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# Design System and Implementation Electronic Archives Al Yarmouk University College

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*Abstract— That modern technology has provided many of the efforts and reduced a lot of time in all areas, for example use papers in the past to manual archiving, which if compared to the use of modern electronic archiving find it difficult and take long times. Electronic archiving are used today to solve the difficulties of papers archiving, solve the slow in the search, solve the difficulties of add some information by an update operations on list. This importance came the idea of studying ( Electronic Archiving ), This is in addition to the importance of clarifying what the advantage of archiving electronic conservation long-term data and maintain the integrity of damage and speed in the search for the desired information in the database and its flexibility and ease for the user to update the information that stored in the database. As for the methodology followed in this paper will help my use of a set of names of employee have been keeping these names and other information for each employee in the database formed by (Microsoft access 2007) With the conservation of the documentation for each employee ( such as nationality and citizenship certificate high and other documents .....), where the document is saved format as (image) .The paper has been has been building in (Visual BASIC6.0) and linked every name of employee in database with his (image). The In this paper aims to, Facilitate the storage and retrieval of large stored files., Quick and easy to find the required information. , Avoid the wrong in bringing the desired information.*

*Keywords— Electronic Archiving, DBMS, employee.*

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## I. INTRODUCTION

The archive and the means of action, and a tool for the conduct of institutions style other resources, whether human or financial or material; and control archive management reflected positively on the good governance of the institutions of whatever area of specialization [1]. At context of the computational, data archive to store electronic documents suggesting, sets data multimedia files, and so on for a fixed period of time. We have noted historical research, the emergence archive was an Arab and, in particular in the regions of Syria and Iraq, so that the concept of Archive as a documentary carries the human activity and history of civilization, was the beginning of the article clay to paper, papyrus paper-ROM and then to the printed paper and then to Microfilm floppy (Disquieted) up to now to the optical disk (CD / DVD) and I have discovered archaeological research (add paragraph in the device)[2] .From the following considers appear the problem.1. Lose a long time to find a document from a collection of document.2. Need some of index to all documents that found in library.3. There are rates of not accuracy in bringing the desired information.4. Need for highly experienced people to know the place of each employee files.

## II. DATABASE MANAGEMENT SYSTEMS DBMS

The DBMS data base management system is the sum of the data and hardware and software, and users that help your organization the operating of data management. The primary function of the DBMS was to provide credible and effective ways of recovery many users. We had the a Yarmouk University has 8,000 students per year and the each student can has almost 8 classroom of records in year, then for over 15 years, It will accumulates 960,00 thousand Yarmouk University class logs. Is not easily for the extraction the records meet your specific criteria for this group, according to existing criteria for, this range of quite small registers! View of the current concern for "grade inflation", the model asked might try to answer is to define the development of the average grade in the introductory Scripting over a 15-year cycles. It was therefore obvious that data retrieval core function of efficiency of database systems [3].Majority the database management system bargain to multiple users trying simultaneously to reach multiple data items of and, more often, the same data heading. For example, suppose we like to introduce automation registration system for the students. Of students may log a by using channels or workstations. Naturally, we assume that database is containing the deliver information depicting capacity of cycles and number of seats currently available Let us assume many students wishing to register 400 in a classroom September 2016. Unfortunately, they have limited capacity of course and could not all demands for to be satisfied, for example, still just a single seat available within that category, you must cope with data these competing demand Base the allowed Only one registration to go through [4]. System devices database management systems are in most cases, that are installed on PCs for general purpose. From devices features strongly influenced to develop DBMSs[5 Many criteria normally used to classify DBMSs. The first is the data model Upon which DBMS. Key data currently in use trade model are many DBMSs is the relational data model. The implement data model object is In some commercial systems but you do not use a large scale. Many of the older applications Is still working on database systems based on the hierarchical data network Models as shown in Figure (1) [6].

