DASTURIY TA'MINOT VOSITALARI VA ULARNING TELEKOMMUNIKATSIYA TARMOQLARIDA QO'LLANILISHI

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Telekommunikatsiya texnologiyalari imkoniyatlaridan foydalangan holda ma'lumotlarni uzatish uchun maxsus dasturiy ta'minot qo'llaniladi. Ushbu dasturiy ta'minot muayyan protokollar bo'yicha yoki barcha tarmoq tugunlarining ishini soddalashtirish va standartlashtirish, uni yagona algoritm bo'yicha qurish uchun mo'ljallangan mexanizmlar bo'yicha ishlaydi.

Shunday qilib, kompyuter tarmoqlari orqali uzatish uchun ma'lumotlarni pochta serveri uchun tushunarli formatga aylantiradigan MIME (ssr-Ko'p maqsadli Internet Mail Extensions) standarti ishlab chiqilgan. Foydalanuvchi kompyuteri va server o'rtasidagi aloqa mijoz-server rejimida dialog shaklida amalga oshiriladi, bu erda ma'lum bir dastur har tomondan ishtirokchi hisoblanadi.

Tezkor messenjerlarning ishlashi uchun alohida dasturlardan foydalaniladi, ular sizga xabar almashish, ovozli va video ma'lumotlarni uzatish bilan telefon qo'ng'iroqlarini amalga oshirish imkonini beradi. Bu erda muloqot nafaqat kompyuter - pochta serveri, telefon stantsiyalari ham dialogga ulangan.

Telekommunikatsiya texnologiyalari uchun dasturiy ta'minot

Telekommunikatsiyalar - har xil turdagi aloqa liniyalari orqali kompyuterlar o'rtasida shaharlararo, masofaviy aloqa va ma'lumotlarning barcha shakllarini, shu jumladan ma'lumotlar, ovoz, video va boshqalarni masofadan uzatish.

An'anaviy telekommunikatsiya tarmoqlariga quyidagilar kiradi:

- Kompyuter tarmoqlari (ma'lumotlarni uzatish uchun).
- Telefon tarmoqlari (ovozli ma'lumotlarni uzatish).
- Radio tarmoqlari (ovozli ma'lumotlarni uzatish - eshittirish xizmatlari).
- Televizion tarmoqlar (ovoz va tasvirni uzatish - eshittirish xizmatlari).

Jamiyat rivojlanishining turli bosqichlarida telekommunikatsiya tizimlarida axborot uzatishning yangi usullari, vositalari va texnologiyalari qo'llanilgan.

Telekommunikatsiya tarmoqlarining konvergentsiyasi (radio, telefon, televideniye va kompyuter tarmoqlari) uchun yangi imkoniyatlar ochadi ma'lumotlar, ovoz va tasvir uzatish. Bu Internet da'vo qiladi

- global universal multiservis roliga
- (infokommunikatsiya) yuqori sifatli yangi avlod tarmog'i
- ma'lumotlar, ovoz va tasvir uzatish

Telekommunikatsiya texnologiyalari - bu axborotni uzatishning algoritmlari, usullari va vositalari majmuidir. Zamonaviy telekommunikatsiya texnologiyalari global kompyuter tarmoqlaridan foydalanishga asoslangan.

Global kompyuter tarmoqlari - bu hududiy va mahalliy tarmoqlarni, shuningdek, uzoq masofalarda bir-biridan uzoqda joylashgan alohida kompyuterlarni birlashtiruvchi kompyuter tarmoqlari. Eng mashhur global tarmoq Internet (kompozit IP tarmoq).

Global Internet 1990 yilda ARPANet tarmog'i asosida yaratilgan. Internetda ma'lumotlarni uzatish uchun TCP / IP tarmoq protokollari oilasi (stek) ishlatiladi.

Kompyuter tarmog'ining dasturiy ta'minoti axborotni qayta ishlash samaradorligini oshirish va texnik vositalardan maksimal darajada foydalanish uchun, shuningdek, shaxsiy kompyuterlarning ishlamay qolishi va ishdan chiqishi holatlarida hisoblash va axborot tarmog'i resurslariga jamoaviy kirishni, tarmoq resurslarini dinamik taqsimlash va qayta taqsimlashni tashkil qilishni ta'minlaydi. texnik vositalar va boshqalar.

