CREATING A WEB SITE FOR MEDICAL EQUIPMENT

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Abstract

There are billions of people around the world – each and every single one of them with all their needs, dreams and beliefs. Today, however, we are all bound by one of the greatest communication sources of the world – the Internet. An enormous part of our planet's population uses it in order to receive information. One of the most efficient ways is by visiting web sites including those for medical equipment.

1. INTRODUCTION

Specialised "St. Mina" hospital for rehabilitation in the town of Varshets is a proud owner of a web site which introduces visitors to institution's work in the field of medicine. The aim of the staff their patients to gain more accurate idea of the medical equipment of "St. Mina" inspired the creation of a graduation work under the guise of a web site called "Specialised Medical Equipment used in "St. Mina" hospital – town of Varshets".

2. PREPARING FOR BUILDING THE WEB SITE

Before starting creating even a single page of the web site. I needed some specific information about instition's medical equipment. In order to do that I visited the hospital's inmates. The staff was kind to show me all premises and told me about each and every piece of equipment. I was allowed to take pictures in order to present my future web site visitors not only with text information but also with a variety of photos. My diploma work was suggested to be attached to hospital's general site.

No sooner had I visited "St. Mina" in Varshets than I proceeded to the next step of the plan – my own preparation. It included reading plenty of books and magazines on the topic, surfing through different articles on the Internet and observing codes of popular and interesting web sites.

All things considered, I made my decision to use XHTML, JavaScript and CSS as web building tools.