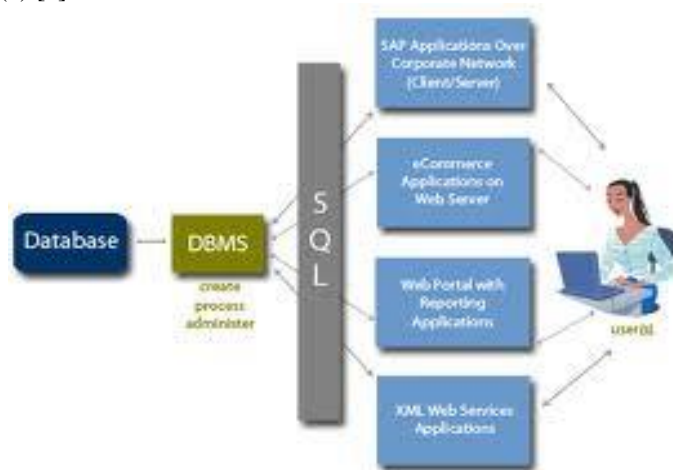


Figure (1):General form to the Database Management Systems

## III.COMPONENTS OF DATABASE

- **TABLES AND RELATIONSHIPS**

Classes would be stored as schedules end up in a database system. You should be careful what you have included every column in the table [7].One of the most important aspects is to avoid unnecessary duplication of data. The Sales table needs to identify which customer participated in a sale. It accomplishes this task by storing just the primary key CustomerID in the Sales table. An alternative would be to store all of the Customer attributes in the Sales table. However, it would be a waste of space to repeat all of the customer data every time you sell something to a customer. Instead, you create a Customer ID primary key in the Customer table and place only this key value into the Sales table. The database system can then retrieve all of the related customer data from the Customer table based on the value of the Customer ID as show in the Figure (2) [8].

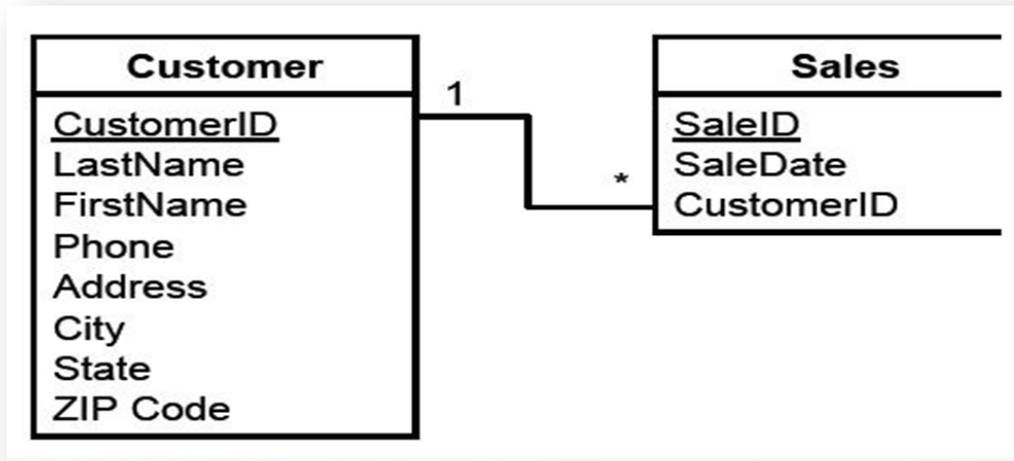


Figure (2) : Represent the Customer and Customer ID  
 Notice the 1 and the \* in Figure (2) Explanations in the graph. That labor standards represented. Most companies are has a policy (1), just a single client be listed on the sale but a customer can take part in Many of the (\*) different sales [9].

**IV. DEFINITION ARCHIVE**

Archival collection of documents of the Organization through technical operations of In acquisition and classification or indexing in order to preserve and facilitate access to take advantage of them Through the preparation of means of IGAD and the provision of appropriate services to users of the archive [10].Is a collection of papers, documents and images are often published, Reservation for reasons historic, with some other materials, these documents arising from the activities of the sector Public and private "Knew that the total archive of documents created or obtained during the exercise activity, all natural or legal person, and every public facility or public or private body, regardless of the date of this document or form or Container, Figure (3) shown the format the electronic archive[11].



Figure (3): Format the Electronic Archive

## V. ARCHIVE IS DIVIDED INTO THREE TYPES

### A. *Archive current*

Where Unreserved current documents, i.e., that are used every day to need it at work

### B. *Archiving*

Data storage and information on the electronic medium for a long time term importance and rarity, for historical reasons and security, and retrieval of time necessary. Or is the process of conservation and storage of documents that will be used in historical research, because it is of interest to ongoing.