8. funktsiyalari taqsimlangan tarmoq operatsion tizimi shaklida amalga oshiriladigan tizimli tarmoq dasturiy ta'minotiga tarmoq operatsion tizimlari kiradi. Ularning imkoniyatlariga quyidagilar kiradi:

➢ tarmoq uskunalarini qo'llab-quvvatlash;
➢ tarmoq protokollarini qo'llab-quvvatlash;
➢ marshrutlash protokollarini qo'llab-quvvatlash;
➢ tarmoq trafigini filtrlashni qo'llab-quvvatlash;
➢ printerlar, disklar va boshqalar kabi masofaviy resurslarga kirishni qo'llab-quvvatlash.

p., tarmoq orqali;

★ tarmoqni avtorizatsiya qilish protokollarini qo'llab-quvvatlash;

★ masofaviy foydalanuvchilarga kompyuter resurslaridan foydalanish imkonini beruvchi tarmoq xizmatlari tizimida mavjudligi.

Tarmoq operatsion tizimi yordamida amalga oshiriladigan boshqaruv quyidagilarni o'z ichiga oladi: abonentlarga axborotni qabul qilish va berish vaqtlari va ketma-ketligini rejalashtirish; tarmoq kompyuterlari tomonidan hal qilinadigan vazifalarni taqsimlash; vazifalar va chiqish xabarlariga ustuvorliklarni belgilash; o'zgartirish

kompyuter tarmog'ining konfiguratsiyasi; foydalanuvchi muammolarini hal qilish uchun tarmoqning axborot hisoblash resurslarini taqsimlash.

Microsoft Windows Server 2012 server operatsion tizimiga misol bo'lib, u keyingi avlod tarmoqlari, ilovalari va bulutli xizmatlarni quvvatlantirish uchun mo'ljallangan. Bu sizga kuchli aloqa va ilovalarni ishlab chiqish, yetkazib berish va boshqarish, yuqori darajada himoyalangan tarmoq infratuzilmalarini yaratish hamda tashkilotingizdagi texnologiya samaradorligi va qiymatini oshirish imkonini beradi.

Microsoft server operatsion tizimining ushbu versiyasi tashkilotlarning operatsion xarajatlarini kamaytiradi, operatsion samaradorlikni oshiradi, quvvatdan samaraliroq foydalanishni ta'minlaydi va kompyuterlarning ish faoliyatini oshiradi, shuningdek, serverlarni boshqarishni soddalashtiradi va mijoz va server kompyuterlarida Microsoft virtualizatsiya strategiyasidan foydalanish imkonini beradi. .

Novell kompaniyasining NetWare tarmoq operatsion tizimlari uzoq rivojlanish tarixiga ega. Yuqori samaradorlikni ta'minlash uchun NetWare ko'p vazifalarni qo'llab-quvvatlamadi, grafik foydalanuvchi interfeysi yo'q edi. NetWare-ning so'nggi nashrlari tarmoqlarni soddalashtirish va himoyalash uchun yechimlarni taklif etadi - korporativ va ommaviy, simli va simsiz, saqlash va mijozlar ish stoli.

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PEDAGOGICAL AND PSYCHOLOGICAL ASPECTS OF USING INFORMATION TECHNOLOGIES IN THE EDUCATIONAL PROCESS

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Abstract: *Presented is the article demonstrating information concerning the meanings of artificial intelligence. As an example, projects in the field of artificial intelligence are given.*

Key words: *expert, methodology, project, social, corporate, process, model, system, object, chatbot, private, information.*

The rapid development of science and technology created the basis forinformatization of all spheres of society's life. The place of the country in the economy, human life and the world community remains dependent on the state of information technology development.

