

UDC 004.021

WEB APPLICATION FOR MANAGING VARIOUS TYPES OF VACATIONS IN THE COMPANY

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This article explains why it is important to keep a schedule of holidays in companies and describes the main features of the developed web application and the technologies that will be used.

Introduction. Control of employee leave is an integral part of management in the enterprise. This is most clearly expressed when a company works with several projects, over which a separate group of employees is working. To achieve maximum performance, you need to monitor clearly the status of the group, since the absence of team members can adversely affect the entire workflow. From the point of view of the company's management, the leave chart should ensure that there are no problems during the entire calendar year, including the period of the greatest use of vacations by employees. The task of the director is to compile and optimize the employee leave chart in such a way as not to reduce the performance of the enterprise.

From the point of view of the company's employees, a correctly drawn up vacation chart enables the employee to plan his holiday in advance at the desired time and provides certain guarantees that the vacation will take place within the agreed timeframe and will not be postponed to another time.

In general, vacation management involves the following tasks:

- planning of important events for the year. It is necessary to determine the intervals in which the absence of workers is undesirable or impossible before the planning of vacations;
- replanning unapproved vacations;
- accounting the facts of care and return from vacation. By results of this stage it is possible to estimate, how the plan of holidays was executed.

It is difficult to keep in mind the factors affecting the schedule of holidays when a large number of people work in the company. Therefore, automation systems are increasingly being used for planning.

There are various systems that allow management of employee leave in companies. There are "1C: Personnel management", Web application "Chancellor", Web application "Vacations" from Webasyst, component of the Bitrix24 system - "Absence schedule".

However, these software tools have disadvantages: some of them are provided as part of a complete system, so it costs a lot, others have an uncomfortable user interface and small functionality.

Task formulation. Thereby, it was decided to develop a web application for management of vacation schedules, which will help the director to compose the vacation schedule, and workers to create requests for leave quickly and receive a response.

The following requirements will be applied to the web application:

- extensibility - in future it is planned to expand the web application with accounting management, human resources and document management modules;

- security - the application must have several levels of users to ensure correct access to the data;
- reliability - the application must respond to unexpected errors and maintain its efficiency.

The main functions of a web application will include:

- user authorization;
- the ability to create, view, modify and delete various types of leaves;
- the ability to view the schedule of leaves by months and years;
- filtering vacation schedules according to different criteria;
- the possibility of changing the period of dates of the holiday schedule;
- availability of notification service;
- the ability to create, view, change and delete holidays and workday shifts;
- the ability to view employee personal information;
- the ability to approve or deny applications for leave;
- the creation of orders for various types of leaves;
- display the imposition of leave from employees who are on the same project on the schedule of holidays;

Technologies. C # programming language is planned to be used to implement the server part of the application.

C# is a simple, modern, general-purpose, object-oriented programming language developed by Microsoft. Nowadays, it is used in various applications: from small desktop programs to large web portals and web services that serve millions of users every day. It is encompassing strong typing, imperative, declarative, functional, generic, object-oriented (class-based), and component-oriented programming disciplines [1]. Object-oriented approach allows to develop large, but at the same time flexible, scalable and extensible applications. C # continues to develop actively, and with each new version there is more and more useful functionality.

MS SQL Server will be used to store the necessary information.

Microsoft SQL Server is a relational database management system that supports a wide variety of transaction processing, business intelligence and analytics applications in corporate IT environments. Microsoft SQL Server is built on top of SQL (Structured Query Language), a standardized programming language that database administrators and other IT professionals use to manage databases and query the data they contain. SQL Server is tied to Transact-SQL (T-SQL), an implementation of SQL from Microsoft that adds a set of proprietary programming extensions to the standard language [2].

Angular will be used for the user interface implementation.

Angular is a platform that makes it easy to build applications with the web. Angular combines declarative templates, dependency injection, end to end tooling, and integrated best practices to solve development challenges. Angular empowers developers to build applications that live on the web, mobile, or the desktop [3].

REFERENCES

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