

NEW WEB SITE AND SERVICES OF COMPUTER SOCIETY OF MACEDONIA

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ABSTRACT

Computer Society of Macedonia is non-government organization that gathers the computer scientists and IT professionals, and articulates their opinions. It is founded in year 2000. Since founding, it offers different information and services for general public and its members. In this paper we present its new web site and accompanying services that provide additional level of service for everyone.

I. INTRODUCTION

The need for constant communication between the members of the Computer Society of Macedonia, sharing resources, and also presenting information about the organization to the world, has been crucial reason for developing and using some systems. Therefore, this paper will cover the functionalities and the services of the new web site and The Course Management System: Moodle. Their integration will be reviewed as special section.

While designing of the new web site, the following things are considered: maintaining and extending the web site by different users with different privileges, easily adding new people to the process of maintenance, attractive look with the logo of the organization, providing accounts for the members etc.

II. NEW WEB SITE

Computer Society of Macedonia has a new web site with the following location: www.cs.org.mk [1]. This is a Joomla web site [2] that is designed properly to describe the organization with its roles and responsibilities, to present its work (especially the competitions in Informatics) and to inform about events and any kind of news. Guests that visit this website can review many sections that will be discussed later. Members of Computer Society of Macedonia have accounts and profiles with different privileges then the guests that visit this site. For example, all of them are can view other member profiles and message them.

The structure of the home page is quite simple and it dictates the design of the content of other pages, too. It contains tabs with the menu options, main menu, slideshow with the most important pictures, latest news, form for registration and logging in, form with links to supporters and sponsors. Next to the tabs there is a search field for easily finding the information that is needed.

The template of www.cs.org.mk is called ZIM_Template and is designed specifically for cs.org.mk. It has a fixed width of placement, and it can be chosen by setting options for the template.

A. News Section

People can review latest events and announcements at the home page of the web site like shown on Fig. 1.



Figure 1: Latest news from home page.

Also, at this part of the web site, collage pictures of the best achievements are shown through slideshow (Fig. 2).

Additionally, there is a separate page where all the news ever announced are available. This page can be accessed from the tabs menu or the main menu.



Figure 2: Slideshow from home page.

B. Organization Section

This is a section of the site where the structure of the organization is presented in details, also bodies of the society, tasks and activities. First things that one can read about are the society aims and activities. There is a list of tasks on which the members should work every day for popularization and promotion of information technology and enhancing its status in the society.

Also, there is a list of authorities and commissions with details for better understanding of the types of members. Other parts of the submenu where people can learn a lot before becoming members are “Rights and responsibilities” and “Membership”. There, it is described more about being a member, about the subscription, continuation of membership, honorable members and termination of membership.

C. Competitions in Informatics Section

This menu (Fig. 3) contains most of the articles on this web site and they are organized to be presented with one special component where for each category, competitions are displayed from the current to the last by the date of creation of the article.

- НАТПРЕВАРИ**
- Основно образование
 - Средно образование
 - Електронски натпревари
 - Регионален натпревар
 - Државен натпревар
 - Македонска Олимпијада
 - Меѓународни натпревари
 - Високо образование
 - Сервиси
 - Материјали

Figure 3: Menu with types of competitions for secondary school.

Organizing this kind of competitions is one of the priorities in the work of Computer Society of Macedonia. There is a special commission that takes care of the competitions and its organization. There is a special section on the web site where people can be informed about types of competitions, participants, their success and materials for practicing. The submenu here is divided into five different pages: Primary School Competitions, Secondary School Competitions, Higher Education Competitions, Services and Materials. This is one of the most important parts of the web site because students of all ages can visit this section and find out more about competitions in Informatics. Furthermore, they can find materials with topics that can help them improve their skills and maybe try to compete.

For others, this section offers names of the competitors, their results, information about groups of competitors and competition cycles especially for competitions for secondary schools.

