



Студенттер мен жас ғалымдардың
«ҒЫЛЫМ ЖӘНЕ БІЛІМ - 2018»
XIII Халықаралық ғылыми конференциясы

СБОРНИК МАТЕРИАЛОВ

XIII Международная научная конференция
студентов и молодых ученых
«НАУКА И ОБРАЗОВАНИЕ - 2018»

The XIII International Scientific Conference
for Students and Young Scientists
«SCIENCE AND EDUCATION - 2018»



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BASIC CONCEPTS OF THE DATABASE

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The flows of information that circulate in the world that embrace us are enormous. In time they have a tendency to increase. Therefore, in any company, both large and small, the question arises of such organization of data management, which would guarantee the best quality work. Some organizations use folder cabinets for this, but many choose computerized methods - databases in which you can safely store, structure and organize large amounts of data. And today without databases it is impossible to imagine the work of most financial, industrial, commercial and other companies. If there were no databases, they would simply suffocate in the information avalanche.

There are many compelling reasons for transferring existing information to a computer basis. Now the price of data storage in computer files is cheaper than on paper. The databases make it possible to store, structure the simplest information and compulsorily retrieve the best tables for the user in the manner. Numerical use of the client / counter server technologies allows you to save even a significant amount of money, the mask and the main value and time of the table to obtain the natural necessary information, to be placed and also the simplest to simplify the sub-access and maintenance, the condition since they are used based on monetary complex processing despite the data and this centralization of their storage. In addition, the compulsory computer allows the counter to store any field data formats, text, drawings, input data in a handwriting mask, photos, the value of the voice recording condition, etc.

To use a database as a huge addition to the volume of stored information, the database in addition to the development of the simplest system devices, version data communications, storage, mandatory funds are needed field the dialogue boxes man - computer, although that allow even a user enters a query format to read files, the value to modify the stored data, the world to add new memo data or modern make decisions except on the basis of changing the stored data. condition To ensure empty these functions physically created specialized system facilities - this management system is the simplest database (DBMS format). Current signature database - obligatory multiplayer database management system data field logical that specializes in the management allowing even an array of information following one or multiple messages at the same time empty users.

This statement of the person is easy to explain, if, for example, the sub-base consider the database of the data of a large bank. the simplest It is mandatory to have all the fields necessary information of the table about the clients, except about their addresses, this credible history, changing the state of settlement accounts, signing financial transactions mandatory, etc. which access to modern this database is available below the sufficiently large the size of the number of employees of the bank, the mask, but among them there is unlikely to be a special person such as this, who has access to the whole of the simplest database, the whole condition, and can physically single-handedly make up to stupid in her changing arbitrary changes. message In addition to data, the mandatory database contains numerical methods and tools that allow each pointer from employees to operate only a mask with those data, the value of which is included in its competence. memo As a result, the data interaction sub-account, by changing the database contained in the database, with the methods that are mandatory for specific employees, the information is generated physically, the counter that they are consuming, and although on the basis of its format, in the written limits of its own, modern editing of data. С понятием *базы данных* тесно связано понятие *системы управления базой данных*.

This is a set of sub-software tools that are mandatory for the sub-creation of a structure, for example a new database, modern content of its content, although editing the contents of the other and visualizing the information. Under the value of the visualization of information, the base message is understood as the selection of the numeric data to be displayed in addition to the

subordination of the specified criterion, the search for their ordering, the mandatory registration and the cash subsequent issuance despite the device of this output or the functions of transmitting communication channels to the message.

In the world of the field there are many modern systems of access control databases. Below Despite the importance of the fact that empty they can work differently with different objects differently and provide a simple signature to the user, various functions are mandatory and the means, fields, most DBMS structures rely on, in addition to a single well-established even complex of basic concepts. monetary This gives us the opportunity to consider one memo system and, in addition to generalizing its concepts, sub-methods and methods, to the empty whole DBMS class. tables As an exception to such an educationally unlikely object, we will select the Microsoft Access database, the condition included in the mandatory Microsoft Office package physically along with the modern ones considered earlier despite the Microsoft Word packages below and Microsoft Excel. decimal In those cases, except when the specific natural methods of subdata operations depend on the simplest version of the program we are using, the condition we will be based on the names of the version of Microsoft Access 2000, except in spite of the fact that, in spite of the speech, the message will be changed about these three generalized concepts and methods, counter for which the sub-difference between such specific versions of the mask programs are secondary

Immediately explain, that if the simplest condition in the database there is no data (a sub data of an empty database), physically it is a cash all the same despite a full database. This fact in packages is of methodological importance format. Although there is no data except in the database, the field but the information, although in it the simplest still exists, is the value of the base structure. at the same time It determines the memo methods for entering data sub-data and this storage is their simplest in the database. Mandatory the simplest out-of-computer "reader is the database version of the logical data - although a business diary, even in which the transfer of each calendar message to the day is allocated memo on the page! Even if in addition to it there is not written down the condition of a line "special, it does not cease to be a daily journal, in spite of having a structure that clearly distinguishes its signature from the condition of notebooks, the field of logical workbooks and other empty writing materials,

Even the databases below can contain a message to different objects, but, to each running ahead, say, numeric that the basic natural objects of any but the simplest database are its tables mask. The simplest database of mandatory data has a large at least one logical table. Accordingly, the access structure of the simplest even the signature database is identically equal to the message structure of its table.

We know the numeric that the structure of access to a two-dimensional table below form the size and row columns empty. Their analogs except in the structure of the field of the simplest database to save data are fields and records the simplest. If the records of the signature in the table are mandatory yet, then the field of its structure except formed only access by a set of fields. Despite changing the composition of the size of the base fields except the table (or there are their properties), we change the mask of the database structure of the data value and, accordingly, the tables get a new physical database.

