



Adopt Warehouse Management System in the University of Al-Qadisiyah

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الأهداء

اهدي نجاحي وباقة ورد معطره الى من ارضعتني الحب والحنان الى رمز الحب وبلسم الشفاء (الى والدتي) الى سندي وقوتي وملاذي بعد الله الى من حصد الاشواك عن دربي ليمهد لي طريق العلم الى القلب الكبير (الى والدي) "كن عالماً...فأن لم تستطع فكن متعلماً، فأن لم تستطع

فأحب العلماء، فأن لم تستطع فلا تبغضهم " واخص بالتقدير والشكر: الدكتور / مصطفى جواد رديف على اتمام هذا البحث وقدم لنا العون ومد لنا يد الساعدة وزودنا بالعلومات اللازمة لأتمام هذا البحث فكان لنا نوراً يضىء الظلمة التي تقف احيانًا في طريقنا هو من زرع التفاؤل في قلوبنا وقدم لنا الساعدات والتسهيلات والأفكار

له مناكل الشكر والامتنان

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Chapter one

Introduction

الخلاصة

تطرقنا في مقدمة البحث على مفهوم التخزين وهو ان تحتفظ في الأشياء في مخازن الا ان يتم الحاجة اليها ، ولأتمام عملية التخزين لابد من توفر عدة امور وهي تصنيف وتكوين وفحص ومعالجة ، لكن اثناء عملية الخزن قد تحدث مشاكل منها مشاكل في التحديث والتكرار لذلك لجات المؤسسة الى انشاء قاعدة البيانات تتكون من حقول وجداول يتم حفظ المعلومات فيها لذلك التفتت هذه الدراسة الى توضيح كيفية الاستفادة من قواعد البيانات في خزن بيانات او معلومات في قاعدة بيانات التي بإمكانها تحتفظ بكميات هائلة من البيانات هذه المعلومات قد تخص موظفين في جامعة القادسية، حيث تقوم هذه القواعد بخزن البيانات لفترات طويلة بدون تكرار او التحديث المستمر وحفاظاً عليها من الضياع اضافة الى ذلك مانعاً الأشخاص الغير مخولين من الاطلاع عليها لذلك تحتفظ هذه البيانات في مخازن أكثر سرية، أيضاً هناك نظام لإدارة قواعد البيانات . هذا النظام يقوم بالحفاظ على امن البيانات والسيطرة على المعلومات بشكل كبير، وله دور في انشاء وصيانة وقراءة قواعد البيانات وترتيبها. لكن هناك بيانات او معلومات مكرسه يتم خزنها في مستودع كبير وهذه المستودعات يتم تزويدها بالبيانات من قاعده البيانات وتكون البيانات داخل

المستودعات بيانات معزولة ومتوفرة وجاهزة بشكل كامل وايضا تكون موضوعية وهذه البيانات مختلفة من مستودع الى اخر وان التخزين في هذه المستودعات يتم بطرق عديده وعادة ما تظهر النتائج في هذه المستودعات بطرق احصائية وحسابية.

Abstract

We discussed in the introduction to the concept of storage is to keep thing instore if needed. In order to complete the storage process, there must be several things such as classification, coding, inspection, processing and others. But during the storage process may occur problems including problems in the modernization and replication. Therefore, the institution resorted to establishing the data base consisting of tables and field where information is stored in it. This study is aimed at explaining how data bases can be used to store data or information in the data base which can retain huge amounts of data. This information may belong employees at university of Al-Qadisiyah. These data base store the data for long periods without repletion or constant updating to keep them from loss. In addition to preventing unauthorized persons from viewing them. Therefore, these data are kept in more secret storage. Also, there is data management system. This system maintains data security and control information significantly. It has a role in creating. Maintaining, reading and arranging database. But there are dedicated data or information stored in large repositories. These repositories are supplied with data from the data base and the data inside the warehouses is isolated, available, fully prepared and also objective and these data are different from warehouses to warehouses. The storage in these warehouses is done in many ways and usually the results are shown in these warehouses in

statistical and computational ways.

Introduction

A warehouse is a facility in the supply chain to consolidate products to reduce transportation cost, achieve economies of scale in manufacturing or in purchasing or provide value-added processes and shorten response time. Warehousing has also been recognized as one of the main operations where companies can provide tailored services for their customers and gain competitive advantage. There are various types of warehouses: they can be classified into production warehouses and distribution centers and by their roles in the supply chain they can be classified as raw materials warehouses, work-in-process warehouses, finished good warehouses, distribution warehouses, fulfillment warehouses, local warehouses direct to customer demand, and value-added service warehouses.



1-coding: -

Because of the number and variety of varieties and the difficulty of placing them accurately we resort the coding. We are patting symbols and numbers instead of description.