III. USER ACCOUNTS

Members of the Computer Society of Macedonia should have special accounts for accessing this site. In the same time this account is a confirmation for their membership. By using this account people can reach many resources and information that is only for the members. There is more than one type of user:

- Registered
- Author
- Editor
- Publisher
- Manager
- Administrator
- Super Administrator

Once a user is logged in, he can see and edit his own profile. Here he can leave information about him, his contact and his connections. The administrator can choose which fields can be edited by the members or can the members attach their picture or avatar. Also there is a possibility for creating personal blogs, galleries, having a hidden email or public email etc. In addition, there are some other information generated by the system, like, are you currently online, when did you membership start etc.

Just like viewing your profile, you can view other member profiles and find a way to connect with them if needed. When viewing information about other members, the list of the users is shown in a table with three columns: username, date of membership, last login and status (online or offline). Other users can be searched by their username, but

still there is an option for changing these three columns with another three and by that, changing the column for searching.

IV. MOODLE

Having this type of Joomla web site is not good enough for massive sharing of resources, obtaining courses and communication in groups. Computer Society of Macedonia has implemented another system (Moodle System) that can be found on: <http://www.cs.org.mk/moodle/>.

This is a place where many courses that are part of organization's work are organized and maintained like the one on Fig. 4. A lot of materials are attached and not every member can have access to them. So, here members are also supposed to have accounts with the same information about them just like the Joomla accounts. That is why the next step was integration of these two systems and transferring and synchronizing user data.

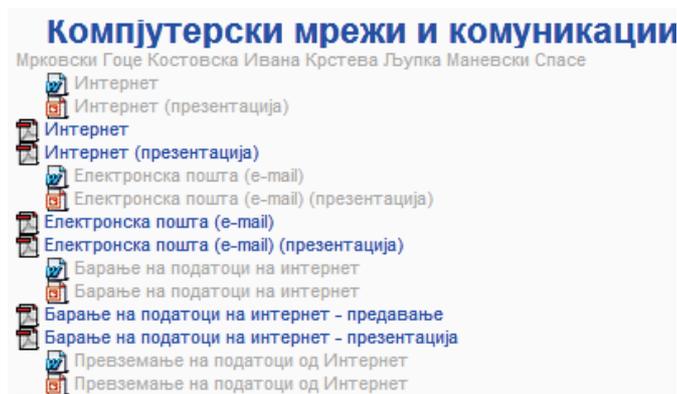


Figure 4: Materials from the course Edubuntu

V. MOODLE AND JOOMLA INTEGRATION

The necessity of using a single user account when logging into Joomla and Moodle sites led to searching for a solution for the needed integration. More precisely, we needed one-sided synchronization: Joomla – Moodle. Every change in an account in Joomla should be propagated to the same account in Moodle. The most important thing that needed to be synchronized was the status of the user account i.e. the information whether the account is active, blocked or deleted. Our first try was integration with the JFusion tool.

A. JFusion

JFusion is a free plugin that provides universal user integration by extending the Joomla [3]. With JFusion users can login to both Joomla and the portal integrated by JFusion

using the same username/password. Joomla login even logs the user into portals at once.

After implementation and testing of the synchronization provided with JFusion, we found out that if we create new account in Joomla it is created in Moodle too, and if we delete an account in Joomla, it is also deleted in Moodle. But, we experienced problems with the propagation of the status of accounts that have been blocked in the Joomla site.

After researching for a while, we discovered the reason. The thing is that JFusion deals with blocked accounts in Joomla by not accepting the site policy for the same user in Moodle. When the site policy is not accepted, there is not access to any course directly, but the problem is that Moodle asks you to accept again the policy every time you try to access any course. If the user accepts the policy, he can enter any course that he is included in, and there is no sign in Moodle that he is blocked. Dealing with the problem meant working with the privacy policies of Moodle and changing the source code which was not a good idea.

B. Joomla

So, we tried new synchronization provided by a totally different tool called Joomla with the logo shown on Fig. 5.



Figure 5: Joomla logo

Joomla is software that had to be installed as extension to Joomla, but also and as Moodle plug-in [4]. Unlike JFusion, this plug-in is only for integrating Joomla and Moodle. It worked perfectly with every change of the account that had to be synchronized.

VI. REFERENCES

- [1] Web Site of Computer Society of Macedonia, www.cs.org.mk
- [2] Joomla CMS, www.joomla.org
- [3] Jfusion module, www.jfusion.org
- [4] Joomla module, www.joomdle.com