3. BUILDING ENTERING MEDICAL INFORMATION ALGORITHMS

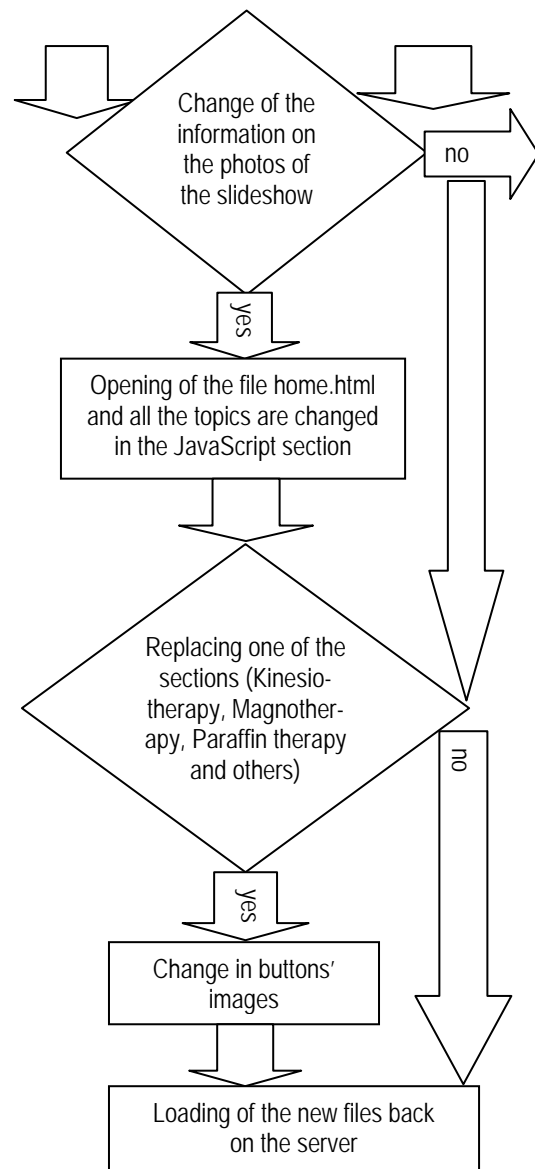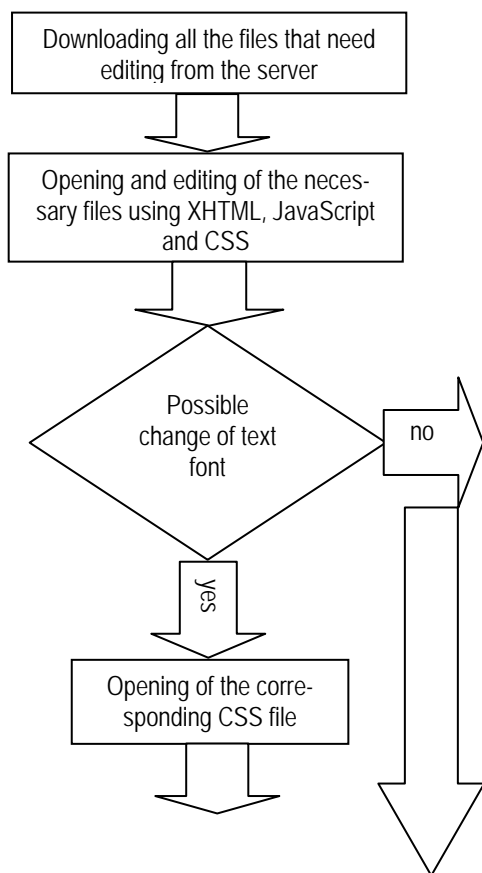Apart from gathering the information that was needed, I followed step- by- step instructions which I structured myself in order to enter text. First of all, the whole medical information received was divided into sections such as Magnotherapy, Physical therapy, Kinesiotherapy and others. Thanks to the Internet and all literary sources written in "References" section I did a research about the various ways to enter the information. XHTML, JavaScript and CSS helped me to include the texts into the right sections. By means of "Times New Roman", Times, serif the whole information about the medical equipment was added to the scroll field of content area. Correct positioning of the text was accomplished by several software products. The whole process is illustrated below:
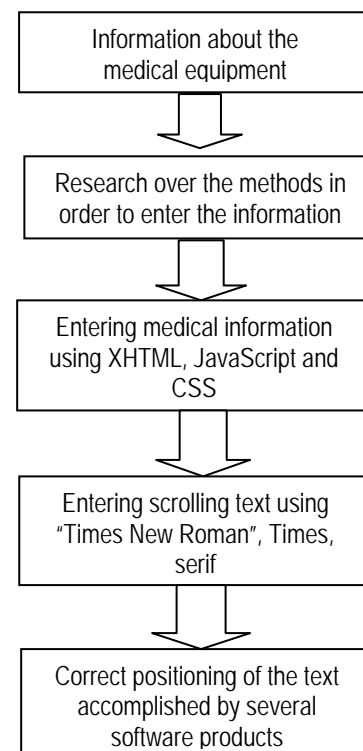
4. BUILDING EDITING MEDICAL INFORMATION ALGORITHMS

If one or several pages of the web site need to be edited, a special procedure is followed. A web resource is fully functional when it is placed on a server. If information is to be edited, all elements that need to be changed have to be downloaded to a local folder created especially for the aim. The necessary file is to be found while opening the folder and with the help of a text editor or a professional software program the information is going to be edited. It is possible to change the font of the text by opening the correspondent CSS file. All the information on the photos of the slideshow could be changed as well. In this case the home page called home.html is opened and all of the topics in the JavaScript part are replaced by new ones.

Correction of one of the sections (Kinesiotherapy, Magnotherapy, Paraf- fin therapy and others) leads to inserting new images of the buttons in the menu. Finally, the edited files are loaded back on the server. Illustration of the algorithm is shown below:

Downloading all the files that need editing from the server

Opening and editing of the necessary files using XHTML, JavaScript and CSS

Possible change of text font — no

yes

Opening of the corresponding CSS file

Change of the information on the photos of the slideshow — no

yes

Opening of the file home.html and all the topics are changed in the JavaScript section

Replacing one of the sections (Kinesiotherapy, Magnotherapy, Paraffin therapy and others) — no

yes

Change in buttons' images

Loading of the new files back on the server

5. BUILDING THE WEB SITE "SPECIALISED MEDICAL EQUIPMENT USED IN "ST. MINA" HOSPITAL – TOWN OF VARSHETS"

There are two main principles used by web developers to create their sites. The first one is to consider the design of each web page. The best way of all is to have choices or to create more than one version of a page. Following this idea I succeeded in designing two types of the main page. The decision which one to work on was made by taking into account several major problems. It is of great importance visitors of the web site to navigate easily through the pages and to evaluate the functionality in a proper way. Under no circumstances is to be underestimated the design of the general web site of the hospital – the look of both sites should be approximately equivalent.

