

Front-end

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2015

Front-end



<https://www.youtube.com/watch?v=9Nr82jC6WoU>

Three layers of web design:

Structure

HTML markup



Style

CSS



Behavior

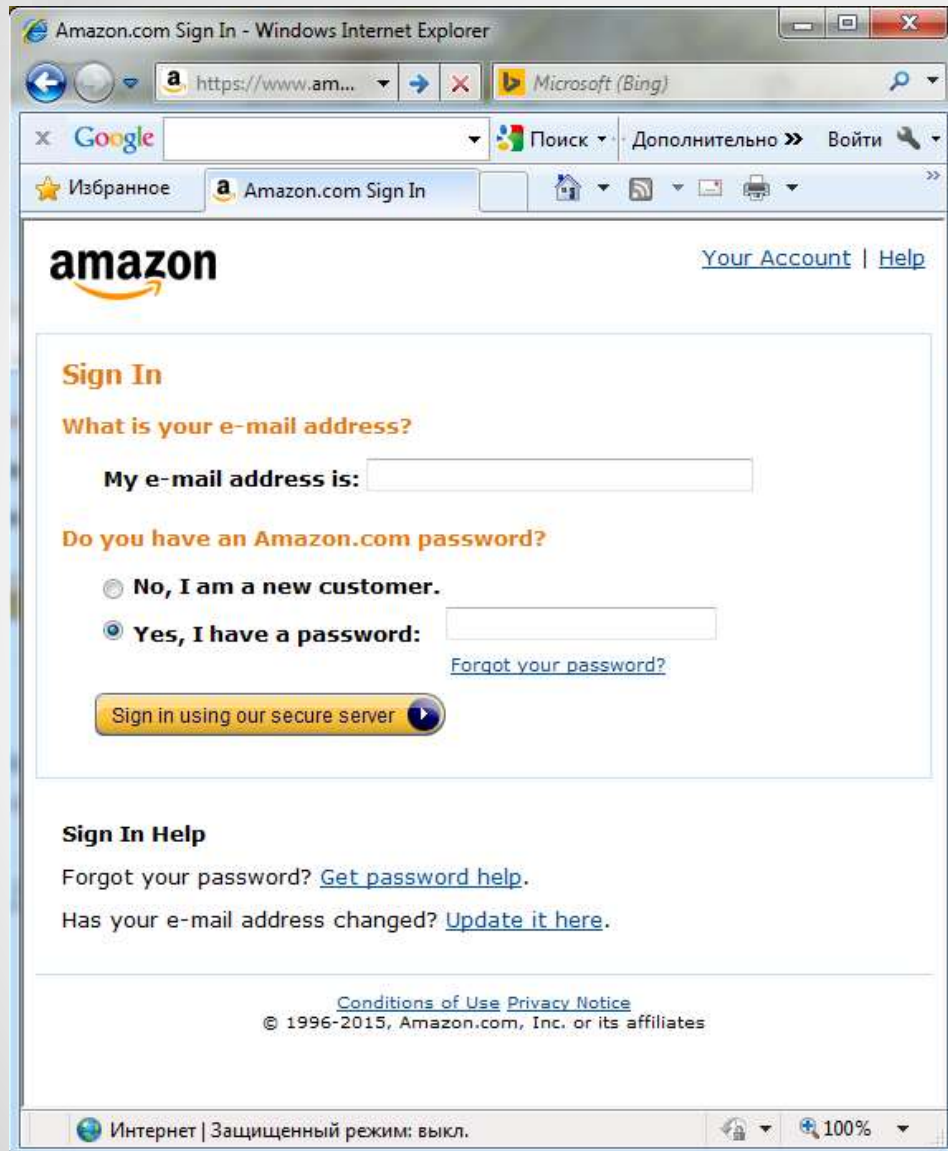
JavaScript



HTML =

Hyper **T**ext

Markup **L**anguage



Do you imagine
how this page
would look like
without HTML?





Looks ugly...
Doesn't it?

No HTML?

Without any markup to give your page content structure, the browser renders **unformatted** and **unstyled** text



HTML tags give
structure
and
meaning
to your content.

HTML Tags

<p></p> - to organize text into paragraphs

This is a paragraph.