List properties of fields changing databases

The base fields, despite the data, do not physically justify the logical structure of the database - although they still define the size of the group value of the data property, except for those written to cells, for example, belonging to each field of fields. The following are the simplest basic properties of the condition fields of tables, the condition of databases most of the example is a Microsoft Access database.

- despite the field name - specifies the sub format as follows format to access the required data of this field counter when automatic objects read operations with even the database (by default the names of clearly fields are used by memo as the sub-heading of the columns to save the tables).

- The simplest Field type - the condition determines the data type, fields that can be owned by itself in addition to this field.

- Even size of the field - the format specifies the limit signature length (in containing symbols) of the data that can be placed today in another field.

Base Field Conditions

- Natural Field Format - this determines the way the simplest data formatting is entered in the cells that belong to the field.

- The Input Mask - Logical field specifies the form whose access is entered below the data size in the field (empty data entry automation tool).

- natural Signature - the sub define determines the title of the simplest column of the table mask for the given field of the field (if the natural signature is not specified, except that the property Name of the field tables is used in the quality of the header by changing the column).

- Numeric value for the counter is the default - sub is the value of the characters that the mask is entered in the cells except for the field automatically (the natural automation tool is the simplest data entry).

- mask Condition for condition value is a constraint physically used for except validation despite the input of data (format is an input automation tool, except that it is used, numeric as a rule, a field for data, although having a numeric type, a simple money type other than or a type other than dates).

- Memo Sub-error message is a program text message, a sub-database that is automatically issued by the database when the user attempts to enter the same identically in the logical error data field (although the data error checking is performed automatically, for example, if the Condition modern field is set to a value).

- A mandatory field is a property, a condition that determines the mandatory filling of the given field when the database is filled;

- Empty lines - a property that allows input of empty string data (from the property The required field differs in that it does not apply to all data types, but only to some, for example, text).

- Indexed field - if the field has this property, all operations related to searching or sorting records by the value stored in this field are significantly accelerated. In addition, for indexed fields, you can make the values in records be checked against this field for duplicates, which automatically eliminates duplication of data.

Here we must pay special attention to the reader's view that since different fields can contain data of different types, and then the properties of fields can differ depending on the type of data. For example, the list of the above field properties refers mainly to text-type fields. Fields of other types may or may not have these properties, but they can also add their own. For example, for data representing real numbers, the important property is the number of characters after the decimal point. On the other hand, for the fields used to store images, sound recordings, video clips and other OLE objects, most of the above properties do not make sense.

Data types. We are already familiar with the main types of data. So, for example, when studying Microsoft Excel spreadsheets we saw that they work with three types of data: texts, numbers and formulas. Database tables, as a rule, allow working with a lot more different types of data.

Text is a data type used to store ordinary unformatted text of limited size (up to 255 characters).

- Memo field - a special data type for storing large amounts of text (up to 65,535 characters). Physically, the text is not stored in the field. It is stored elsewhere in the database, and the pointer is stored in the field, but for the user this separation is not always noticeable.

- Numeric - the data type for storing real numbers.

- Date / Time - the type of data to store the calendar dates and the current time.

- Monetary - the data type for storing money. Theoretically, you could use numeric-type fields to write them, but there are some features for sums of money (for example, related to rounding rules) that make it more convenient to use a special type of data, rather than setting up a numeric type.

- Counter - a special data type for unique (not repeated in the field) natural numbers with automatic build-up. Natural use - for order numbering of records.
- Logical - a type for storing logical data (can take only two values, for example, Yes or No).
- The OLE object field is a special data type intended for storing OLE objects, for example, multimedia objects. In reality, of course, such objects are not stored in the table. As in the case of MEMO fields, they are stored elsewhere in the internal structure of the database file, and only the directives to them are stored in the table (otherwise the work with the tables would be extremely slow).
- Hyperlink - a special field for storing URL addresses of Web-based Internet objects. When the link is clicked, the browser automatically starts and plays the object in its window.
- The substitution wizard is not a special data type. This is an object whose configuration can automate the input in the data field so that you do not enter them manually, but choose from the drop-down list.

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REVIEW ON AN ORGANIZATION OF SELF-STUDY WORK OF A LEARNER AND ITS FEATURES

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In 19th century, German educator and thinker F.A. Diesterweg while considering the idea of developing the mental forces of learners, noted: "Development and education cannot be given or communicated to any person. Everyone must achieve this through his own activity. A thing that a man has not acquired through his independence is not his." Based on aforementioned, the importance of the role of self-work in the learning process began to be realized long time ago. According to the experience of European universities, a student majorly gets an education not from solely attending lectures, and taking seminar hours, but mainly from a self-work, and a self-study of recommended materials, via writing essays and doing critical thinking exercises. Therefore, Self-Study Work (further - SSW) of a learner is becoming a leading tool in an educational process, as a result of modern requirements in educational system. As SSW helps a learner to effectively gain and expand her knowledge in an individual manner, and to solve problems, so its organization should be done in a concise and thorough way.

It is worth to mention that the problem and advancement of organization of SSW of a learner is constantly discussed in local and foreign platforms of pedagogical literature, scientific conferences, Internet forums and more. According to Russian researchers as K.J.Babanski, A.V.Usova SSW is considered as a method of learning; while Kazakhstani pedagogues B.N.Yessipov, T.I.Shamova give it a definition as a form of organization of lessons, and another group of scientists led by M. Martinez-Pons and F. Weinerg sees it as an element of the model of