### C. *Archival material*

A records and books old and rare .. etc., it is not easy to compensate and require maintenance and special handling

## VI. CHARACTERISTICS AND ADVANTAGES OF ELECTRONIC ARCHIVE

The advantages of the electronic archive to facilitate the cloning process in several forms, quickly and with minimum cost of copy paper, can also be automatically transferred from place to place Thanks to the Internet. The National Archives can be a bank of electronic information on State-level, stored in the archives over the long term and provides decision-makers - immediately upon request - All information necessary to help them in their duties, and later to the researchers within Legal procedures[12].

Features of the Electronic Archiving

1. Provide space and dispensing Archive paper and piles of transactions, files, and other.
2. Linking parts of the institution among them an important Diverged location.
3. Ease and speed of electronic a transfer of messages and documents among the branches of the institution or organization outside the scope of foundation.
4. Accessibility Access to electronic documents whatever the site of the beneficiary or used for this documents.
5. Control of documents and transformations and follow-up, development, and knowledge of the functioning Transactions within the Foundation.
6. Multiple access points for documents saved electronically, making it easier retrieval of documents.
7. Access to the beneficiaries of any their speed and Services to them.
8. Reduce Errors and violations Systems.
9. Reduce Reviews government departments of by the beneficiaries.
10. Central In dealing with the documents and thus the lack of inconsistency and redundancy in ordering or decisions.
11. Uniform standards in dealing with documents linking the information in more than a database, either within or outside the parent organization information, whether the mother or abroad.
12. Improve the performance of government institutions, as well as private sector institutions.

## VII. STEPS TO CREATE ELECTRONIC ARCHIVE

The construction steps are

1. Resigned data and documents to be archived from all departments and divisions in the various offices.
2. Encoded documents to be archived according to the manual previously prepared for this purpose.
3. Introduction to computer memory or any medium of storage media by Msamsp programs and systems to accurately document archiving and preservation in addition to equipment required for the introduction of these documents to your computer and archiving such as printers and other means of entry.
4. Save documents in the files of the archived e-Archive.
5. A continuous updating of data, and adjust the work to achieve the desired security, maintenance and repair of equipment so as not to stop impeding the progress of work.

6. Issuance of reports on a regular basis for work and materials stored in the archive, the report includes the following information:
  - a) Types of records and files that were installed by the storage.
  - b) Different media used to store records.
  - c) Foundations that are in accordance with its order of records, for example, serial numbers, according to a specific directory can be used to output the data when you need it.
  - d) Way to update the data recorded in different files, so as to add new data or to modify some of the previous data or delete some of the other.
  - e) Ways and means to control the errors that may occur when you enter the data according to the order of their records and clear that the operations should include the virtual methods that can be used to detect errors. For example: After you update the data can be output summary aggregates after various additions and withdrawals that have occurred and compare the results with the summary before the update to ensure compliance, which must be achieved if the operations had been accurately.

Study the nature, volume, and frequency, and response time, and with regard to access to information from the computer memory and updates the data stored in the files of this memory. This means that the need for a balance between response time on my computer system and the specific cost required by each of the programming for this order and store the data in accordance with this operating system, and update the data whenever the need arises. Although the establishment of data management using computers and various file its own may require considerable investment in capital and staff who need them, such as this administration, but it can provide a valuable service to the Foundation, can also be adjustments from time to time easily and the cost of a few .

