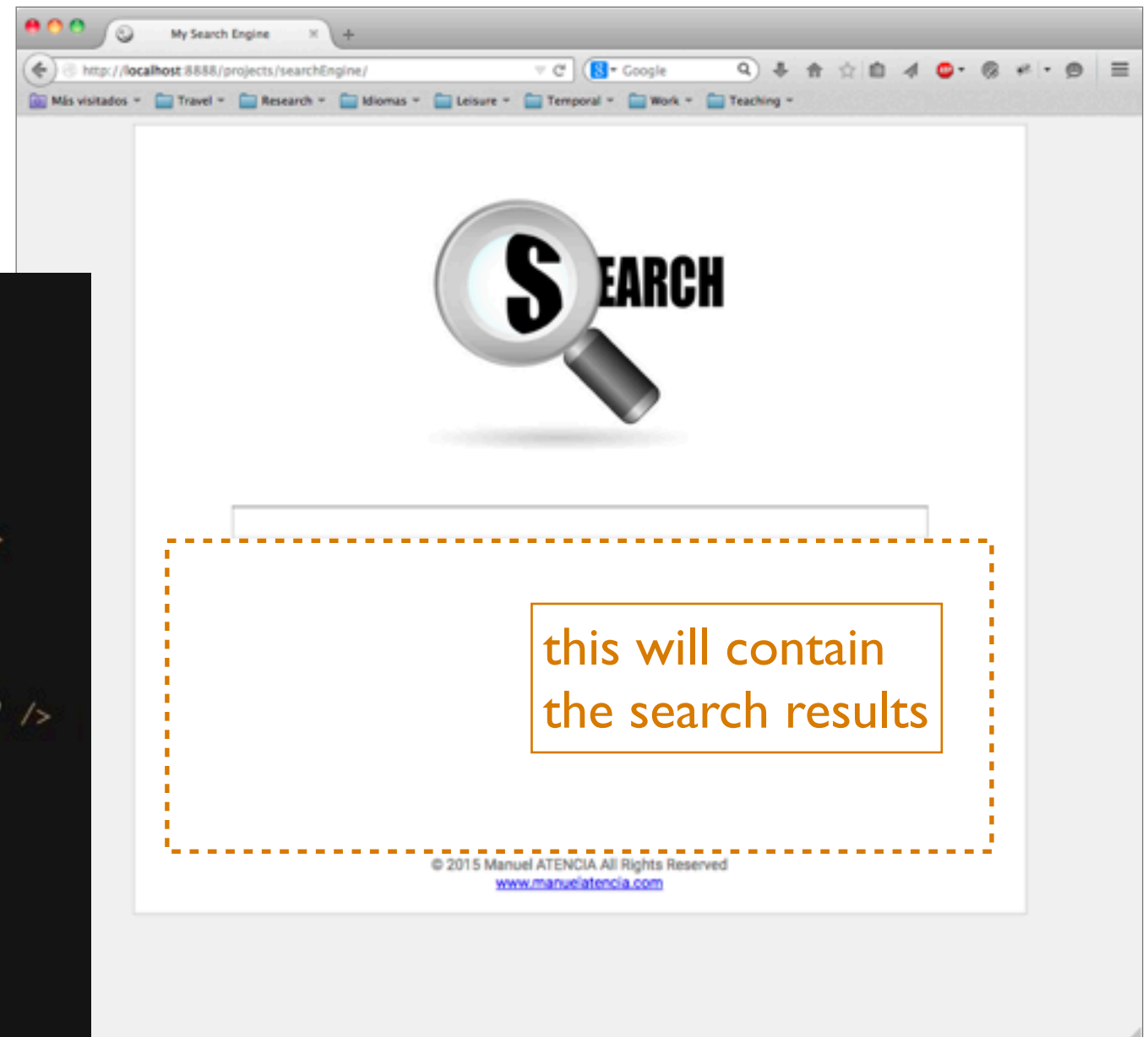
this will contain the search results

The HTML skeleton

`index.html`

```html
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
    <div id="logo">
      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
    <div class="form">
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        