JOURNAL OF ADVANCED SCIENTIFIC RESEARCH

Editorial Team

USE OF MULTIMEDIA ELEMENTS IN CREATING WEB PAGES AND ELECTRONIC LEARNING RESOURCES

Khurram Ergashevich Tangirov
associate professor (PhD) of the department of Informatics and digital educational technologies, Jizzakh state pedagogical university
xurramtangirov@gmail.com;

Nigora Akramovna Ismailova
master student of the specialty of information technologies in education, Jizzakh state pedagogical university
nigoraismoilova0897@gmail.com

Abstract: this article highlights use of multimedia elements in creating web pages and e-learning resources. When creating direct web pages, using the HTML language, multimedia elements are important, with the help of which the general structure of the web page can be represented schematically. Also, in the process of presenting information on the web page, there is a need to use tables of various forms. In such cases, tables of the desired form can be achieved using HTML elements, especially table-related tags, their attributes and parameters.

Keywords: web-page, web-design, multimedia elements, HTML, Internet, informatics and information technologies, electronic learning resources.

INTRODUCTION

Today, it is more convenient to create tables and perform related actions with the help of special software tools, web page constructors, HTML editors, and not with the help of simple codes. You can also use HTML codes to perform these actions, create tables, or perform tasks of formatting data.

When creating direct web pages, using the HTML language, use of multimedia elements in creating web pages and electronic learning resources are important, with the help of which the general structure of the web page can be represented schematically. Also, in the process of presenting information on the web page, there is a need to use tables of various forms. In such cases, tables of the desired form can be achieved using HTML elements, especially table-related tags, their attributes and parameters.

MAIN PART

Over time, the "Spider Web" began to serve not only for the exchange of text and images, but also for the exchange of video, sound, actions and similar multimedia elements.

Multimedia is computer-generated information that contains more than one type of information. For example: text and sound, image and sound, etc. Even the introduction of silent video to information technology began to be called "multimedia presentations".

Examples are multimedia found on the Internet - videos, sounds, animations.

They can be stopped, restarted, "transferred" a little. Some multimedia elements may also have buttons that are interactive in nature, such as a toggle button. In short, multimedia elementary reminds us of well-known audio and video clips.

In order to use multimedia, a web designer must know the following three things:

- the reason for using multimedia elements on the page;
- popularity of used multimedia elements on the Internet;
- the type of use of the multimedia element. That is, when the page is opened, multimedia will start or open in a separate window, ...

The following table lists the main multimedia file formats used on the Internet:

File Format	File Type	Extension
Sun Systems sound	Digital audio	.au
Windows sound	Digital audio	.wav
Audio Interchange	Digital audio	.aiff, .aifc
MPEG/MP3 audio	Digital audio	.mpg, .mp3
MIDI audio	Sound control commands	.mid, .midi
RealMedia	Audio/video	.ra, .rm, .ram
MPEG video	Video	.mpg, .mpeg
QuickTime	Video	.mov, .qt
Microsoft video	Video	.avi
Digital video (формат DV)	Video	.dv

A hypermedia appeal is not much different from ordinary hyperlinks. There is only one difference: it is necessary to display a multimedia file, not a document or a web page, as in hyperlinks. The browser should "recognize" it and open it through the appropriate program.

Hypermedia references look like other hyperlinks. Just remember to specify a different type of multimedia file, not the URL address of the HTML file:

Watch Zero's music video

When the user selects the application, the file is uploaded to his computer. After that, the browser will try to open it using the appropriate program. If the desired program is not installed, it can be saved for future use.

Two tips:

First, specify the approximate file size in the hyperlink. The user has to decide whether it is worth spending his free time to open and view this multimedia file.

Second, you need to get permission from the server while uploading the file to the server. It's not just about copyright, but sending large files over the Internet slows down the server. As traffic increases, the server may charge additional fees.

How can a browser play a multimedia file? Every browser stores information about file formats and programs. And a hyperlink on the Internet will try to determine the file format from the information it contains once it knows that it is not placed in a plain HTML document. When there is a familiar file format, it sends it to the appropriate program and ensures that it runs.

File formats that most browsers "understand":

- Graphics eg .gif, .jpeg, .png
- Sounds, eg .midi, .wav
- Plain text with .txt extension.

There is another way to put multimedia elements on a page. This reminds us of the <img /> element. The above task can be performed using the **<embed>** element, created by Netscape and widely used.

In general, the **<embed>** element works like the <img /> element. It can store the element name, the URL of the file and, if necessary, its dimensions:

<embed src="D:\Music\klip\new\Sakhar.avi" width="300" height="300" autoplay="0" align="left">

</embed>

QuickTime format options for the **<embed>** element:

Attribute	Value	Task
Autoplay	True	Plays the video automatically
Controller	False	Hides the control panel
Loop	True	Splits the video into loops
Playeveryframe	True	Prohibits frame acceleration
Volume	0-256	Determines the loudness of the sound. 256 is the highest value
Hidden	True	Hides video cameras
Href	url	Creates a new window for the video as a hyperlink.