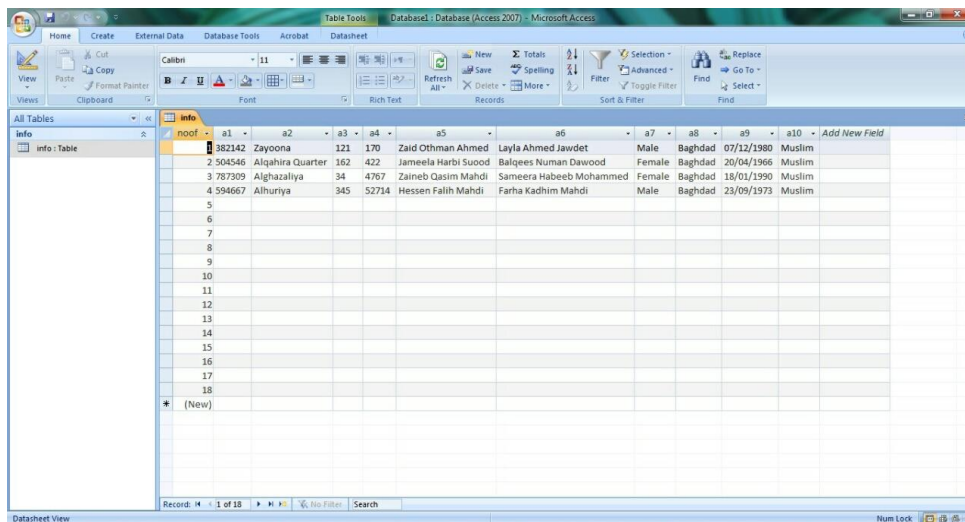
### VIII. DESIGN SYSTEM AND IMPLEMENTATION

A. In this system the practical of this paper, we have a range of programming languages and applications for the design and implementation of this system, as follows: -

1. Microsoft access 2007 :- was used to create the database used in the project.
2. Microsoft visual basic 6.0 :- has been used to deal with the database and linking Folders information with information on the database.
3. ActiveX Data Object ( ADO ) :- Have been using this tool link between the database and programming language.

B. steps of design

1. created a database was saved as dB And consisting of table saved as named table and formed from a number of columns ( 34 columns)as shown in Figure(4).



Figure(4) Show Create Table in Microsoft Access.

Where we made the first column is the primary key to avoid a repeat of the sequence of the employees in subsequent operations. Here was the creation of a blank database or possible to add data to in the current step.

2. Was set up four folders have been stored with the path of the program and the purpose is to store The employees files in it, its name is (nationality, citizenship certificate, ration card , A picture of the employee)and we have to verify the existence of these folders If they do not exist will be automatically generated it.

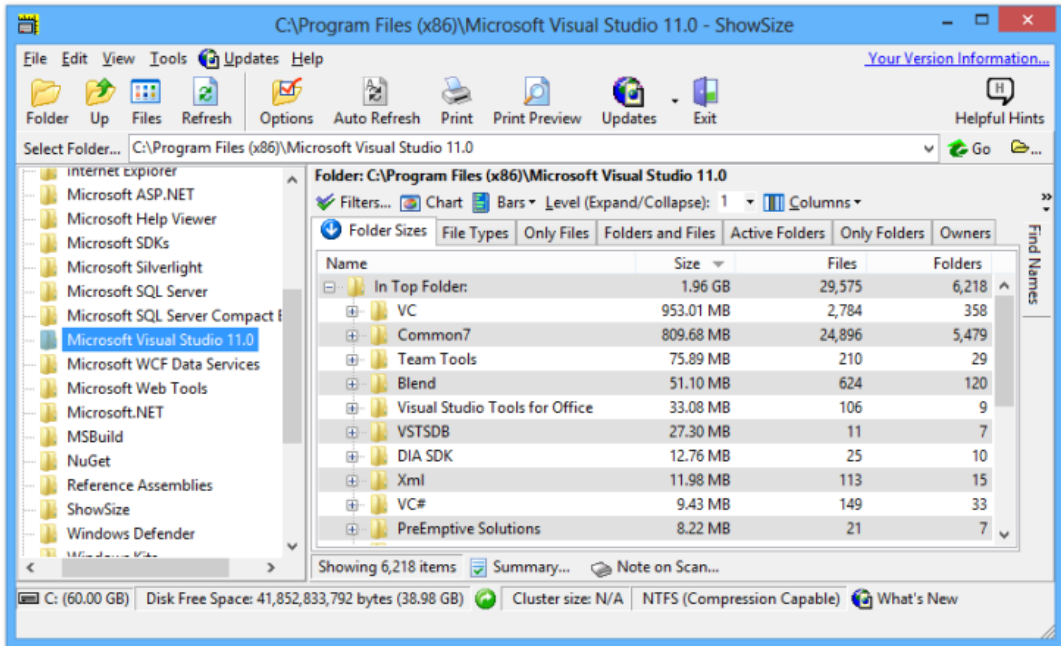


Figure (5) shows the location of these folders.