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel ATENCIA All Rights Reserved<br />
      <a href="http://www.manuelatencia.com">www.manuelatencia.com</a>
    </div>
  </div>
</body>
</html>
```
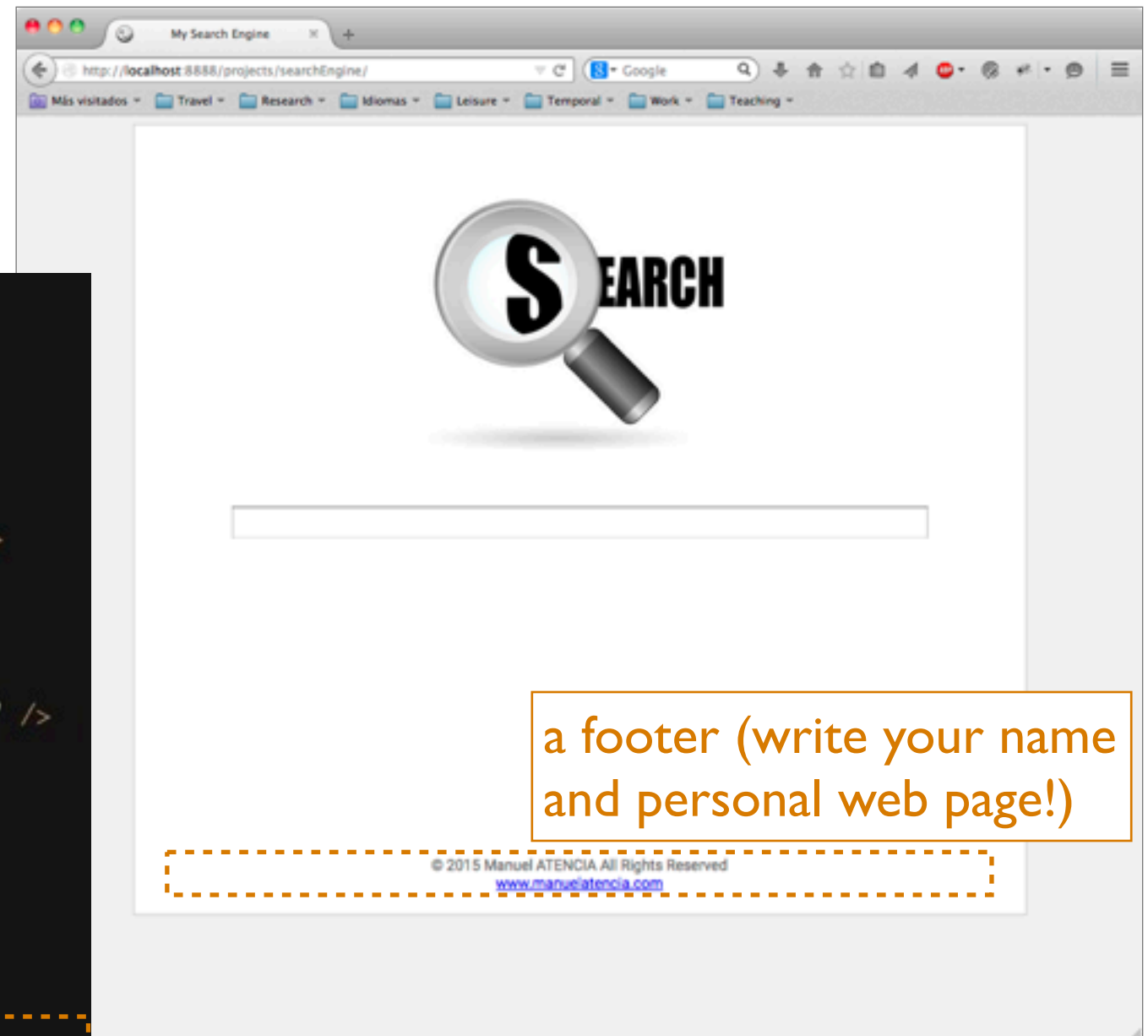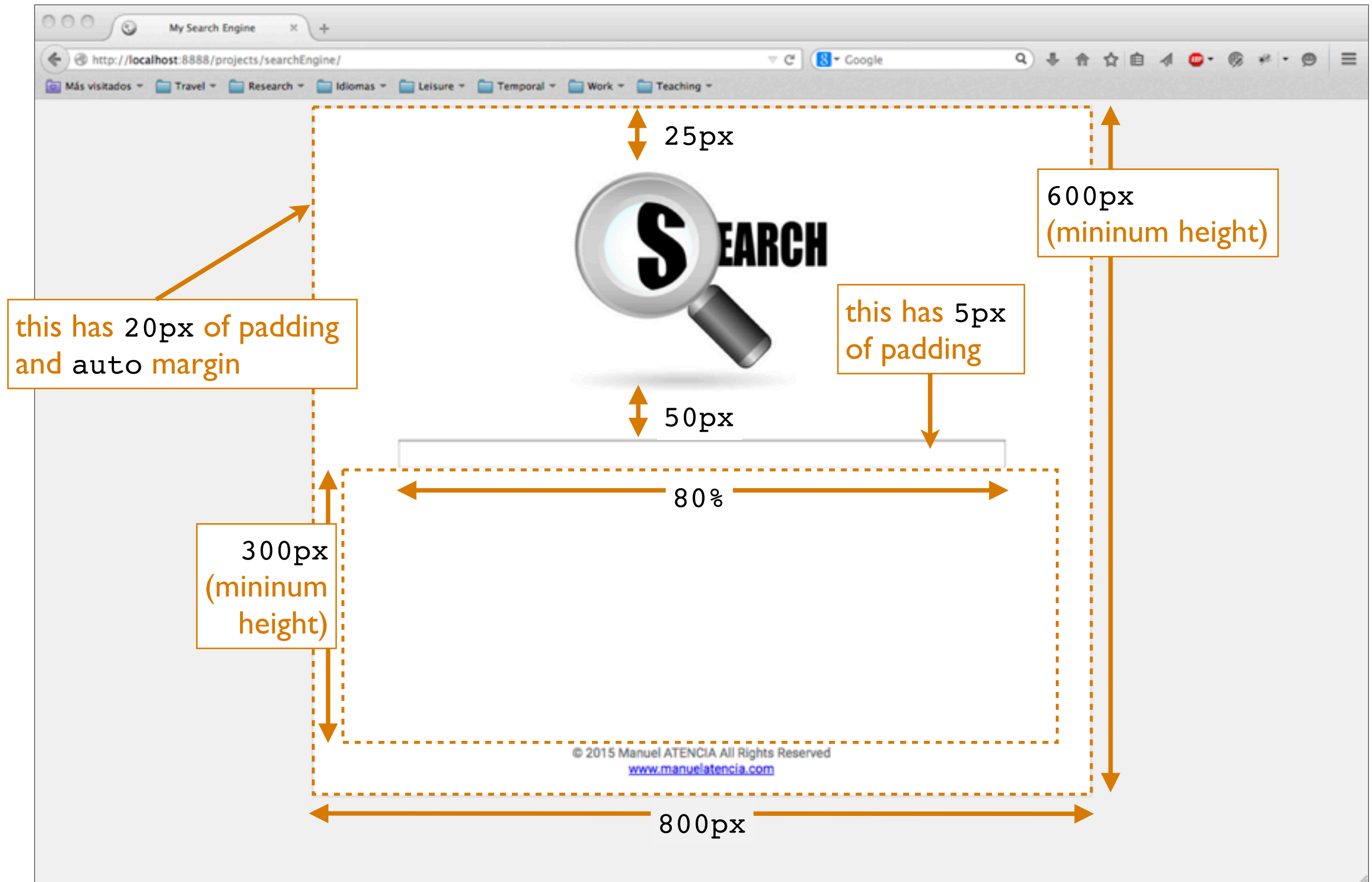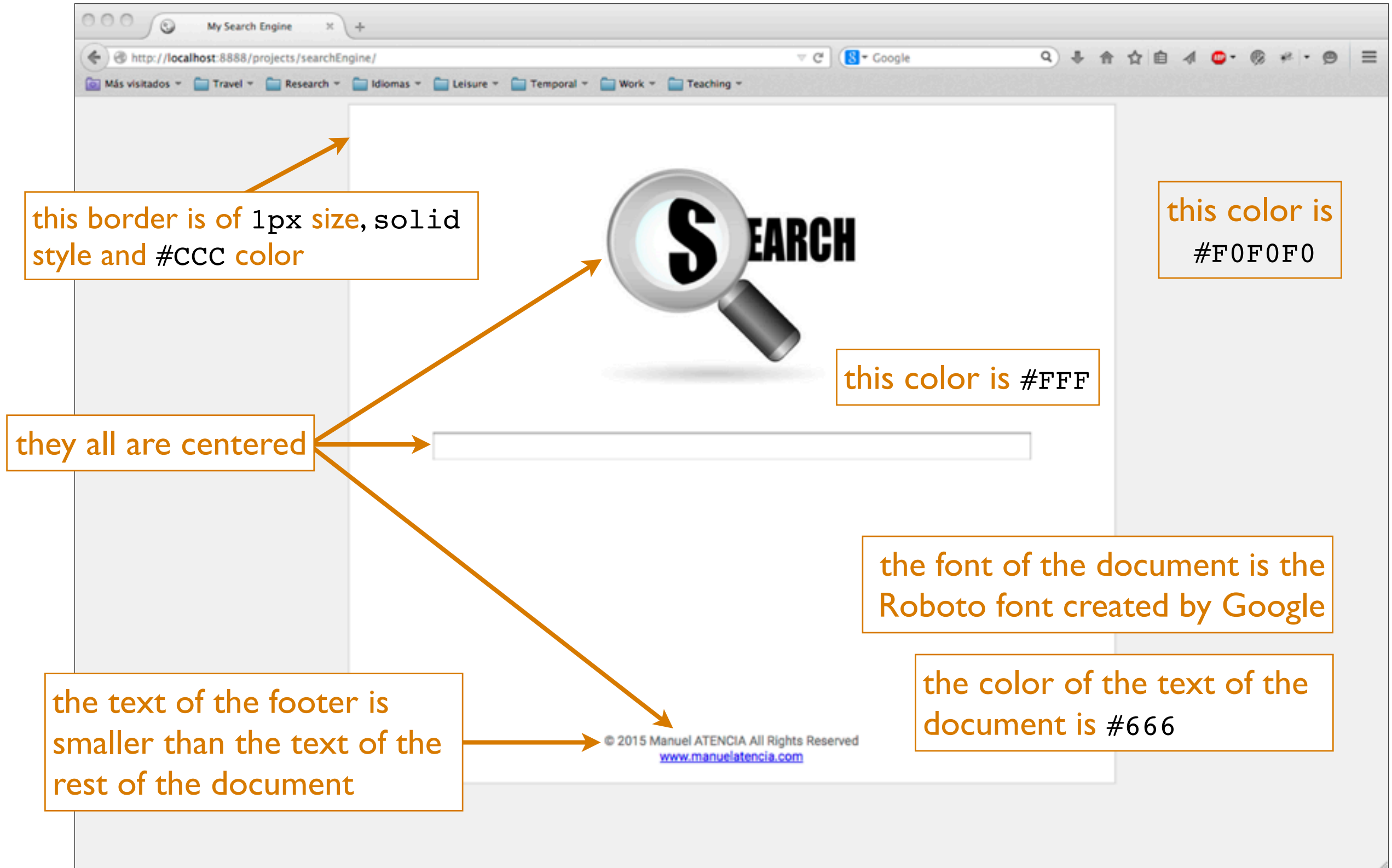

a footer (write your name and personal web page!)

