

A NEW WAY TO STRUCTURE WEB PAGES WITH HTML5

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Abstract

The paper describes a new way to structure web pages with the semantic elements in HTML5. Many of the new HTML5 tags are intended to expand upon the generic <div> tag and to give extra meaning to the content they enclose. The article also demonstrates and compares with an example the use of both the <div> tag and the new HTML5 tags to organize web-page content.

Аннотация

В статье представлен новый способ структурирования веб-страницы с помощью семантических элементов HTML5. Многие теги HTML призваны заменить тег <div> и предоставить дополнительную соответствующего содержания. В статье также демонстрирует и сравнивает использование <div> тега и новых семантических элементов организовать содержимое страницы.

Introduction

HTML5 is cooperation between the World Wide Web Consortium (W3C) and the Web Hypertext Application Technology Working Group (WHATWG). HTML5 was designed to replace HTML 4, XHTML and the HTML DOM Level 2. One of the goals of HTML5 is to provide more semantic tags for web designers to choose from. A semantic element clearly describes its meaning to both the browser and the developer. Many of the new HTML5 tags are intended to expand upon the generic <div> tag [1]:

- The <section> element defines a section in a document;
- The <article> element specifies independent, self-contained content;
- The <nav> element defines a set of navigation links;
- The <aside> element defines some content aside from the content it is placed in (like a sidebar);
- The <header> element specifies a header for a document or section;
- The <footer> element specifies a footer for a document or section;
- The <figure> tag specifies self-contained content, like illustrations, diagrams, photos, code listings, etc.

A new way to organize web page content

The <div> element is a container that can apply formatting anywhere in a web page. The limitation of the <div> is that it doesn't provide any information about the page and the purpose of the certain section. The new sectioning HTML5 elements can replace <div> elements with more descriptive semantic code.

The following example demonstrates and compares the use of both the <div> tag and the new HTML5 tags to organize web-page content. Figure 1 shows the ordinary HTML page with a basic structure.

Page structure with <div>

```
<div class="Header">
<h1>Lorem Ipsum</h1>
<p class="Logo">Neque porro quisquam est qui dolorem
ipsum.....</p>
<p class="Author">http://www.lipsum.com/</p>
</div>
<div class="Content">
```

Комп'ютерні технології та Інтернет в інформаційному суспільстві

```
<p><span class="Lorem">Lorem Ipsum</span>Lorem Ipsum е
елементарен примерен текст, ...</p>
<p>...</p>
<h2>От къде произлиза</h2>
<p>Противно на всеобщото вярване, Lorem Ipsum ...</p>
...
</div>
<div class="Footer">
<p class="Slogan">"Neque porro quisquam est..."
...</p>
<p>
<a href="English.html">English</a>
...
</p>
<p>Copyright 2014</p>
</div>
```

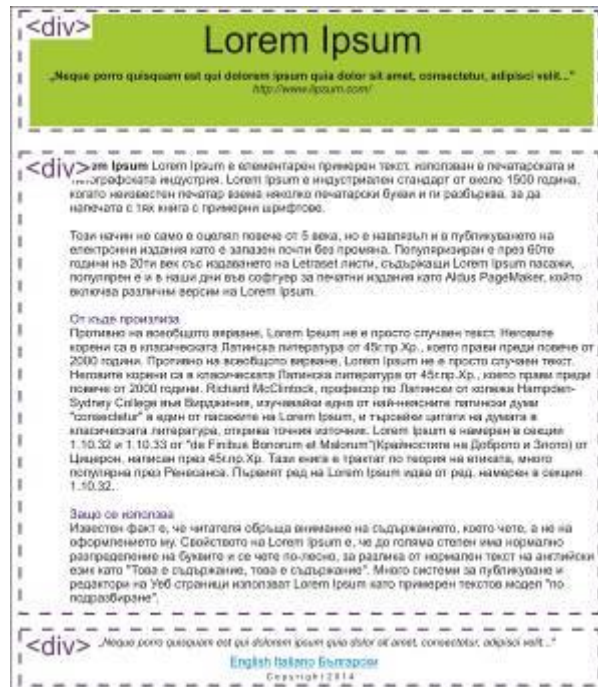


Figure 1 - HTML page with a basic structure

Page structure with HTML5 semantic elements

In this example, the <header> and <footer> elements take the place of the <div> elements:

```
<header class="Header">
  <h1>Lorem Ipsum</h1>
  <p class="Logo">Neque porro quisquam est qui dolorem
  ipsum.....</p>
  <p class="Author">http://www.lipsum.com/</p>
</header>
<div class="Content">
<p><span class="Lorem">Lorem Ipsum</span>Lorem Ipsum е
елементарен примерен текст, ...</p>
<p>...</p>
<h2>От къде произлиза</h2>
```

```
<p>Противно на всеобщото вярване, Lorem Ipsum ...</p>
...
</div>
<footer class="Footer">
  <p class="Slogan">"Neque porro quisquam est...</p>
  <p>
    <a href=" English.html">English</a>
    ...
  </p>
  <p>Copyright 2014</p>
</footer>
```

The <article> element includes the title, author, and main content. With the <article> element to the page get the following structure:

```
<article>
  <header>
    <h1>Lorem Ipsum</h1>
    ...
  </header>
  <div class="Content">
    <p><span class="Lorem"> Lorem Ipsum </span> Lorem Ipsum е
    елементарен примерен текст, ...</p>
    <p>...</p>
    <h2> От къде произлиза </h2>
    <p> Противно на всеобщото вярване, Lorem Ipsum ...</p>
    ...
  </div>
<footer>
  <p class="Slogan">"Neque porro quisquam est...</p>
  ...
</footer>
</article>
```

Figure 2 shows the final structure of the page.



Figure 2 - The page with three of HTML5's semantic elements – article, header and footer

This example uses only a few of the semantic elements of HTML5. With their help the pages are clean and with logical structure. The advantages of using the semantic elements are: **easier editing and maintenance, accessibility and search-engine optimization.**

Conclusion

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References:

1. http://www.w3schools.com/html/html5_semantic_elements.asp