- The coding is in several areas:
- Materials the parts- tools
- Filling material -purchased parts
- -hard ware-measurement tools
- Scrap-spare parts-many
- The output is under operation -general takes
- Advantages of coding:
- Avoid complicated
- Characterization
- Help with planning
- Providing a basis for registration, computers and pricing
- Easy exchange, query and drag select exactly
- Enhancing purchasing
- Efficiency
- Avoid couples
- Symbols used in coding: -
- The alphabetical system (c/r/p)
- Digital system (35/56/08/12)
- Methods of classification: -

- Depending on the nature of the product (raw materials)
- Metals, copper, aluminum
- According to the nature of use
- According to the nature of the original item number purchased from the supplier
- Coding properties: -
- Covers all stored items
- Confirm the symbols used
- Allowing future expansion
- Only one code per category
- Easy to understand
- Must include the following:
- Dimensions
- The performance
- The weight
- Chemical analysis

2- classification

- First: classification according to the relation of the class to one manufacturing process.
- A- For direct varieties (Raw materials, and parts semi. Finished materials final process)
- B-For indirect varieties (maintenance materials, tasks)
- Second: classification according to the list of government warehouses.

A- Sustainable varieties: Latvia use and must be returned after dispensing with such as furniture, equipment, spare parts.

B-Consumable items: completely used such as raw materials, fuel and writing tools.

C-Categories not valid.

They are damaged and can not be repaired such as iron, scrap, worn clothes and damaged leather.

- Third classification according to the movement of items (FSN) or the frequency of purchase.
 - A- Fast moving varieties
 - B- Slow motion varieties

C-stagnant varieties

- Fourth: classification by value of use of items (ABC)
- a- Group A: -their number 20% worth up to 80%
- b- Group B: -the number of 25% of it's value may reach 13%
- c- Group C: -their number 55% worth up to 7%
- Fifth: -classification by unit price
- a- their prices are high
- b- low priced items
- c- their prices are average
- Sixth: -classification according to the importance of the category for use(VED)
- a- important and vital varieties

b- medium importance varieties

c- low importance items

- Seventh: -classification according to the difficulty of obtaining items (SDE)

a- Rate varieties

- b- Varieties are difficult to obtain
- Eighth: classification by sources of supply
 - a- Government supply sources
 - b- Normal sources
 - c- Local sources
 - d- External sources
- Ninth: -classification by season of purchase.
 - a- Seasonal varieties
 - b- Non. Seasonal varieties
- Tenth: -interdepartmental classification Example: -
 - 1- Classification by category value
 - 2- Classification by difficulty
- In this research, we address the important issue of database. Creation, management and storage of data within records or fields. When creating data base. The data base will be stored in tables or records and then controlled modified. Processed and retrieved. This data base can help solve system problems application. Based filed these problems are minimized by the repetitive and minimized

dates that must be made to the data and also contributed to these systems in maintaining the data added to the control and control over the overall operations through the data base reduce the cost work and thus reduce the final price to the service on in. addition to making sure to maintain security and data privacy measures.

- The aim of the research: -is to build an information system for the university of Qadisyah using the programming language access sense helps in the decisionmaking processes easily and accurately where the information systems is stored in all the data is considered as the main source of information if the health of data and accurate information and help system to speed decision
- Making appropriate and also helps in planning process and control over the assets of stores in the university.
- Research problem: -
- Through the visits of the field of the realty of the stores of the university sample research shows that it is the absence of data base system to control the warehouse materials of various types (stationery, tools, planning, and furniture's, as well as the problem of the lack of an indicator shows what critical items must be provided to the warehouses for treatment the work.

Chapter two

1-Storage concept

2-Data base

3-Data base management system

4-Data warehouses

5-Storage in the data warehouses

- Storage concept

- It is a job whose function is to keep some things until they are needed these items may be stored in warehouses or special stores with the conditions and conditions suitable for storage it is based on planning, organizing and controlling the materials stored in the continuous flow.
- There many institutions of different types resort to storage to meet future needs in view of storage is one the important activities of the supply of these institutions is the university of Qadisiyah which resorted to store information about the university and the assignment of works and property.
- Storage mechanisms
- 1- Human being is the active element in all life processes.
- 2- Means of measurement which include weight, weight and storage place
- 3- Legal texts are the task of the process
- Data base
- Is a set of loops, tables, vectors, means and integrated data structures that are interconnected in a way that allow information to be stored without duplication?
- Or, more simply data linked together within this rule by logical links.
- Data

- This information may be information numbers or information about an employee stored within the database
- The information

Which are organized and processed for use, for example: - figures (2*4) have become useful information.