The CSS styles

25px

600px
(mininum height)

this has 20px of padding
and auto margin

this has 5px
of padding

50px

80%

300px
(mininum
height)

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800px

The CSS styles

this border is of `1px` size, `solid` style and `#CCC` color

this color is `#F0F0F0`

this color is `#FFF`

they all are centered

the font of the document is the Roboto font created by Google

the text of the footer is smaller than the text of the rest of the document

the color of the text of the document is `#666`

Client-server communication. PHP, Ajax and jQuery

Client-server communication. PHP, Ajax and jQuery

1- the user types, e.g. "htm"

results are shown
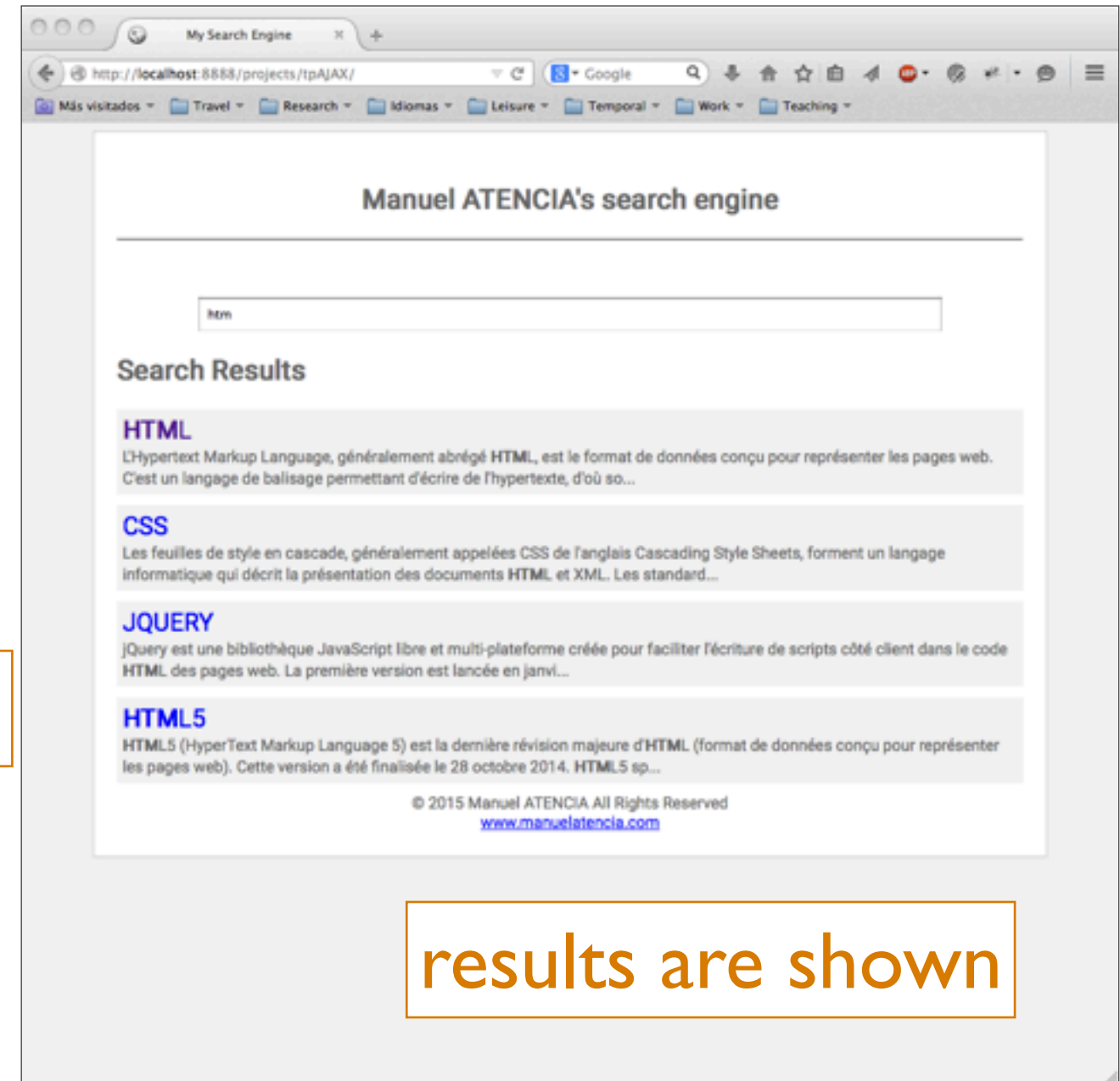
Client-server communication. PHP, Ajax and jQuery

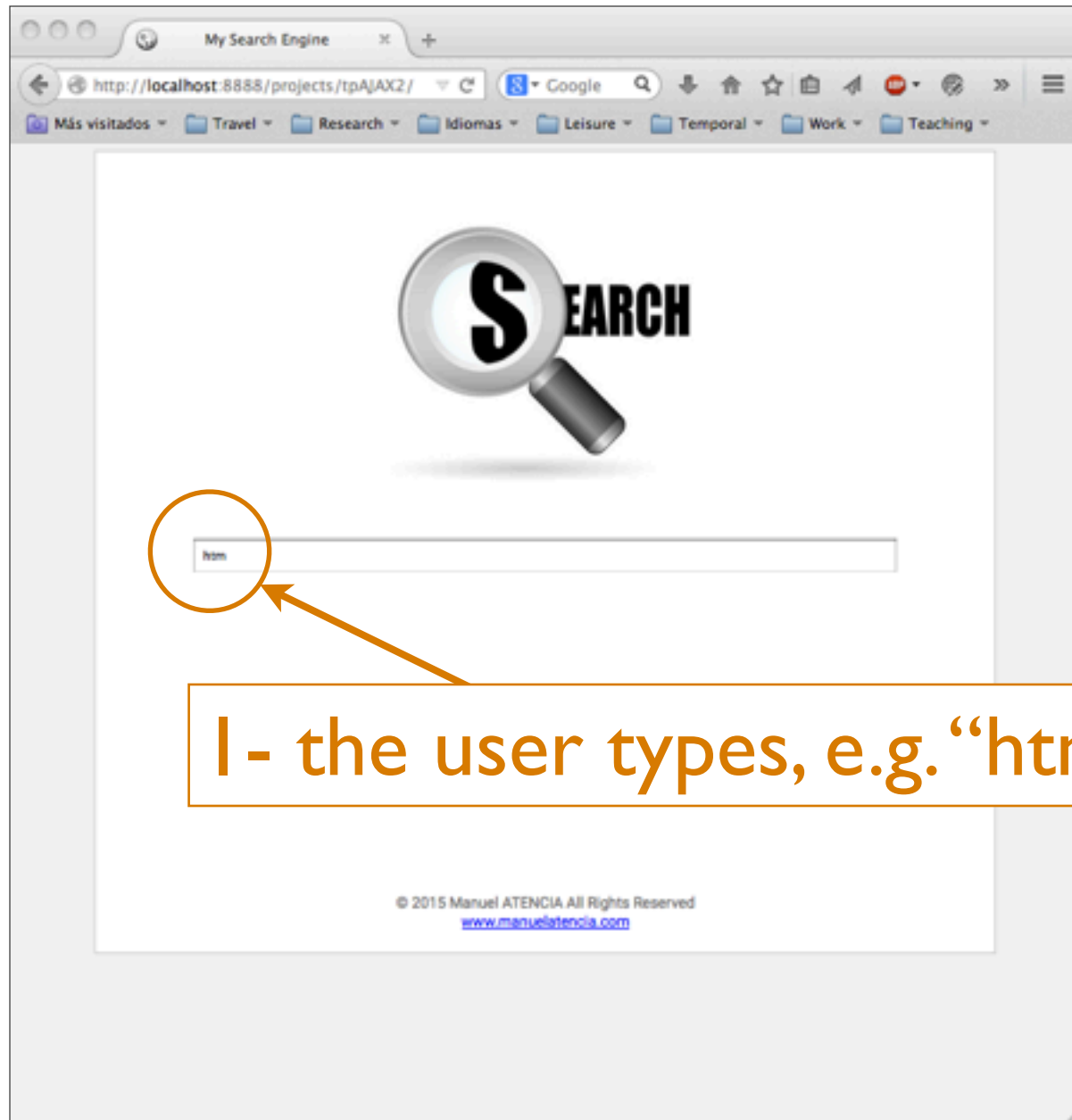2 - the user types, e.g. "sartre"

no result is found

Client-server communication. PHP, Ajax and jQuery

3 - the user types nothing

the user is requested to type a search parameter

Client-server communication. PHP, Ajax and jQuery

when the user releases a key on the keyword...

...the logo is replaced by this heading and this horizontal line, ...