Windows Media format options for the **<embed>** element:

Attribute	Task
Showcontrols	0 - hides the control panel, the rest of the optional value shows the control panel.
Autosize	0 – No automatic frame size detection.
Showstatusbar	0 - the bottom bar is not visible.
Autostart	0 – disables video autoplay.

The **<bgsound> or <audio>** tag is used to set sound or music in the background of a web page.

Let's get acquainted with the attributes of the **<bgsound … > or <audio …>** tag:

src = "..." - the name (address) of the sound or music file to be loaded on this page. It can upload and download the following formats. (*.wav, *.wmv, *.m4a, *.mp3, *.midi, *.rmi)

loop = "..." - number of repetitions (or infinite - infinite)

Embed MUSIC or VIDEO on the page

<embed>, </embed> tags are used to embed sound, music or video (player) on a web page.

Let's get acquainted with the attributes of the **<embed … > tag**:

src = "..." - the name (address) of the sound, music or video file to be loaded into the player. It can upload, download the following formats (*.mpg, *.avi, *.dat)

width = "…" – player, control panel width, width

height = "…" – player, control panel height, height

loop = "..." - number of repetitions (or infinite - infinite)

autoplay = "..." - starts when the page is loaded (true or false); 0 or 1

hidden = "…" – hide player, control panel ("true" or "false")

type = "..." - the type of multimedia file to be placed in the player

quality = "…" – high-quality multimedia "high".

RESULTS AND DISCUSSION

Hyperlinks are the backbone of website traffic. When selecting an application, the user "drops" to an address associated with some URL that loads into the browser window or launches a utility. Sometimes the hyperlink results in a new web page that redirects to an e-mail or FTP server. In order for the user to select (shelchok) the reference, the web designer must create it.

The **<a>** (anchor) element is used to create a hyperlink. It is filled with an href attribute that specifies the referrer URL. Therefore, to create a hyperlink, it is necessary to determine the URL address.

A URL is the full address of a web page or service that is typed into the browser's address bar. Often this address is displayed in the bottom line of the browser when the cursor is hovered over the hyperlink.

When creating a hyperlink, if we want to use a service or an address on the Internet, it is necessary to specify its full address. If we want to create hyperlinks from the web pages we have, there are some things that make things easier:

<base> element.

An example.

1. Suppose we want to create a directory structure based on http://www.mathinfo.uz.

2. In this directory, we want to place directories such as images, about, faculty.

3. we created the page kurs.html in the fizmat directory (inside the faculty directory).

4. Now we want to refer to the contact.html page located in the about directory. For this it is written as follows:

../about/contact.html

5. Unfortunately, this entry is not as convenient as http://www.mathinfo.uz/ about/contact.html. There are many mistakes that can be made when writing such long references. The <base> element is used to avoid this. With this element, a directory is selected as the main base:

<head>

<base href="http://www.mathinfo.uz" />

<head>

Using this element, the above contact can be simply written as "about/contact.html". The <base> element does not interfere with references to Internet addresses.

Create references. Internal and external references.

The anchor (**<a>, **) element is used to create references in an HTML document. These tags include the reference word 'uz.' The application is written in the following form:

Request text

So, to refer to the about.html page in the about directory with the word "Data", it is necessary to write as follows:

Information

  About

The name of the applications should be written as informative as possible. You should not choose contact names such as "Click here", "New task". A user may not click on a referral without knowing what they will get as a result of clicking on it.

There are some things you should pay attention to when submitting applications. For example, you are sitting at home and ordering your brother to do something: "bring water to a mug from the kitchen" (it is illogical to tell me to bring water from the kitchen of a house with such and such number in such and such country, such and such region, such and such city or village, such and such street). In this case, it doesn't matter which country, which region, which city, village, which house you live in. Or your brother doesn't even ask which kitchen, because there is only one kitchen in the house. The same goes for using references. That is, it is not necessary to start the reference with "http://www.mathinfo.uz/" every time to place references in the directories created by ourselves. It will be enough to write the next one. To change to another directory, it is enough to use the exit symbol "../" from the current directory. That is, to place a reference from the about.html page in the about directory to the service.html page in the service directory, write "../service/service.html". All the above references are external references.

Internal references are placed on the current page itself. For example, let's create a page dedicated to a topic in a science. References to all existing plans in the topic can be placed in such a way that when selecting a reference, information from the plan appears on the screen. It's simple to do. That is, you need to mark all the paragraphs that need to be passed, and then put anchors (<a>,) on those characters. Let's look at an example:

<h2 align="center">Plan </h2>

<p>1. HTTP</p>

<p>2. HTML</p>

Now let's define the paragraph in question:

<p><a name=q1>HTTP is…</p> or

<p><a name=q2>HTML is…</p>

You can also link to a paragraph on another web page:

<p>Answer this question<p>

Images can also be hyperlinked:

Images can be of different sizes, and any image can be hyperlinked.