This is a paragraph.

This is a paragraph.

<table></table> - to display table

Month	Savings
January	\$100
February	\$80

<form></form> - to define form for user input

First name:

Last name:

**** - to add image



Lets add HTML tags to our page...

```
<form name="signIn" method="POST" id="ap_signin_form">
  <div id="ap_signinla_pagelet">
    <div id="ap_signinla_pagelet_title">
      <h1>Sign In </h1>
    </div>
    <div id="ap_signinla_email_section_title">
      <h2>What is your e-mail address?</h2>
    </div>
    <div id="ap_signinla_email_row">
      <span>
        <label for="ap_email">My e-mail address is:</label>
      </span>
      <span>
        <input id="ap_email" name="email" size="30" maxlength="128" tabindex="1" type="email">
      </span>
    </div>
    <div id="ap_signinla_password_section_title">
      <h2> Do you have an Amazon.com password? </h2>
    </div>
    <div id="ap_signinla_new_cust_radio_row">
      <span id="">
        <input name="create" id="ap_signin_create_radio" value="1" tabindex="6" type="radio">
      </span>
      <span id="">
        <label for="ap_signin_create_radio">No, I am a new customer.</label>
      </span>
    </div>
  </div>
</form>
```

How will it look now?

Amazon.com Sign In - Windows Internet Explorer

D:\Amazon_no_css Microsoft (Bing)

Google Поиск Дополнительно >> Войти

Избранное Amazon.com Sign In

Amazon Your Account Help

Sign In

What is your e-mail address?

My e-mail address is:

Do you have an Amazon.com password?

☐ No, I am a new customer.

☒ Yes, I have a password:

[Forgot your password?](#)

[Forgot your password?](#)

[Has your e-mail address changed since your last order?](#)

Sign In Help

Forgot your password? [Get password help.](#)

Has your e-mail address changed? [Update it here.](#)

[Conditions of Use](#) [Privacy Notice](#)

© 1996-2015, Amazon.com, Inc. or its affiliates

Компьютер | Защищенный режим: выкл. 100%



Looks better...

But still not
good...

HTML

Once page content is marked up with HTML tags, the browser applies default styles to the tags.

So now page is **readable** and have a **clear hierarchy**.

But what should we do to
make the page look nice?



The answer is
use **CSS!**

CSS =

Cascading
Style Sheet

CSS

Set of rules defining how an html element will be “**presented**” in the browser.

CSS Rules

```
p {  
  color: red;  
}
```

This is a paragraph.

This is a paragraph.

This is a paragraph.

```
#title {  
  font-style: italic;  
  border: 1px dotted blue;  
}
```

This is title

This is title with applied style

This is title

```
.title {  
  font-weight: bold;  
  background: yellow;  
}
```