...a query containing the search parameter is sent to the server, and the answer is displayed
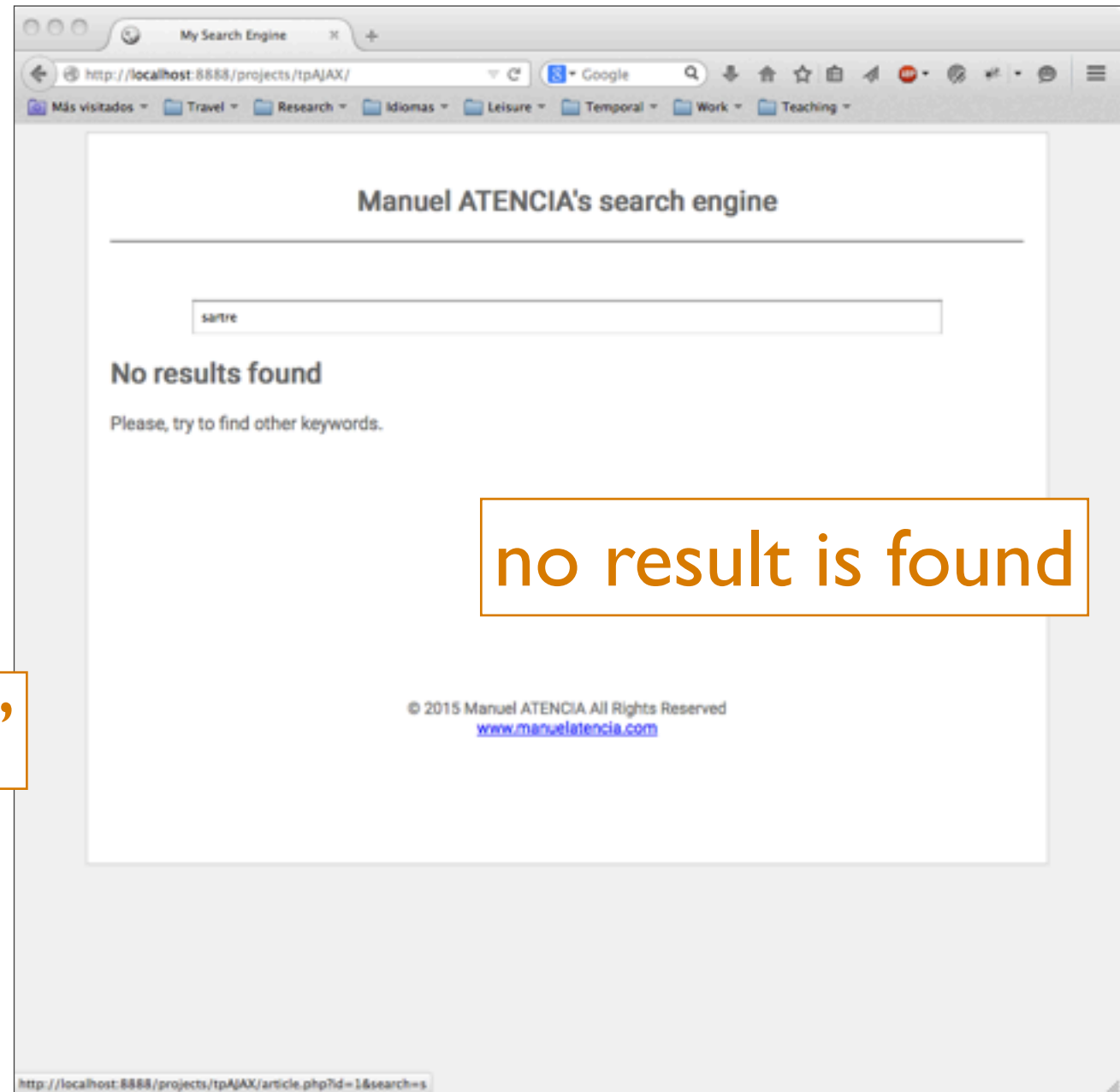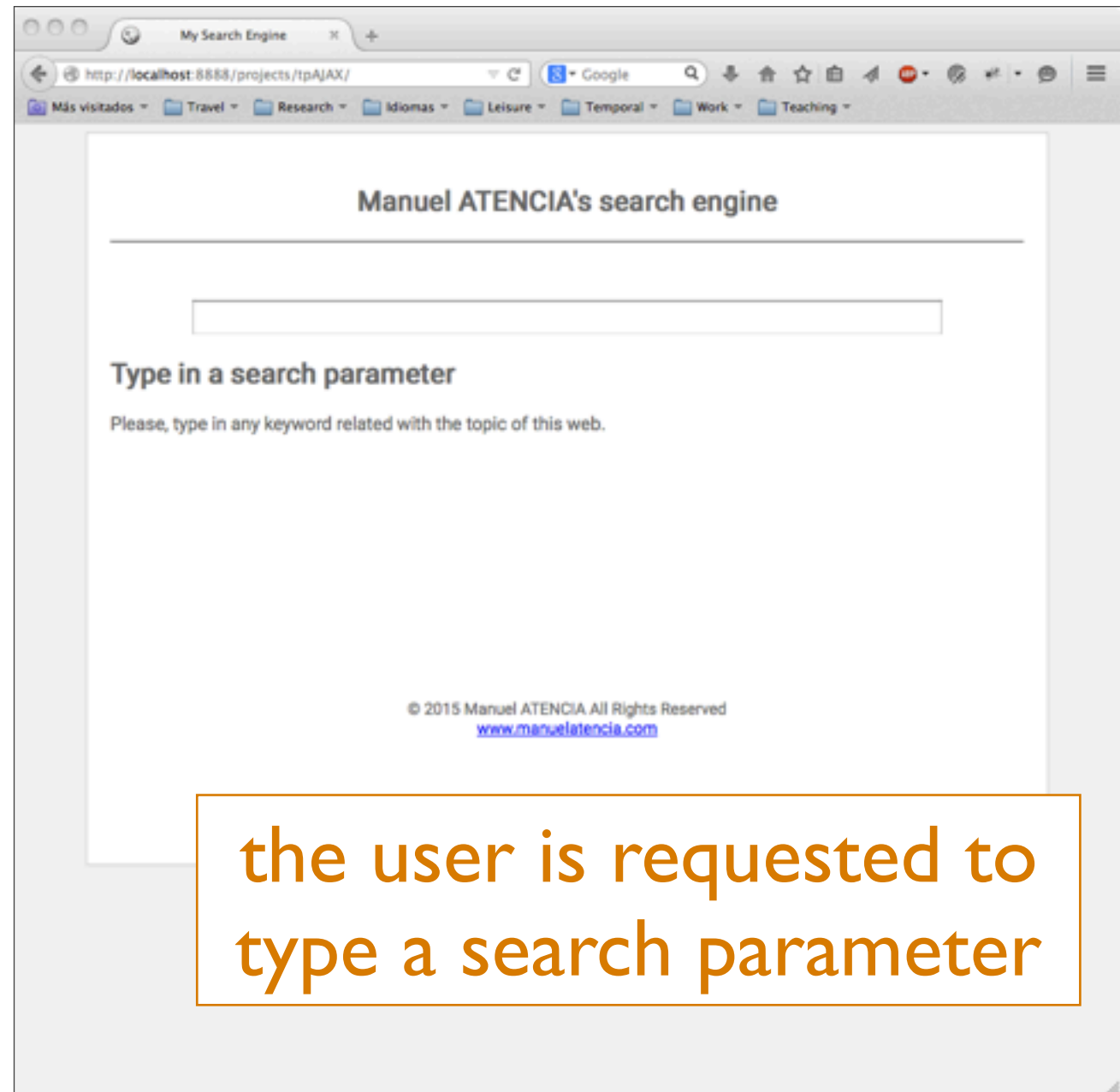
server's answer

