

**APPLICATION PACKAGE AND THEIR APPLICATION IN EDUCATION***Umirov Boboyor Tangirovich**Basic doctoral student of Samarkand State University*

**Annotation.** Software is the collection of software and documentary tools to create and use a data processing system with computer tools. This paper discusses software packages used in the education system.

**Keywords:** software, operating system, education, programming technologies, application programming.

**Аннотация.** Программное обеспечение — это совокупность программных и документированных средств для создания и использования системы обработки данных с помощью компьютерных средств. В данной статье рассматриваются программные пакеты, используемые в системе образования.

**Ключевые слова:** программное обеспечение, операционная система, образование, технологии программирования, прикладное программирование.

**Annotatsiya.** Dasturiy ta'minot - bu kompyuter asboblari bilan ma'lumotlarni qayta ishlash tizimini yaratish va ishlatish uchun dasturiy ta'minot va hujjatli vositalar to'plami. Ushbu maqolada ta'lim tizimida qo'llaniladigan dasturiy paketlar muhokama qilinadi.

**Kalit so'zlar:** dasturiy ta'minot, operatsion tizim, ta'lim, dasturlash texnologiyalari, amaliy dasturlash.

Many technologies can be applied to the education system today, including the formation of students' knowledge, skills and competencies through software, which is very relevant today.

Depending on the functions performed by the software, it can be divided into four groups:

- System software
- Application software
- Service software

- Methodological tools of programming technology

System software organizes the process of processing information on a computer and provides a standard work environment for applications. System software is so closely related to hardware that it is sometimes considered part of a computer.

The application software is designed to solve specific user tasks and organize the computing process of the information system in general.

Service software includes applications and programs that serve both the user and the personal computer. Using such programs can ensure that your PC works in optimal condition.

The methodological tools of programming technology can be used to create the necessary applications and programs for system software, application software and service software.

System software includes: Operating systems (OSs) that manage the message processing process and provide interaction between hardware and users. One of the main tasks of the OT is to automate the input-output process of information, managing the implementation of practical tasks that the user solves. The OT enters the required information into the computer's memory and monitors its execution; analyzes situations that prevent accurate calculation, gives instructions on what to do when difficulties arise. Depending on the tasks they perform, OS can be divided into three groups:

- single-function (single-user);
- multifunctional (multi-user);
- tape.

A single-function OT is designed to allow a user to perform a specific task at any given time. A typical representative of such operating systems is MS DOS (developed by Microsoft).

A multitasking OT allows the computer to be used collectively when allocating time in multitasking mode (the computer memory has multiple program tasks and the processor allocates computer resources between tasks). Typical representatives of this type of OT are IBM's UNIX, OS2, Microsoft Windows 95, Microsoft Windows NT and others.

Network operating systems are associated with the emergence of local and global networks and are designed to provide the user with access to all the resources of computing networks. Typical representatives of networked OTs are Novell NetWare, Banyan Vines, IBM LAN, Sun Solaris.

Application software includes: Application software is the end goal of the application programmer's work and at the same time is the user's tool. An expert in a particular field does not have to be an expert in data processing at the same time, nor does he have to know how to write a program. However, he must know how to work with a computer, the functions and capabilities of the system, especially the application, for his problem area.

Application software provides computer processing systems, solving problems in various fields. An application or application is a program designed to solve a specific area or class of problems in information technology that processes data.

The following are the types of applications:

Text editors are used to create Word, Word Perfect, Text and many other printed documents - references, spreadsheets, articles, reports, etc. The most powerful of the word editors are called word processors. Special types of text editors are called publishing systems, which are used to reproduce newspapers, magazines, booklets, brochures, and books. These are Ventura Publisher, Adobe Acrobat, Adobe Page Maker and Quart Xpress.

Graphic editors are used to create various images, drawings, graphics, diagrams, illustrations, as well as three-dimensional images: Paint, Adobe PhotoShop, Corel Draw, 3Ds Studio, etc.

Spreadsheets are electronic spreadsheets that automatically process text and numeric information. These include Lotus, Super Calc, Excel, Quattro Pro and many more.

Integrated systems provide components similar to the special packages mentioned above, a system that provides a single way to interact with all the components of the package, as well as a convenient, efficient way between the various components of the package. A good example of such a system is the MS Office suite. Another example is Corel Word Perfect, which includes a Word Perfect text editor and Quattro Pro, a spreadsheet editor. There is also Sun's Star Office suite, which can run on a variety of hardware and software platforms.

Service Software: Using this type of software can increase user productivity, improve OT performance, use a personal computer, and optimize its normal operation. These types of programs look like this:

Utilities - provides users with a qualitatively new interface. OT frees the user from knowing the details of operations and commands. Utilities provide the user with additional services (which do not require special software development), mainly in the form of services for disks and file systems.