This is title with applied style

This is title

This is title with applied style

Some things you can change with CSS

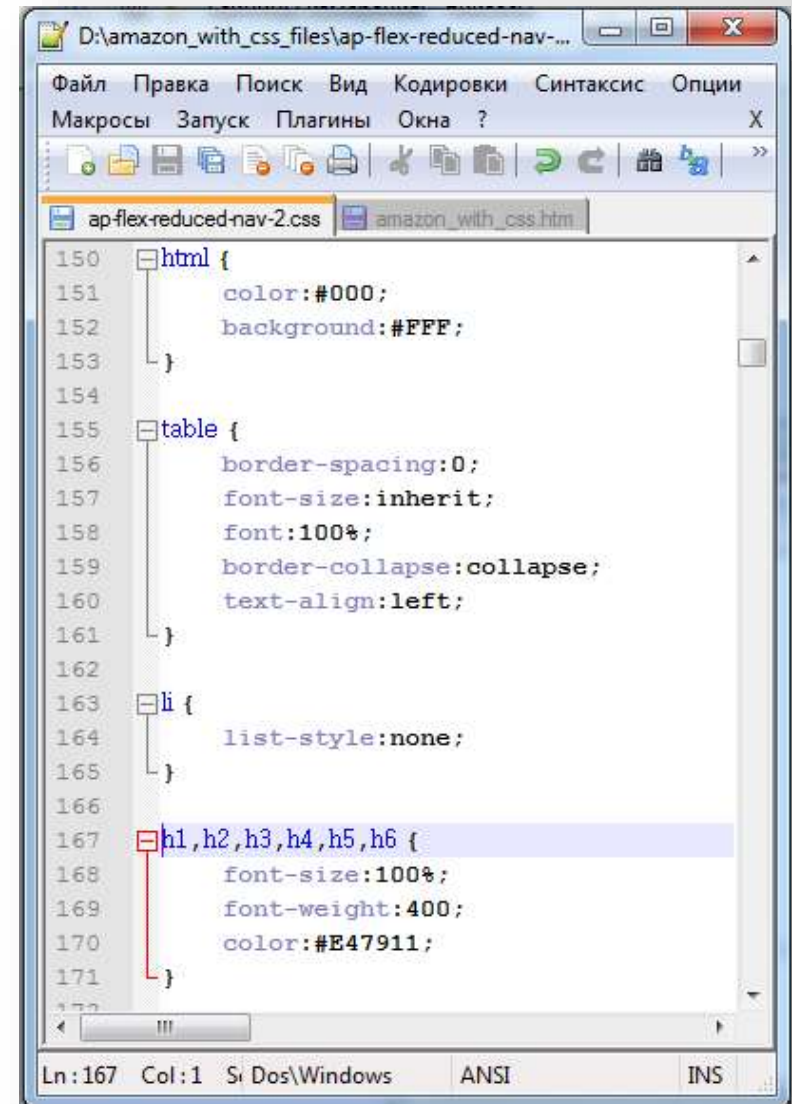
- colors
- font
- font size
- backgrounds
- spacing
- sizes
- borders
- positions (layout)

Some things you can't change with CSS

- content
- markup

So now it's time for styling!!!

Lets add some
css rules to our
example page.



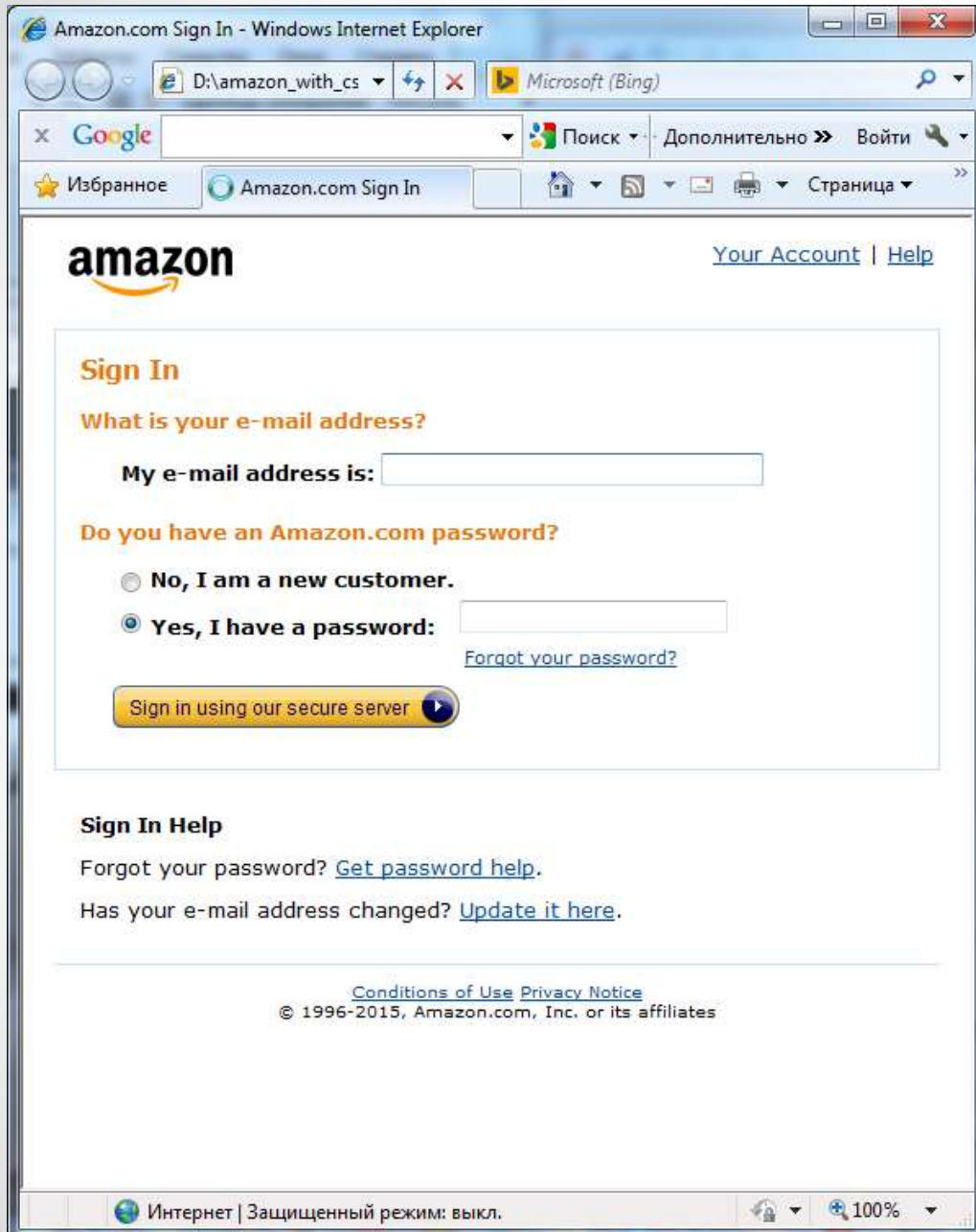
The screenshot shows a text editor window with the following CSS rules:

```
150  html {
151      color:#000;
152      background:#FFF;
153  }
154
155  table {
156      border-spacing:0;
157      font-size:inherit;
158      font:100%;
159      border-collapse:collapse;
160      text-align:left;
161  }
162
163  li {
164      list-style:none;
165  }
166
167  h1,h2,h3,h4,h5,h6 {
168      font-size:100%;
169      font-weight:400;
170      color:#E47911;
171  }
```