Client-server communication. PHP, Ajax and jQuery

Client-server communication. PHP, Ajax and jQuery

`index.html`
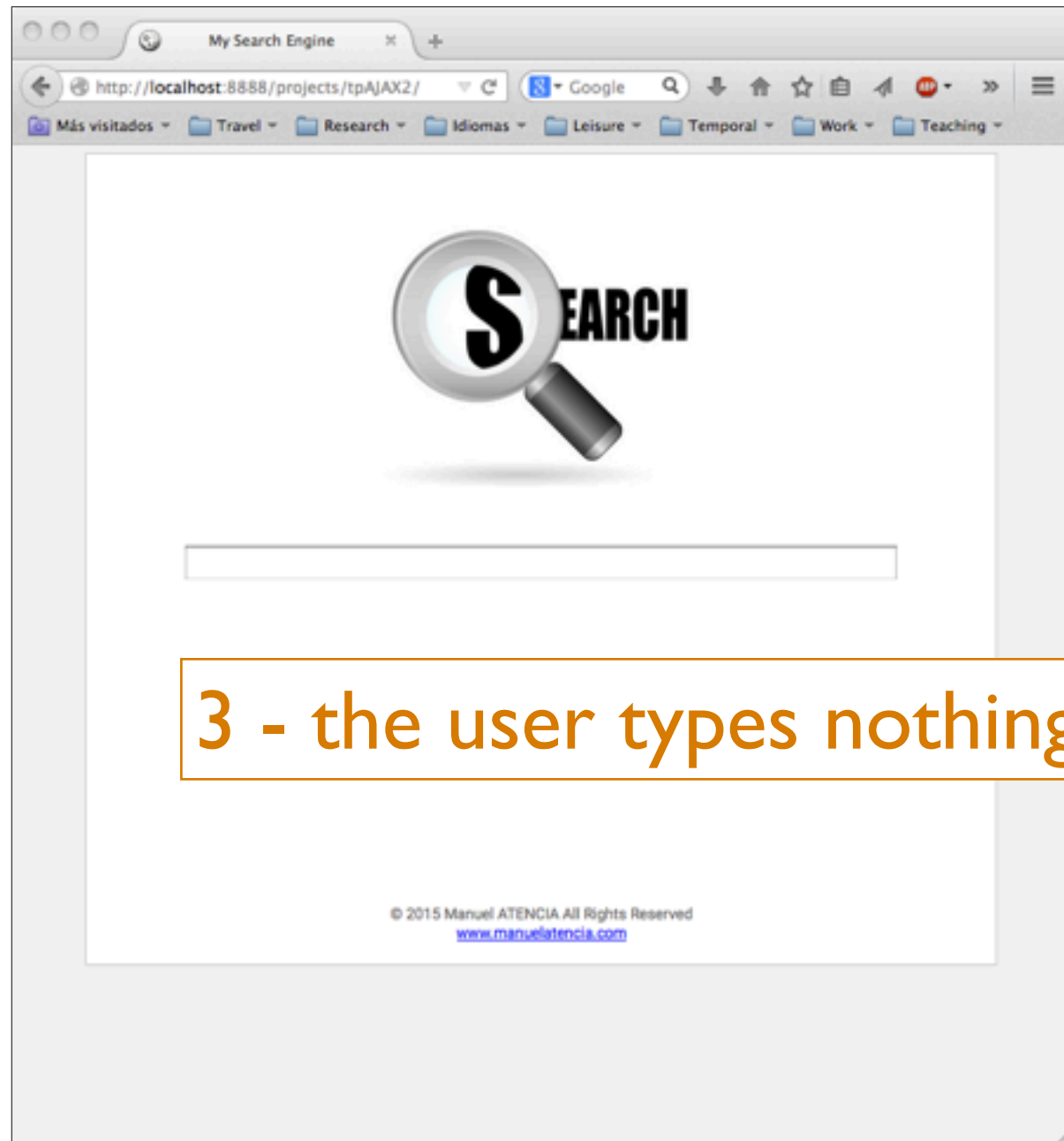
```html
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
    <div id="logo">
      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
    <div class="form">
      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel ATENCIA All Rights Reserved<br />
      <a href="http://www.manuelatencia.com">www.manuelatencia.com</a>
    </div>
  </div>
</body>
</html>
```
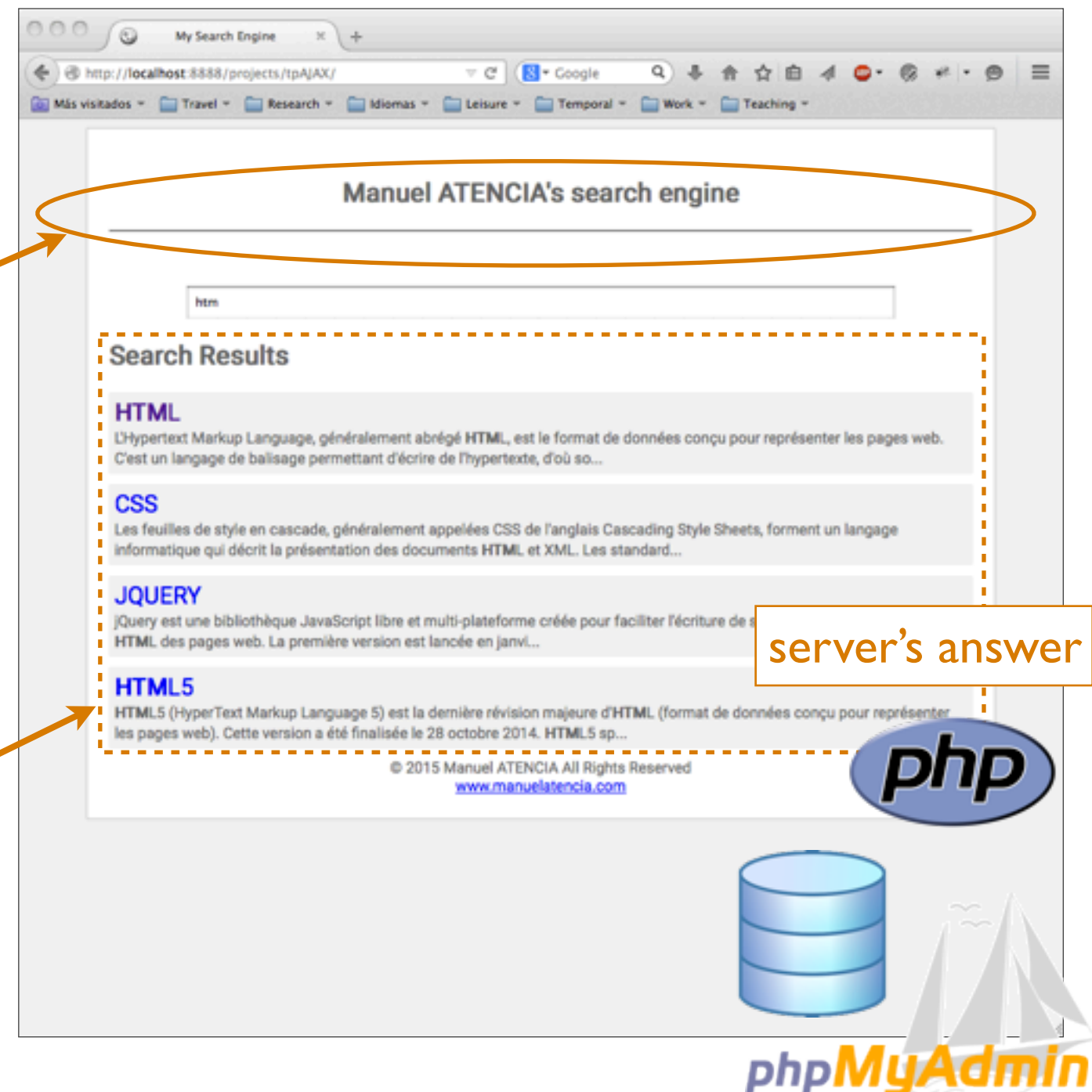
Client-server communication. PHP, Ajax and jQuery

index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
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<body>
  <div id="container">
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    </div>
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      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel
      <a href="http://ww
    </div>
  </div>
</body>
</html>
```

ajax.js

```
$(function(){ // when the dom is ready and loaded




});
```

Client-server communication. PHP, Ajax and jQuery

`index.html`

```html
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
    <div id="logo">
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    </div>
    <div class="form">
      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel
      <a href="http://www
    </div>
  </div>
</body>
</html>
```

`ajax.js`

```javascript
$(function(){ // when the dom is ready and loaded

    when the user releases a key on the keyword:


});
```

Client-server communication. PHP, Ajax and jQuery

index.html

```html
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
    <div id="logo">
      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
    <div class="form">
      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel
      <a href="http://ww
    </div>
  </div>
</body>
</html>
```

ajax.js

```javascript
$(function(){ // when the dom is ready and loaded

    when the user releases a key on the keyword:

    jQuery code to remove the logo and replace
       it by the heading and horizontal line