Another important fact of web building is the colour scheme of each page. On the one hand, it is visitors who will not accept the look of the site if it is based on the principle of using many colours as possible. It is not recommended to use a lot of colour nuances as well. On the other hand, it is of vital importance for a site to be built based on a web colour scheme. Moreover, different types of monitors require appropriate representation of some non web – based colours. If monitors do not act for the highest quality of picture as far as web – based colours are concerned, this leads to some lack of the site design.

Considering all mentioned, it was my second version that I continued building. Both of the designs are shown below:
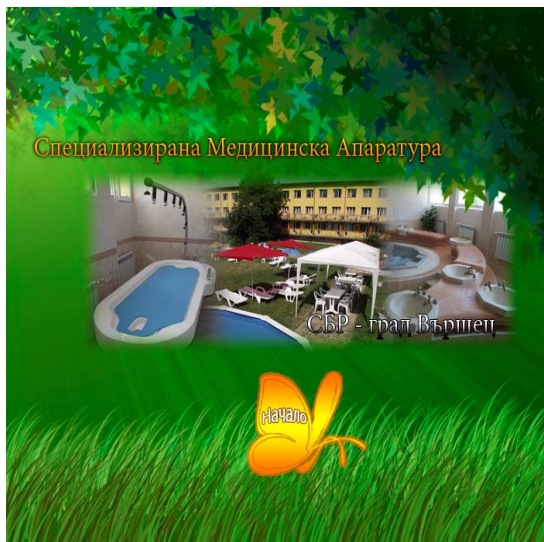

First version of the main web page

Second version of the main web page chosen the most suitable for building the site

Building the whole web site needed one step further to be paced. Usage of web – based languages helps completing the creation and adds functionality and dynamics to our work. Reviewing all options on the theme, I chose XHTML, JavaScript and CSS as my partners in the finishing part of the process.

Assuming all said, my work as a whole, could be divided into three periods – design of the main web page, building it and creation of the site based on the several web pages included. A scheme of the whole process could be seen below:
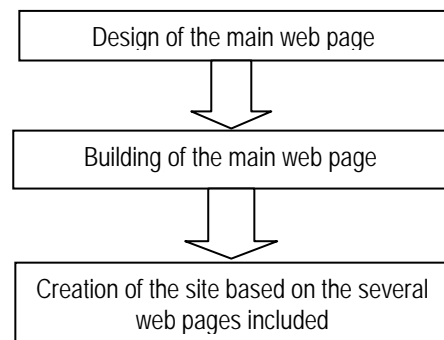
6. CONCLUSION

Building the web site "Specialised Medical Equipment used in "St. Mina" hospital – town of Varshets" is a result of ideas accomplished thanks to the medical staff of the institution and the abilities of the contemporary technologies. The road of site development has not been finished yet. The layers of improvement will proceed increasing their numbers but two of them will be realized in the near future. The tendencies to use smartphones and tablets to connect to the Internet, to talk to relatives and friends and other kinds of use, opened the doors to ideas for recreation of the site for medical equipment into mobile. Thus all patients, medical staff as well as many other people will have access to the information wherever they are. A printable version of the site is also taken into account. If such is used, the necessary information will be easily materialized into paper version. On the other hand, the text will be shown as a whole and reading through it will be faster.

Technologies tend to develop every single day, web sites increase their numbers and change the way they are built and the way they look – this is the future, the time of change of human beings and its global network of information.

7. APPENDIX AND ACKNOWLEDGMENTS

Final version of "Specialised Medical Equipment used in "St. Mina" hospital– town of Varshets" web site is shown below:

References

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