

GRADUATES WEBSITE IN EDUCATION

V. TSYBULSKY, I. BURACHONAK
Polotsk State University, Belarus

This article discusses the creation of a website for work at the university on the example of the resource of St. Petersburg State University "Alumni Association of St. Petersburg State University".

Nowadays we live in the century of information technology and most people communicate with each other through the Internet. Previously, after graduating from university, many classmates tried to keep in touch with each other, but contact information or addresses could easily be lost, after which, communication could stop. People talked through letters, rarely could talk on the phone. Currently, letters in envelopes, as well as minute calls have been replaced by various instant messengers, online chats, social networks, as well as the opportunity to talk with anyone around the clock on the phone.

For graduates, it is necessary to create a site on which they can find their classmates, people with whom they were friends while studying at the university, contact them according to the information provided on the site, and invite everyone to come together, as in the good old days.

When creating the site, it was possible to find very few such resources that will help graduates to get together, or to find their friends. On the basis of analogues, the website "Graduates" was created.

In order for it to function well, it was necessary to raise all the archives from the beginning of the opening of the educational institution and get all the data, at least from the very first issue. All the collected information about the graduate is uploaded to the site on which he can register with his name, valid at the time of training, diploma number, as well as e-mail, which, upon registration, will receive a password to enter. After registration, in his personal account, the user will see information about himself that was stored at the university, but he can enter his personal data. In addition, each user can upload photos to the site, as this will help facilitate the search for their friends on the site.

Another feature of this site is that not only site administrators, but also registered users can post ads. The user, in his personal account, can create an advertisement of whatever he wants and send for publication on the main page of the site, but it will not be published, since immediately it is sent for review and editing to the administrator to prevent the possibility of publishing ads off-topic.

Why is the site universal? The site has an admin panel where the administrator can configure everything as he needs, so the site can be embedded in various universities, and even in schools. Using such a resource, you can not do without a database. Since the project was done in PHP (Hypertext Preprocessor), a decision was made to use the MySQL database management system (8.0) to organize data storage. It is also convenient, it is possible to convert data and the administrator does not need to fill it in manually, he just needs to click a button, select an Excel file and all information about university graduates will be uploaded to the database and displayed on the site. But there is a small nuance for the data to load correctly, you need to enter them in the correct order into the Excel file. In addition to entering information through an Excel file, you can manually enter one record, as well as edit or delete it.

If the user is interested in any question, he can contact technical support at any time, where they can help him solve it.

Another of the main features of this site is the ability to search for graduates in the following input fields:

1. Last name.
2. Name.
3. Patronymic.
4. The group.
5. Year of release.
6. Faculty.
7. Specialty.
8. The form of training.

All specified fields are optional. If the user does not enter anything, then all university graduates will be displayed. An example of a graduate search page is shown in picture 2. The data is filtered by the fields of the faculty, specialty, and the user's training form can be obtained from the list, which is also loaded from the database.

Figure 1. – Personal Information Editing Page

Фамилия	Имя	Отчество	Группа	Год выпуска	Факультет	Специальность	Форма обучения
Диняев	Олег	Викторович	10-КБ	2015	Факультет информационных технологий	Нет данных	Дневная
Статут	Алексей	Иванович	10-КБ	2015	Факультет информационных технологий	Нет данных	Дневная
Ярошевич	Павел	Владимирович	10-КБ	2015	Факультет информационных технологий	Нет данных	Дневная
Винник	Алексей	Александрович	10-ИТ2	2015	Факультет информационных технологий	Программное обеспечение информационных технологий	Дневная
Базегский	Владислав	Витальевич	10-ЭС-1	2015	Радиотехнический факультет	Нет данных	Дневная
Павлов	Антон	Иванович	10-ЭС-1	2015	Радиотехнический факультет	Нет данных	Дневная
Хорав	Вадим	Олегович	10-ЭС-1	2015	Радиотехнический факультет	Нет данных	Дневная
Окунов	Илья	Сергеевич	11-ФК-1	2015	Факультет финансово-экономический	Финансы и кредит	Дневная

Figure 2. – Graduate Search Page

In their personal accounts, graduates can create ads that appear on the main page. I think that this function is very convenient, it's easier to gather your classmates for some kind of meeting, because you don't need to call everyone and invite them, especially since some may not have information about contact numbers. To make sure that the graduate has created an ad with acceptable content, it is moderated, and as soon as the administrator makes sure that the content of the advertisement really meets the requirements, he makes it visible to all graduates, however, if the announcement has obscene content, the administrator has the option to edit it.

In the process of developing a software product, all the restrictions imposed on the database by the subject area were observed, thus maintaining the integrity of the system. The integrity constraint lies in the absence in the relations of records with the same primary key values, as well as in the absence of records in which the primary key value is not specified. This restriction works due to compliance with the basic properties of the primary key.