});
```

Client-server communication. PHP, Ajax and jQuery

index.html

```html
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
    <div id="logo">
      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
    <div class="form">
      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel
      <a href="http://www
    </div>
  </div>
</body>
</html>
```

ajax.js

```javascript
$(function(){ // when the dom is ready and loaded

    when the user releases a key on the keyword:

    jQuery code to remove the logo and replace
      it by the heading and horizontal line

    Ajax call with the user input (e.g. "htm")
      to be sent to the server to retrieve and
      show the results of the query

});
```

Client-server communication. PHP, Ajax and jQuery

client

server

`index.html`

```html
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
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  <div id="container">
    <div id="logo">
      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
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      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel
      <a href="http://www
    </div>
  </div>
</body>
</html>
```

`ajax.js`

```javascript
$(function(){ // when the dom is ready and loaded

    when the user releases a key on the keyword:

    jQuery code to remove the logo and replace
      it by the heading and horizontal line

    Ajax call with the user input (e.g. "htm")
      to be sent to the server to retrieve and
      show the results of the query

});
```

Client-server communication. PHP, Ajax and jQuery

client

server

POST http://.../searchEngine.php

index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
    <div id="logo">
      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
    <div class="form">
      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel
      <a href="http://www
    </div>
  </div>
</body>
</html>
```

ajax.js

```
$(function(){ // when the dom is ready and loaded

    when the user releases a key on the keyword:

    jQuery code to remove the logo and replace
      it by the heading and horizontal line

    Ajax call with the user input (e.g. "htm")
      to be sent to the server to retrieve and
      show the results of the query

});
```

Client-server communication. PHP, Ajax and jQuery

client

POST http://.../searchEngine.php

server

index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
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        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel
      <a href="http://ww
    </div>
  </div>
</body>
</html>
```

searchEngine.php

```php
<?php

    php code generating articles whose
    titles match with the user input

    if no result is found, an
    explanatory message is created

?>
```

ajax.js

```
$(function(){ // when the dom is ready and loaded

    when the user releases a key on the keyword:

      jQuery code to remove the logo and replace
        it by the heading and horizontal line

      Ajax call with the user input (e.g. "htm")
        to be sent to the server to retrieve and
        show the results of the query

});
```

Client-server communication. PHP, Ajax and jQuery

client

server

index.html

```
<!DOCTYPE html>
<html>
<head>
  <title>My Search Engine</title>
  <meta charset="UTF-8" />
  <script type="text/javascript" src="js/jquery.js"></script>
  <script type="text/javascript" src="js/ajax.js"></script>
  <link rel="stylesheet" type="text/css" href="css/styles.css" />
</head>
<body>
  <div id="container">
    <div id="logo">
      <img src="images/logo.png" width="300" alt="no image found" />
    </div>
    <div class="form">
      <form action="" method="post" id="search_form">
        <input type="text" name="search" id="search_input" />
      </form>
    </div>
    <div id="results">
    </div>
    <div id="footer">
      &copy; 2015 Manuel
      <a href="http://ww
    </div>
  </div>
</body>
</html>
```

searchEngine.php

```
<?php

    php code generating articles whose
    titles match with the user input

    if no result is found, an
    explanatory message is created

?>
```

ajax.js

```
$(function(){ // when the dom is ready and loaded

    when the user releases a key on the keyword:

       jQuery code to remove the logo and replace
         it by the heading and horizontal line

       Ajax call with the user input (e.g. "htm")
         to be sent to the server to retrieve and
         show the results of the query