The state of development of modern technologies depends primarily on the intellectual potential of society, including the development of the education sector. Issues of the content and quality of education are considered a priority in the society. In the developed and developing countries of the world, special attention is paid to informatization of education. While searching for ways to develop education and increase its effectiveness, the introduction of new information technologies in education has become the focus of reforms in the field of education. In the world, distance learning is gaining popularity as an important part of the open education system. In the information space of our planet's civilization, every member of society uses information continuously in their daily activities. The volume of information, which is constantly increasing, serves to increase the intellectual potential of the society. The use of information in all spheres of the life activity of every member of the society is the basis for the formation of the information environment. Modern information technology environment includes information objects, their interaction, technologies and means of information creation, distribution, processing, collection,as well as the organizational and legal structure of information processes. Nowadays, the educational system must take into account the capabilities and requirements of humanity.

The educational system should be person-oriented, that is, it should be differentiated, taking into account the various characteristics and qualities of the person. In the recent past, in many countries of the world the average student-

oriented education system today is not satisfying not only the student but also the society. Any educational system is formed in a certain social, scientific, technical, economic, cultural and finally, political environment and develops. It is considered the most important environment and socio-economic factor. The main features of the educational process are its integrity, systematicity, periodicity and technology. Integrity means the inseparable unity of the processes of education and training, as well as the processes of development and formation of a person. Education and training, although science distinguishes them, are related to each other and have a lot in common. The content of teaching is mainly scientific knowledge about the world. Norms, rules, and values prevail in the content of education.Teaching mainly affects intelligence, education has become primarily a consumer-evidence area of the individual. Both processes affect the mind and behavior of a person and lead to its development. Despite how close they are, these are specific processes, and science considers them separately in the theory of education and didactics. In this way, the methodological principle and the integrity of the entire pedagogical process, which are considered especially relevant in modern conditions, are ensured. The educational process and the educational system are also common, because the processes consist of the properties of the systems. It can be said that educational processes are a series of changes in the state of the educational system. Scientific and technical progress, cultural and political environment can promote or slow down socio-economic changes. The educational system serves to fulfill the main tasks of socio-economic and cultural development of the society, because the school, higher education institution prepares a person for active activity in economy, culture, political life. That is why the school and higher education institution are important as the backbone of education. At the same time, socio-economic changes and scientific and technical progress find their expression late among school and university pedagogues. It takes a certain period of time to master new ideas and new technologies in the thinking and receptive activities of teachers and students. Person-centered learning, first of all, changes the paradigm of education. If earlier teaching was considered a priority in the educational system, now in the era of information society, the priority is directed to teaching to read. For this reason, it is necessary to replace the teacher-textbook-student paradigm of education with the student-textbook teacher paradigm. For these purposes, the teacher should choose the methods and technologies of teaching in such a way that he should create an opportunity for students not only to acquire ready-made knowledge, but also to search for knowledge from various sources, acquire it independently, form a personal point of view, justify it and use previously acquired

knowledge to obtain new ones. Such training can also be called developmental.Acquiring knowledge is important for developing thinking factor, any assimilation or acquisition of knowledge does not have a developmental effect on the student's thinking. For this, it is necessary to activate knowledge and forms of activity. A simple return of acquired knowledge will not be enough for the development of independent thinking of readers and students. Active cognition, independent thinking activity is very necessary.The activity of independent acquisition of knowledge and the process of applying the acquired knowledge become the formation of new knowledge, a source of effective thinking of the student. For this reason, in the process of reforming the field of education in our country and in the developed countries of the world, the development of pedagogical technologies is aimed at finding the necessary information, being able to pose a problem and solve it, being able to critically analyze the acquired knowledge and apply this knowledge to solve new problems.Nowadays, the need for personalized education is becoming clear to everyone.Person-oriented teaching is teaching that takes into account the student's personal characteristics, abilities and opportunities, and effectively uses advanced pedagogical and information technologies in the development of the student's personality. Thus, person-centered teaching, differentiation and individualization of teaching are considered as the main principle. The variety of form and content – gives the opportunity to choose from the cases offered based on the student's interest, opportunity and personality. Such an opportunity should be reflected in the education system. Different levels of teaching can be a solution to such a problem.The organization of educational activities in such a way that students have to count with a set of everyday subjects and a set of tasks given for them causes many problems. In this case, students cannot focus their full attention on any subject. The best solution to overcome such shortcomings is modular training.

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