As is clear, the location of these folders will be with the executive program site and this path depends on the location of the program for the computer on which the program.

3. In the language of the visual basic6.0 create four interfaces in order

- Interface defines for the project and the project designers.
- Interface to enter the legislature and with the PIN project.
- The main interface of a project that has been treated the actual with data in database.
- Interface views the files where the displayed images are linked with database data

### IX. IMPLEMENTATION SYSTEM

The implementation of proposed system been from third interface because its contain the important command used to procedure most operation of this system, this interface consists of the following:

- A. The use of textboxes to view the data constraints in the database, where all been linked textboxes with a column of the database columns, the first column with textbox Column n with textbox n .
- B. .The use of labels to refer to the name or type of data displayed in textbox Located next door on the left.
- C. Was used image to view a picture of the employee in the database and that data will be displayed in the textbox , where the image is displayed employee with the filled textbox The statements, either in the absence of a picture of the employee in the folder "Pictures of the employees " , which is located with the course of the program, it will be show button "choosers picture of the employee" rather than a picture of the employee, which allows us to The possibility choosers image of inventory already in the computer or exist on disk or ... etc..
- D. The functions and buttons that give more flexibility than user to enter data into the system as the shown in Table 1

TABLE I  
THE FUNCTIONS AND BUTTONS IN SYSTEM

No	Name functions and buttons	Details
1	change the image	Change the image of the employee stored in a folder images the employee, Mentioned in the second step, when you need to replace it.
2	nationality	displays the fourth interface, display an image of the nationality at case of a picture as similar to the sequence that the extension of employee jpg But in the absence of a listed image is displayed open box allows us to choose picture and saved in folder "nationality".
3	certificate	displays the fourth interface, display an image of the certificate at case of a picture as similar to the sequence that the extension of employee jpg But in the absence of a listed image is displayed open box allows us to choose picture and saved in folder " certificate ", the name is similar to the sequence of the employee along jpg.
4	ration card	displays the fourth interface, display an image of the ration card at case of a picture as similar to the sequence that the extension of employee jpg But in the absence of a listed image is displayed open box allows us to choose picture and saved in folder " ration card ".
5	Report of Employees	displays a report on the names of the employees and the sequence of each and every one of them, as well as Mobile number for each employee and benefit in print basic data for the employees.
6	save	saves the changes taking place on the employee data, or save a new employee we wish add to the database with a msg box to confirm save or modify data.
7	New	emptying all the text boxes, Sequence textbox with a value equal to last in the database and increased value of one, for example, if last sequence in database equal to 55, the new value will be equal to 56.
8	Edit	adjusts the employee data previously saved where we are without pressing this button we cannot modify the data in the ( textbox ), In order to save modifications information press the button "save" bottom will be display (Msgbox) to confirm amendments.
9	Delete	Deletes the current employee data with the deletion of all linked files with sequence of employee, display Msgbox to confirm the deletion.
10	Next	Displays the following employee data that comes after the current employee, if the current sequence is the last you'll see the first employee data.
11	Back	Displays the previous employee data that comes before the current employee, if Current is the first sequence data will be displayed another employee.
12	first	displays the first employee data in the database.
13	last	displays the last employee data in the database.
14	Exit	The out of the program with the view msgbox to confirm the exit.
15	Search	Searching for employees exist in the database by showing window to insert part Employee data that will search for the employee on the basis of which, we have chosen the name of the employee and the sequence Because this data cannot be repeated in the database, especially the sequence because it is primary key to the data base.

## X. CONCLUSIONS

The Have reached to the conclusion in this paper the. First the time needed for searching for an employer file without Archiving takes about 10 min, while in this program it takes only 3sec.Second these arching about a documents by using proposed system is more accuracy compared with the manual searching. Thirdly reduce the number of tables better from increase the size of the individual table because difficult in found relationship between them.at Last function (where) in visual basic increased the number of probabilities in searching operation instead of the operation (=).We would suggest in future works database making more inclusive contain all the information college. Possibility taking documents from external devices such as the (scanner) instead of receiving a folder document format in the PC 0.3-making the proposed system online by sharing with the College of the site to be worked Using the network.

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