An important feature of modern DBMSs is the standard means of maintaining the integrity of databases when changing and deleting records in relationships.

For foreign keys, the integrity constraint is that the value of the primary key must be equal to the value of the foreign key, i.e. each attribute value must be undefined.

Storage of the necessary data is implemented in the free relational database management system MySQL 8.0, which has advantages over analogues:

ICT, Electronics, Programming, Geodesy

1. A large number of plug-ins and auxiliary applications that help simplify the work with databases;
2. A wide selection of tools that allows you to implement almost any project;
3. There are many built-in security features that work by default;
4. equally easily can be used to work with small and large volumes of data;
5. Due to some standards used, there is a high system performance.

The university consists of several faculties. Each faculty has several departments, and several specialties and forms of training may also be present. Thus, each student is listed in the faculty, in a particular department, specialty and form of training and has unique personal data. Thus, including all options for combining a graduate with a university, the following scheme was developed, shown in picture 3.

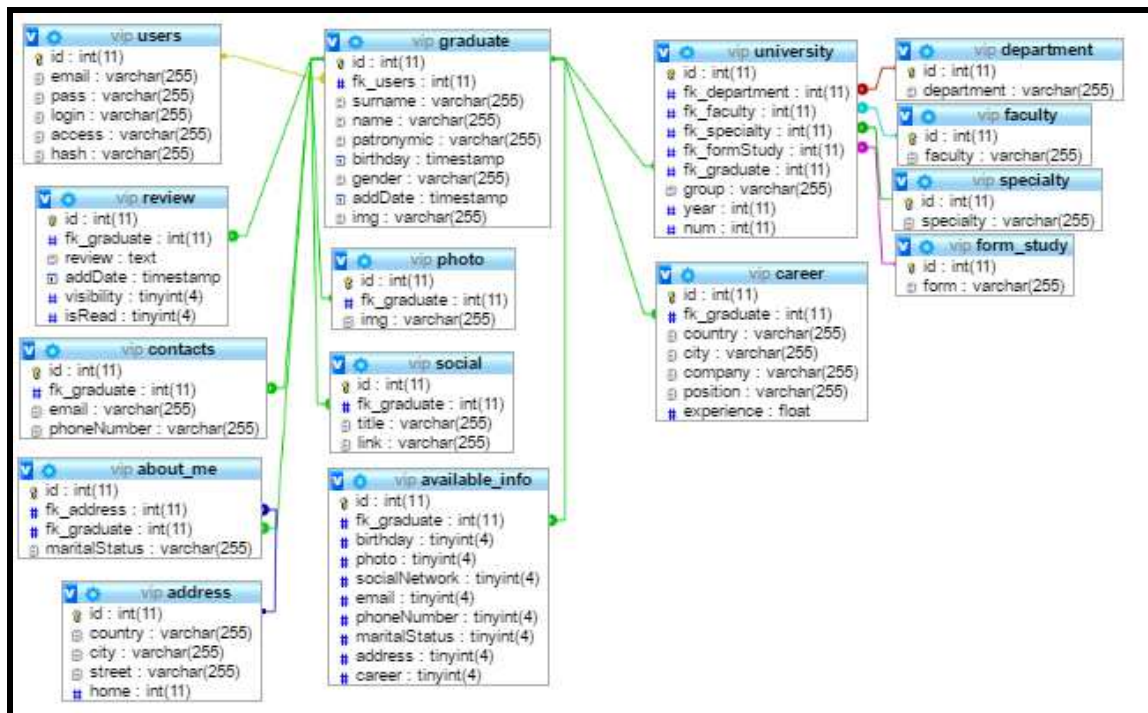


Figure 3. – Relational database schema

When implementing this relational database schema, the SQL language features were used to the maximum. SQL (Structured Query Language - Structured Query Language) is a universal computer language used to create, modify and manage data in relational databases.

Thanks to the developed database, as well as the user interface, a software product was implemented that can be used in any educational institution.

Thus, the developed software product contributes to the education among students of pride in their native university, their involvement in one of the best universities in the country and the world, in the elite of a modern intellectual society, and will also allow the promotion of the outstanding achievements of its graduates.

Conclusion. This site is already at the stage of implementation in the educational institution “Polotsk State University”. The developed product will facilitate the work of university employees. With ease it will be possible to inform all graduates about a planned event in honor of them. In addition, graduates have the opportunity to find their classmates by search provided on the site, enter information about themselves in their personal account.

REFERENCES

1. Unity User Manual [Электронный ресурс] / – Access mode <http://www.php-s.ru/self-teacher>. – Access date: 16.09.2018.