First: - Importance of data base

- 1- You store all the data in complete and accurate ways and then organize to be easier retrieval
- 2- Make adjustments to the stored data and also follow the changes that occur in them.
- 3- Storage of enormous data beyond human potential and performing certain processes and treatments that are impossible to perform in the hand.
- 4- Is important in achieving the confidentiality of the data stored so that no one can see it.

Second: - Data base function

- 1- Has the ability to adding bug information or data to new files.
- 2- Has the ability to delete old data that we no longer need.
- 3- Changes the existing data according to the updated information.
- 4- The ability to search and query information or limited information.
- 5- Displays the blocks in the form of report or structured forms.

- 6- Also, its function is to arrange and organize data within files
- 7- Calculates the total, final or arithmetic mean of the required data.

Third: - Data base types:

- 1- In size
- a- May be small projects

A- Access B- Paradox C- FoxPro

- D-DBASE III+ IIV E- R: BASE
- b- Large project
 - A-Oracle B-SQL C-DMS D-IDMS
 - E-Informix F- Sybase
- 2- Interns of mode operandi: -
- Rules that are visual, network, or redactional.

Fourth: -characteristics of data bases

- 1- Tables: -these are records. These are records contain information of the same type.
- 2- Records: -a line or group of rows of the tables that contain a set of fields or are stored in fields.
- 3- Fields: -an element with records that stores a signal statement or information.
- Field properties: -
- 1- Field name

2- Field type

3- Field size

3-Data base management system(DBMS)

- Is a set of programs and these systems are used to define the language of queries and maintain the security of data and control of information in full.
- Data base management systems consist of two parts: -
- 1- The first part
- The heart of data base systems: -
- This part is able to create maintain and read data base and can be called as data base engine.
- 2- The second part: -
- Is a multi-platform system tools through which we can access the data base engine and implements the work related to the data bases.
- These programs are often callable through operating systems or within programming languages. These data base systems compete among themselves in maintaining the integrity of data as well as the speed of call and order of data.
- Functions of the data base management system
- 1- Creation data base: -
- When the data base is created, the data is stored inside the tables. These tables are created by creating a new data

base, inserting a table, importing or linking to the table from another data source.

- 2- Update data base
- 3- Run the database
- 4- Database maintenance
- 5- Protection, security and data integrity
- 6- Synchronize process control
- The data base management system shall be:
- 1- Modeling language: -you define the data base graphic
- 2- Data structure: -designed to handle huge amount of data
- 3- Query language: -enables users to analyze, modify and feed data as well as directly query database
- 4- Handling mechanism: -includes ACID properties

4-Data warehouses

Data warehouses: -a data base in which data or information is stored to satisfy the needs of the decision maker. It contains properties that are distinguished from the properties that the data base contains in its daily operations.

- Data warehouses properties
- 1- It is provided with data from other data base
- 2- Supports complex queries
- 3- The beneficiary analyzes the warehouses data through the data default tables using analytical tools.
- The data is in the data repositories

- 1- Data is isolated from the operations systems and the warehouse base is supplied from the operations data base
- 2- Data is available and fully ready
- 3- Integrated data base bug based standard or standard.
- 4- Related to time stamped periods
- 5- The data are usually manipulated on a given subject matter
- 6- Update operations are also not done on an individual basis.

Classifications and types of data repositories.

- These types and classifications depend on multiple factors. These factors lead to structural similarities or specifications of application. Therefore, the authors and the author agree that each organization has its own data warehouse which is different from the different types of data repositories other data warehouse organizations.
- Organization cannot match the same techniques of the repository in the application and:
- 1- Because the applications of operations are not the same
- 2- Data encoding and encryption are different
- 3- Applications that have been configured and configured to process different data
- 4- The basics of input and methods of data collection are different
- 5- Techniques and tools that are used in helping different decision makers
- 6- Logical schemas are different

- 7- Supported models as repositories of different data.
- Classification based on building data repositories
- With the large volume of data stored in the organizations operations systems, the organizations have set up data repositories. There is also need to make use of the data stored in the operations systems that can be obtained from the information provided on the world wide web.

5- Storage in the data warehouse

- Relational database is used in data stores and methods of analysis (CLAP) called in this case RCLAP relator or may use the multi-directional database called multidimensional OLAP.
- View result in data repositories
- There are many ways to analyze the data used by presentation process:
- 1- Calculation: when using data analysis, the result will appear in a statistical calculation.
- 2- Data extraction: -the results appear in the form of a graphical or statistical each containing information that may be specific or specific (management, marketing, employs).
- Difficulties facing the implementation of data repositories:
- 1- The construction process may take time starting from the plan until it is applied

- 2- Due to the size and complexity of the warehouse management may be difficult, so the workers must be trained, especially on the quality of data.
- 3- Bellor the construction process must be assessed for the needs of the user
- 4- There are forms and locations of data that appear after completion of the warehouse construction and this makes it difficult to manage the warehouse.

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