});
```

Client-server communication. PHP, Ajax and jQuery

number of visits
(initially 1)

identifier of an article   title of an article   text of an article

table "articles" from the
database "searchEngine"

| id	name	article	visits
1	php	PHP: Hypertext Preprocessor, plus connu sous son s...	1
2	ajax	L'architecture informatique Ajax (acronyme d'Async...	1
3	html	L'Hypertext Markup Language, généralement abrégé H...	1
4	html5	HTML5 (HyperText Markup Language 5) est la dernièr...	1
5	css	Les feuilles de style en cascade, généralement app...	1
6	javascript	JavaScript est un langage de programmation de scri...	1
7	jquery	jQuery est une bibliothèque JavaScript libre et mu...	1

phpMyAdmin

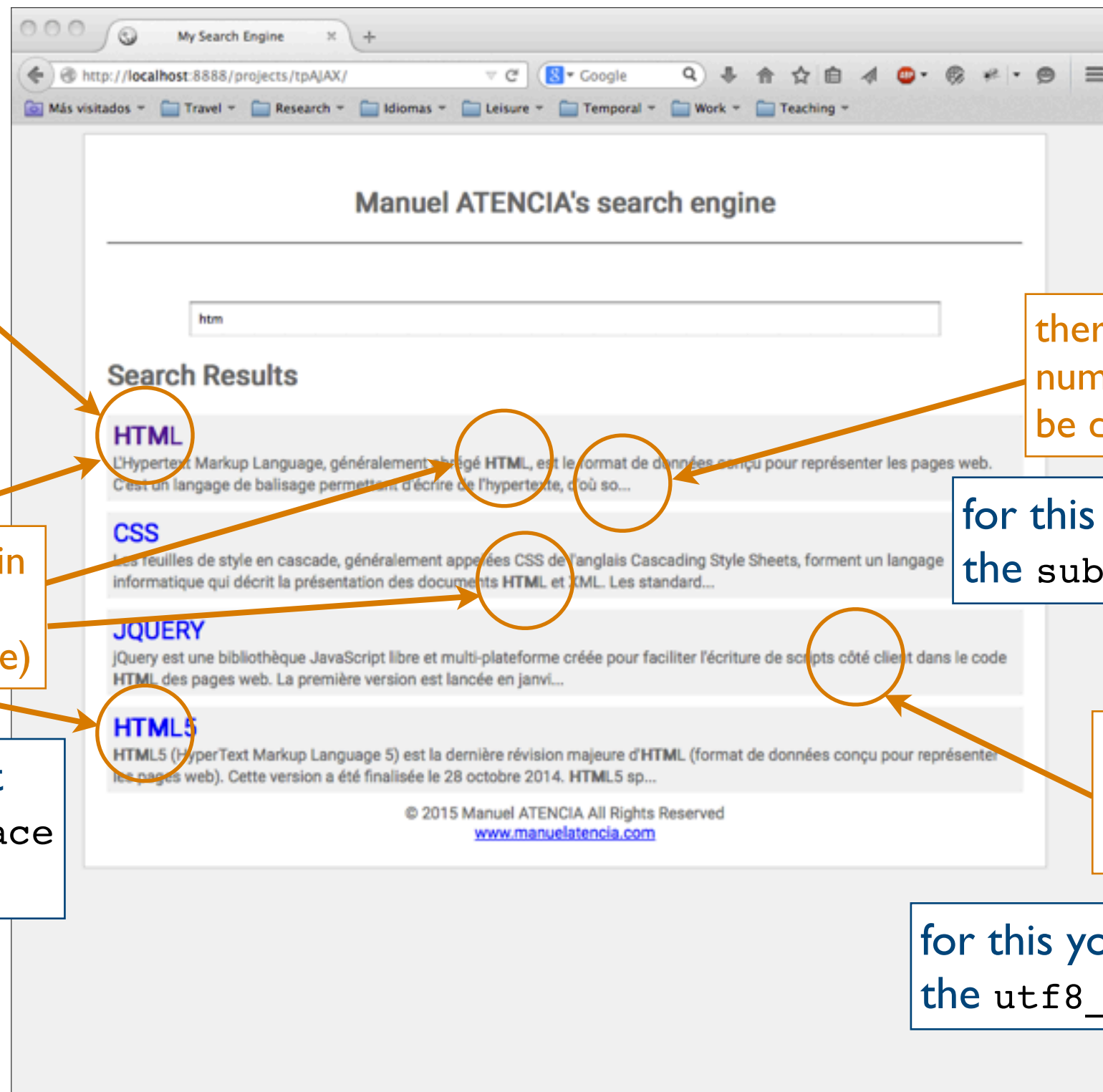# Client-server communication. PHP, Ajax and jQuery

articles

think of setting the style of articles: background color, margin, padding...
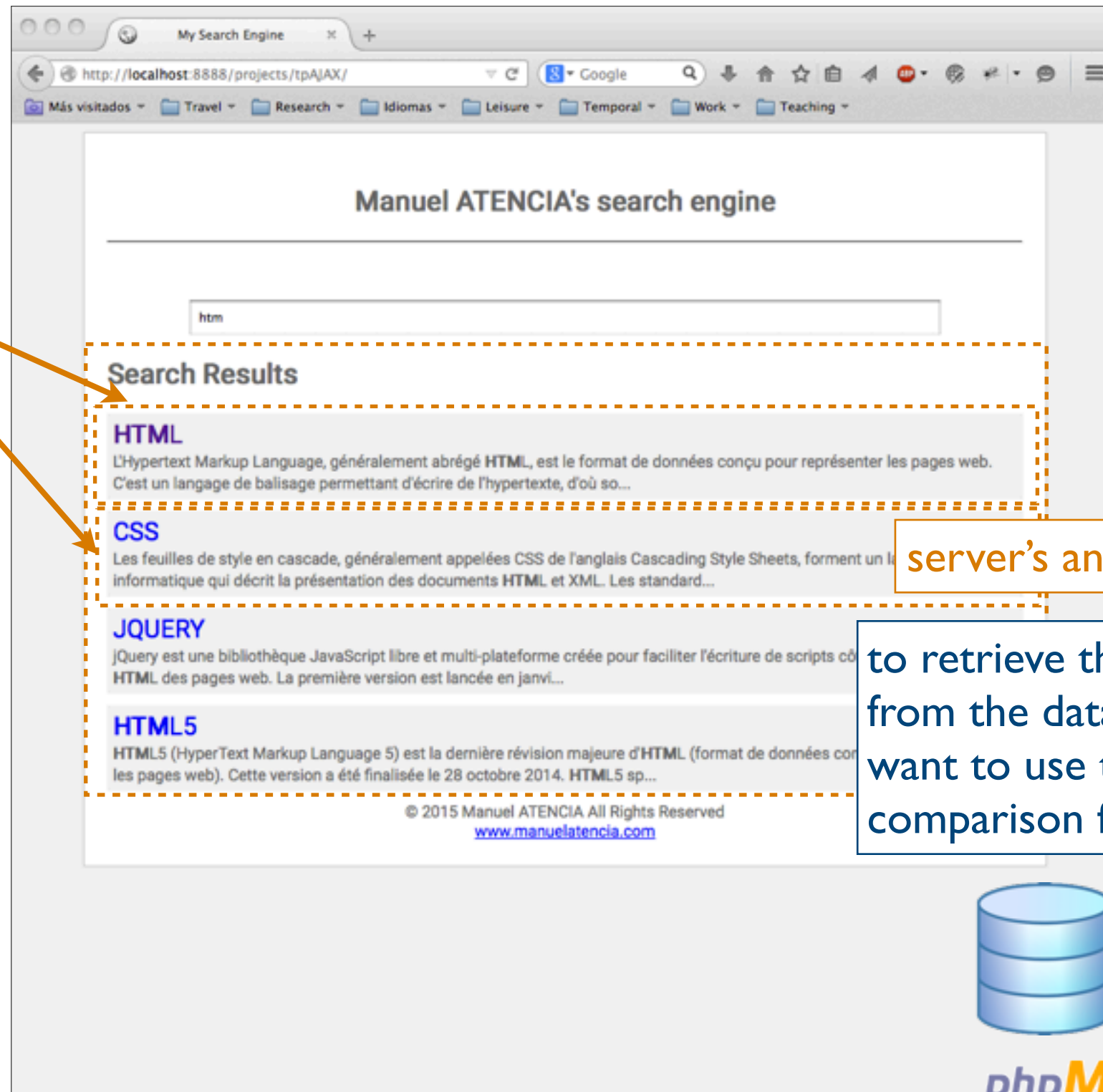
server's answer

to retrieve these results from the database you may want to use the mysql string comparison function `LIKE`

Client-server communication. PHP, Ajax and jQuery

titles of articles appear in uppercase

mathing results appear in bold (both in the title and content of an article)