The status bar at the bottom indicates: Ln:167 Col:1 Si Dos\Windows ANSI INS

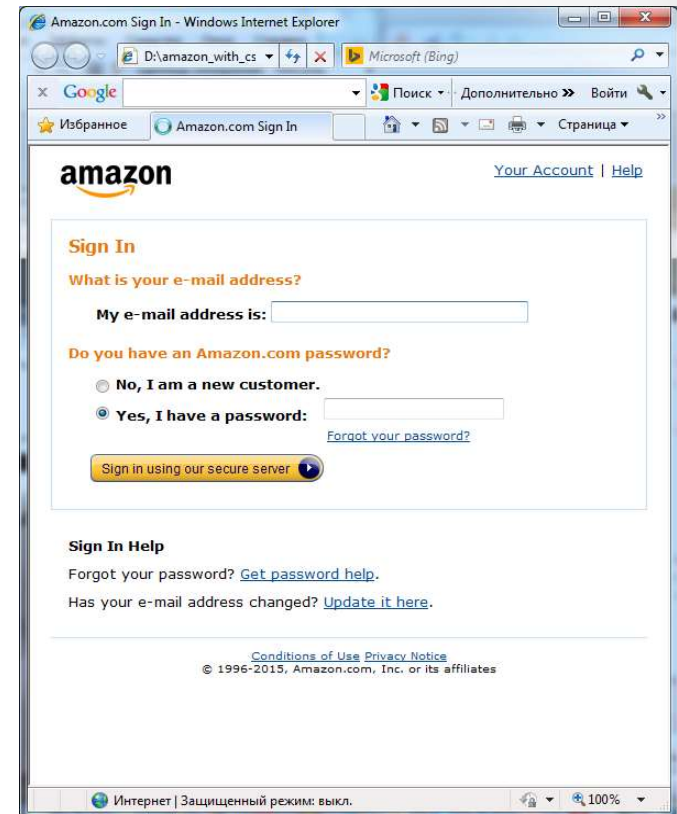
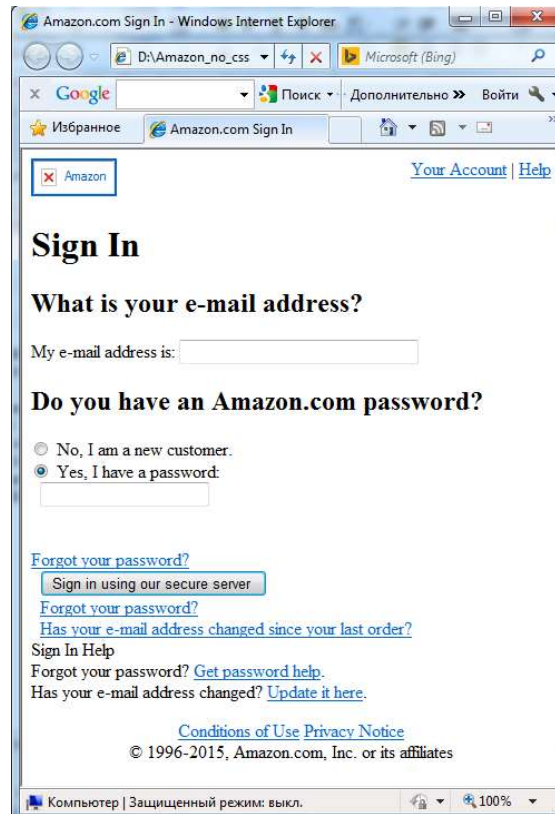
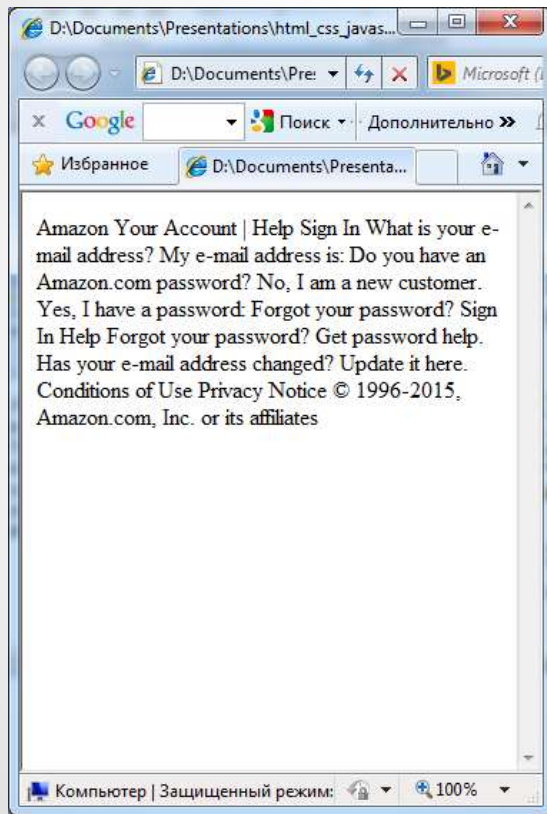
How will it look now???





Looks
perfect!

Text + HTML + CSS = Web Page



Now time for actions!

JavaScript

JavaScript \neq Java

Java is to
JavaScript ...



... as ham is
to hamster

(c) Jeremy Keith, web developer, 2009

JavaScript ≠ Java

- JavaScript was not developed at **Sun Microsystems**, the home of **Java**.
- **JavaScript** was developed at **Netscape** in 1995.
- It was originally called **LiveScript**, but that name wasn't confusing enough. ☹️
- Java was the buzzword in the days when LiveScript was created, so **LiveScript** was renamed into **JavaScript** in the hope of catching the media's interest.

But from confusion came misunderstanding...