Special appeals:

A URL is so universal and flexible that it can be used by all kinds of Internet applications (e-mail, FTP, Gopher, Usenet news, Telnet sessions). This allows you to

create a universal site using different references on one page. For example, along with downloading a program, a user can find news about that program using a Usenet news server link.

mailto. Creating a mailto address is simple. For this, it is enough to know the e-mail address, which consists of four parts: user_name, @ symbol, computer name, server name. mailto address:

<p>You can contact me with an optional question</p>

FTP. The FTP protocol is used to transfer files between computers. To create FTP references, it is enough to know the required server name:

Mathematics & informatics faculties FTP site

 Zip program

As you can see from the second example, the necessary program can be downloaded completely. In this case, the browser will ask the user whether the downloaded program should really be saved to the hard disk or not.

Gopher. Gopher is a browser representation of data in hierarchical form using text. Gopher sites are rarely used these days. Make references to them:

Library of Congress

Usenet. A Usenet newsgroup is an Internet conference group. Although its name is news, the basis of this group consists of questions and answers, discussions in which every participant can participate. This group can be contacted whenever there is an issue on your site that needs to be discussed. Or users ask you so many questions that you don't have the opportunity to answer them, so you can turn to this group, somewhere there will be someone who can help you:

Dedicated to Starrek Usenet Conference

Telnet. A Telnet server application is an application designed to communicate with a remote computer provided by the Software. Telnet technology is not supported by any modern browsers, so you have to use additional programs when choosing this option:

Connect to telnet server

target attribute.

You can also use some small tricks when creating references. For example, when selecting a reference, the target attribute is used to open a new window. When this attribute is used, the result is generated in a new window.

Mathematics & informatics faculties site

If you want All references on the site to open in a new window, it is better to place it inside the <base> element:

<base href="http://www.mathinfo.uz" target="_self" />

As a result, all hyperlinks to your web page will be created in a new window.

CONCLUSION

In conclusion, the use of elements related to tables in the creation of web pages and e-learning resources is important in the process of representing the general

structure of the web page in a schematic way, in the process of presenting information on the web page in tables of various forms, and also , tables similar to the one above can be generated.

REFERENCES

1. Tangirov K.E. The use of electronic educational resources for individualization in the process of teaching algebra in schools //European Journal of Research and Reflection in Educational Sciences. United Kingdom: Progressive Academic Publishing. Vol7. – 2019. – №. 3. – С. 43-48.

2. Tangirov, K.E., Mamatkulova, U.E., & Khasanov, Z.S. (2022). Possibilities of individualization of learning in interactive electronic information and educational. Mental Enlightenment Scientific-Methodological Journal, 2022(1), 166-175.

3. Tangirov K.E. Using Electronic Educational Resources for Individualizing Algebra Teaching Process at Schools //Eastern European Scientific Journal. – 2019. – №. 1.

4. Ergashevich T. K., Shavkatovich K. Z. Use of electronic educational resources in the educational process //Cutting edge-science. – 2020. – С. 89.

5. Botirov D.B., Tangirov Kh.E., Mamatkulova U.E., Aliboyev S.Kh., Khaitova N.F., Alkorova U.M. (2020). The importance of teaching algorithms and programming languages in the creation of electronic education resources. *Journal of Critical Reviews*, *7*(11), 365-368. doi:10.31838/jcr.07.11.63

6. Tangirov K.E., Jomurodov D.M., Murodkasimova S.K. The importance of e-learning and e-learning resources in individualized learning // Asian Journal of Multidimensional Research (AJMR), 2021. Vol 10, Issue 3, March, 2021. – pp. 464-469. http://dx.doi.org/10.5958/2278-4853.2021.00176.2

7. Тангиров Х. Э., Хасанов З. Ш. У., Баходиров З. И. У. Интеграция уроков английского языка и информатики //Science and Education. – 2022. – Т. 3. – №. 5. – С. 1389-1391.

8. Тангиров Х.Э., Маматкулова У.Э. Значение мотивации в использование электронного средства обучения по математике //Научная дискуссия: инновации в современном мире. – Т. 8. – №. 28. – С. 114-119.

9. Тангиров Х.Э., Саттаров А.Р., Шукуров Э.Х. Методические аспекты применения информационных технологий обучения //International scientific review. – 2016. – №. 8 (18). – С. 82-83.

10. Тангиров Х.Э., Рахматов А.Ш., Отабеков А.О. Технология создания электронного учебника по курсу" Информатика" //Молодой ученый. – 2016. – №. 20. – С. 25-27.