for this you may want to use the `str_replace` php function

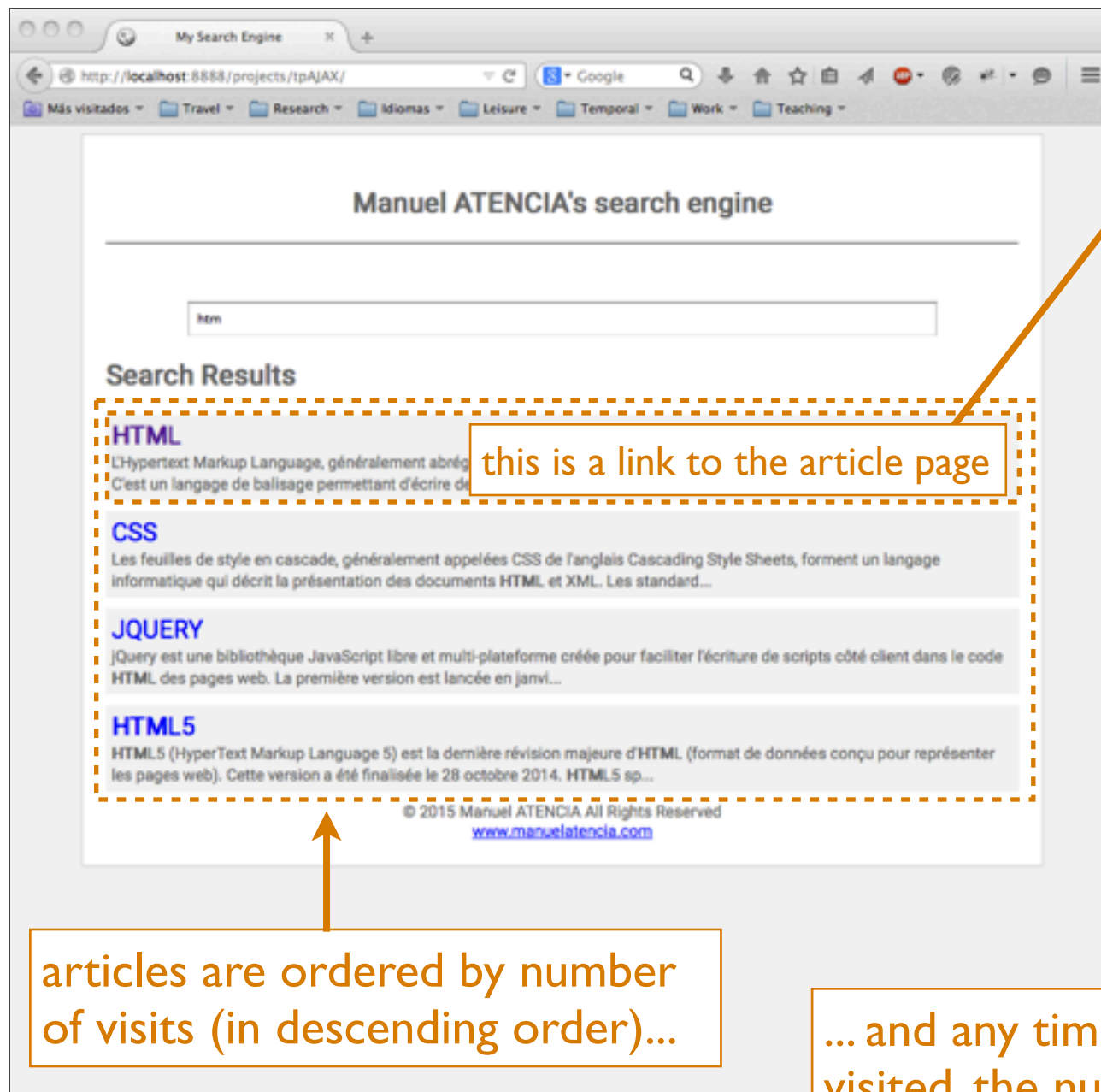there is a maximum number of characters to be displayed (e.g. 200)

for this you may want to use the `substr` php function

French characters (e.g. côté) should be displayed properly

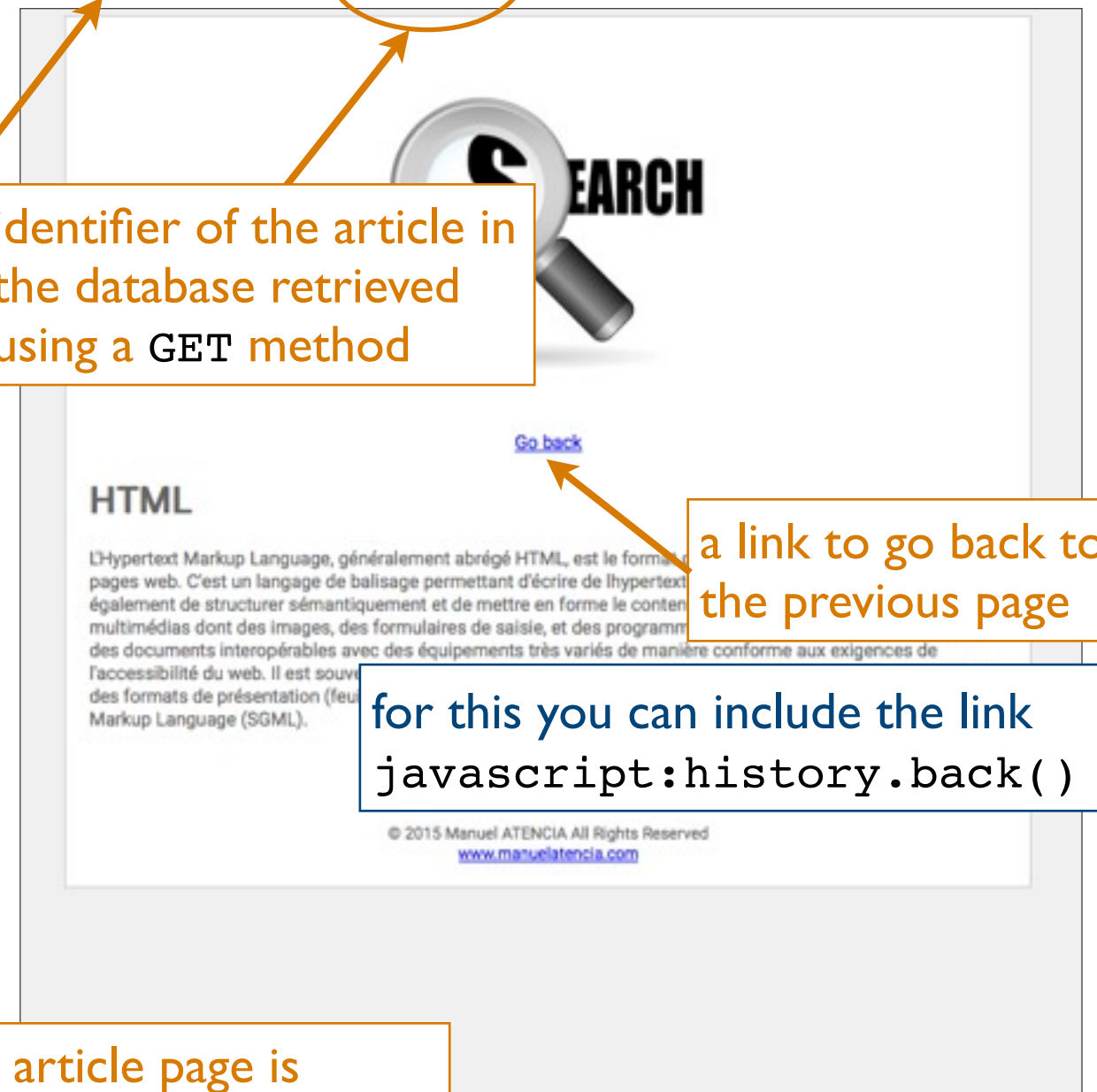for this you may want to use the `utf8_encode` php function

# Client-server communication. PHP, Ajax and jQuery

`index.html`

`article.php?id=3`

identifier of the article in the database retrieved using a `GET` method

this is a link to the article page

a link to go back to the previous page

for this you can include the link `javascript:history.back()`

articles are ordered by number of visits (in descending order)...

... and any time an article page is visited, the number of visits is updated

for this you may want to use the mysql `UPDATE` statement and `SET` clause

Client-server communication. PHP, Ajax and jQuery

Manuel ATENCIA's search engine

html|
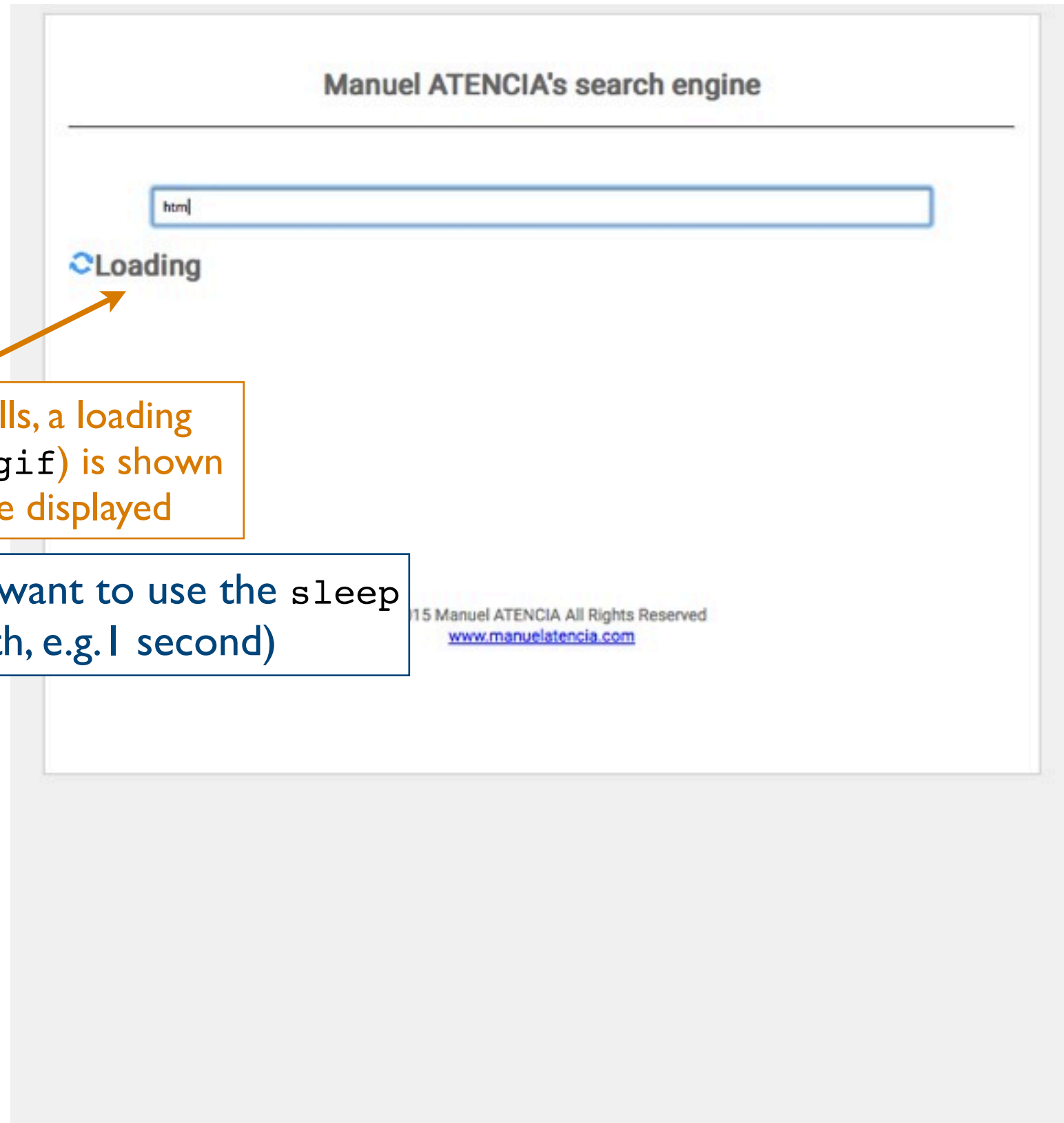
↻Loading

to simulate ajax calls, a loading
image (`loading.gif`) is shown
until the results are displayed

for this you may want to use the `sleep`
php function (with, e.g. 1 second)