Translators and electronic dictionaries use these programs to automatically translate text from one language to another. For example, Lingua Match. Correspondent package allows you to keep business correspondence in 6 languages. The Multilex Pro electronic dictionary contains 2 million Russian and English words.

Personal managers and organizers. These programs replace the notebook, which provides a person with a variety of information: phone numbers, addresses, a side notebook with birthdays and various appointments, the time of the day of

conferences, etc. Personal Manager - This program is a personal and team activity planner, or a personal "alarm clock", which also includes a "lifetime calendar", mail program, etc. He is the organizer of personal and business information. For example: MS Outlook.

Educational, teaching and multimedia encyclopedia programs. The curriculum package includes individual teaching and quality control programs in various subjects: mathematics, foreign languages, chemistry, biology, etc.

Multimedia programs are programs that help you see and hear audio and video information. For example, KM-Player, AIMP player, Win-AMP, Pot-Player.

File managers - perform the function of servicing files and directories, as well as disks. These include arFar Manager, Norton Commander, Windows Commander, Total Commander.

Archivists - Archiving tools also create, update, and unarchive archives based on files and directories. For example, Win Rar, Win Zip, Extra Zip, 7-Zip, and so on.

Drivers are programs and files that act as intermediaries between a device and an OT. If a driver is installed that does not match the device type and model, the device will not work normally.

Antiviruses are special programs used to protect your computer from viruses, delete viruses, and treat infected files. ESET Nod32, Kaspersky Anti-Virus, Microsoft Security, Doctor Web, Avast, etc.

Games and leisure programs. Systematic and application programs are created using programming languages. In this process, the written program is translated into machine language via a programming language translator.

The methodological tools of programming technology are a working tool for a category of professionals called practical programmers. Hardware software is designed to develop a variety of software packages that can be used in a variety of areas of human endeavor. Practical programmers need to know not only how to

process data, but also how to develop programs. They need to be well interconnected or well integrated in the areas of specific application of information technology - engineering, mathematics, physics, publishing, accounting, medicine, etc. Ordinary users do not normally encounter this group of programs.

The group of hardware programs includes the following programs: translators of different algorithmic languages (they translate the text of the program into machine language), editing links - they combine the individual parts of the program and make it a whole. Settings - help you find and fix typos.

A programming system is a set of tools that includes a programming input language, a translator, a machine language, a standard program library, the means to configure and integrate broadcast programs. In a programming system, a translator translates a program written in the input language of the programming language into the machine command language of a specific computer. Translators are divided into compilers and interpreters, depending on the method of translation from the input language.

An expert integrated environment — combines all the listed components into a single, user-friendly system for software development.

Application software is designed to develop and perform specific user tasks.

Application software runs on system software, particularly operating systems.

Application software includes:

- software packages for various tasks;
- user and IT common work programs.

Application packages (ADPs) are a powerful tool for automating the tasks that the user solves, which in practice completely eliminates the need to know how to process information.

There is currently a wide range of ADPs that differ in their functionality and implementation methods.

An application package (ADP) is a set of programs designed to solve a specific class of tasks.

There are the following types of ADP - general-purpose (universal) methodically oriented; global network; computing process organizations.

Operating system - establishes communication between the computer and the user, the computer manages the resources of the main device, the operation of additional devices. The operating system programs are copied to the RAM, which fulfills the requirements of the program. When the program completes its task, it clears the RAM, that is, it creates a large amount of RAM for the user to work on.

Based on OT commands, the user has the ability to name the disk, copy files, get a sequence of directories on the screen, work directly with any program, printer, display.

The Windows operating system was developed by Microsoft, the first versions of which appeared in the 80's and became popular among users. The advantages of Windows include: ease of working with data; work with several programs at the same time; protection; easy exchange of copies of data between applications; user-friendly and understandable interface; manage, configure, and add all devices; Ease of working with the Internet and e-mail; watching movies and listening to music, etc.

An operating system is a set of programs that automate the way a computer interacts with hardware and software resources.

The main functions of OT are:

- ✓ loading programs into RAM and managing their execution;
- ✓ provides data exchange between external devices and running programs;
- ✓ serves non-standard cases during program execution;
- ✓ remove completed programs from RAM and free up space for new programs;

- ✓ organization of search and storage of programs and data on external devices;
- ✓ organization of user-operating system interaction - receiving and executing user commands;
- ✓ copying from one disk device to another, formatting disk devices and performing various other auxiliary (service) functions.

The main input-output component of an operating system is usually written to the computer's permanent memory, while the rest is placed on a laser, hard drive, or floppy disk, which is why it is also called a system disk.

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