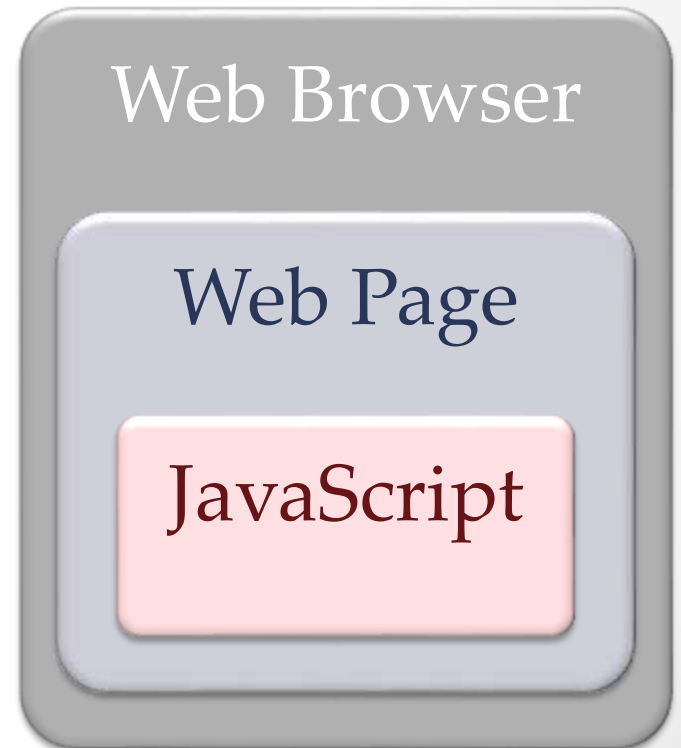
JavaScript ≠ Java



- **JavaScript** is **NOT** a Java
- It is **NOT** a light version of Java
- It was **NOT** based on Java
- It does **NOT** matter if you know Java

JavaScript

Classic **JavaScript**
is a client-side
language used to
add interactivity to
your web-pages



What we can do with JavaScript?

Oops!



We couldn't save your profile as entered. Please take a look at the following:

- Login has already been taken
- Email address doesn't match confirmation

Desired Username

Must be at least 4 characters

Email

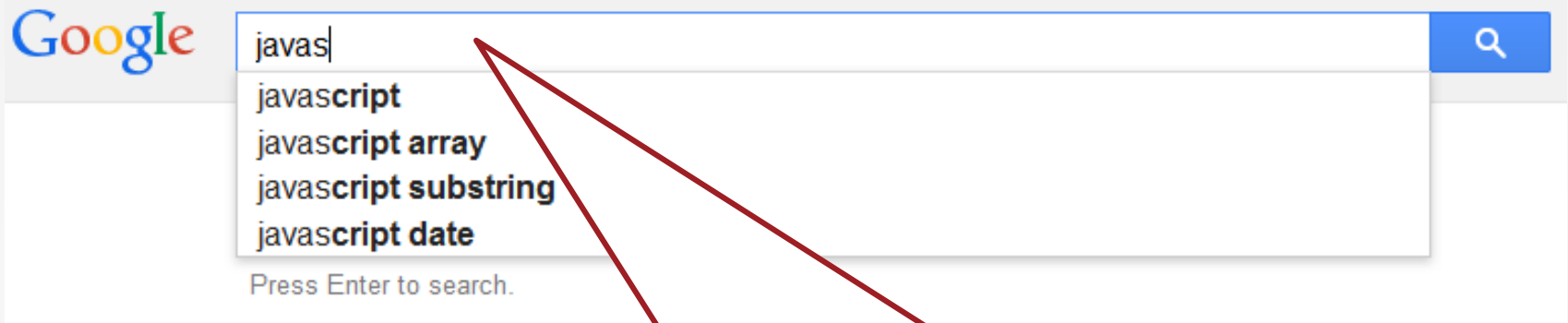
Retype Email

Password

Retype Password


Validate values
entered in the
form fields

What we can do with JavaScript?




A search box can give you suggested results while you type, based on what you've entered

What we can do with JavaScript?

 **Luxoft Poland** via **Luxoft**
May 5 at 4:19pm · 🌐

Luxoft rocks @ Agile Days 2015



Luxoft Rocks @ Agile Days 2015
Luxoft Team shined at Agile Days 2015 conference in Moscow, Russia. With its sleek booth, cool offerings and engaging speakers, Luxoft proved its expertise o...

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Load information automatically when it's needed

What we can do with JavaScript?



Create photo
slideshow and
control how long
it takes to move
from one image
to the next and
with what
animation effect

What we can do with JavaScript?

And much much more...

JavaScript

At the beginning JavaScript was designed to manipulate web pages.

And it does that very well!

But nowadays its usage is much much wider: you can use it outside of web pages and the browser

