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University of Diyala
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Department of Computer
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**Intelligent student Restaurant Sale Point System This
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Science
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science**

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿ وَلَوْ أَنَّمَا فِي الْأَرْضِ مِنْ شَجَرَةٍ أَقْلَمٌ وَالْبَحْرُ يَمُدُّهُ،

مِنْ بَعْدِهِ سَبْعَةُ أَبْحُرٍ مَّا نَفِدَتْ كَلِمَاتُ اللَّهِ

﴿ إِنَّ اللَّهَ عَزِيزٌ حَكِيمٌ ﴿٢٧﴾ ﴾

صدق الله العظيم

سورة لقمان آية ٢٧

الاهداء

في مثل هذه اللحظات يتوقف اليراع ليفكر قبل ان يخط الحروف
ليجعلها في كلمات تتبعثر الاحرف وعبثا ان يحاول تجميعها في
سطور كثيرة تمر في الخيال ولا يبقى لنا في نهاية المطاف الا قليلا
من الذكريات وصور تجمعنا برفاق كانوا الى جانبنا فواجب علينا
شكرهم ووداعهم ونحن نخطو خطواتنا الاولى في غمار الحياة
ونخص بالجزيل الشكر والعرفان الى كل من اشعل شمعة في دروب
عملنا والى من وقف على المنابر واعطى من حصيلة فكره لينير
دربنا الى الاساتذة الكرام والى الاصدقاء الاعزاء .

شكر وتقدير

الحمد لله الذي انزل القرآن شفاء ورحمة للمؤمنين والصلاة والسلام على من اعطي السبع المثاني والقران العظيم وعلى اله اجمعين الذين رفعوا بهمهم العالية اعلام الدين وعلى اصحابه الذين امنوا به وازروه ونصروه واتبعوا النور الذي انزل معه الذين ابلوا البلاء الحسن بنصرته واقامة دينه.

وبعد...

احمد الله والثناء عليه جلّت قدرته على توفيقه باتمام هذا الجهد العلمي المتواضع فيطيب لي ويبهج نفسي ان اتوجه بالشكر والامتنان الى الاهل الذين ساندونا وكانوا نعم العون في كل الظروف والشكر والتقدير للست رجاء نسأل الله ان يجازيه خير الجزاء ولن تفي الكلمات بحقه فقد كان نعم العون والشكر والتقدير للدكتور بشار فقد ساعدنا وقدم لنا توجيهات للمشروع ونسأل الله ان يجعلها في ميزان حسناته.

ABSTRACT

The world is living now in a new world revolution, information revolution which is connecting with technology information age and the center of the world moved from revolution in to knowledge.

Today, the human society's base on knowledge on ton wealth, then the knowledge became the center of progress and extensive information dos not mean anything if society cannot used these information wisely.

Where programming languages and design have been used in this work which include VB, SQL Database.

So as to give the format and programming required

SUPERVISOR CERTIFICATION

I certify that the preparation of this project entitled
Intelligent student Restaurant Sale Point System
prepared by

سعد مهدي محمد
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was made under my supervision in the Department of Computer
Science/College of Science/University of Diyala and it is part of the
requirements for obtaining a Bachelor's degree in Computer Science

Signature :

Name :

Date :

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CHAPTER ONE
INTRODUCTION

1.1 Introduction

The world is living now in a new world revolution, information revolution which is connecting with technology information age and the center of the world moved from revolution in to knowledge. Today, the human society's base on knowledge on ton wealth, then the knowledge Became the center of progress and extensive information dos not mean anything if society cannot use this information wisely [1].

The gap between advanced countries and developing or growing countries become a knowledge men gap because of huge information in revolution information technology and telecoms. The information became an important resource to the person and society; the electronic chips begin to play a basic role such a coal which is a basic thing in the past when the industrial revolution was so important. A technology gap approach to why growth rates differ [2].

The modern technology contains the digital technology in twenty-first century. This advanced shorten the time between any two areas on the earth because of using electronic network. The information revolution is connecting with information technology through using computer System and telecom system [1].

1.2 What is ICT and Why

ICT (information and communications technology - or technologies) is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning. In general there are some important things as the requirements for the implementation of ICT, there are [3]:

1. The availability of tutor support services that can help The candidate when Learning difficulties.
2. The existence of government officials / managers of ICT.
3. The existence of the positive attitude of the candidates and educators on computer technology.
4. Availability of learning system design that can be learned / known by every the candidate.

1.3 Problem of the Current System

Due to the manual means been used by the restaurants, keeping information about food items, sales, food orders and Financial accounts , a lot problems are encountered which includes:

1. Solve the problem of delay
2. Lose of vital document as the filing system is manual.
3. Take a lot of time to retrieve a particular information.

1.4 Research Objective

The aim of this study is to develop the work of the big and small restaurants and move from the traditional work to electronic work and keep abreast of developments and shorten the time and effort

1.5 Research Scope

The research work focuses on enhancing the work system of restaurants. This is one of the most important steps that we take to advance society in the age of technology. It is chosen as a case study, to explore its current work system, as well as to develop Intelligent restaurants calculations System that can be used to increase efficiency of restaurants.

1.6 Expected Contribution / Benefit

The contributions of this study are to Providing support to self-employment in the street to implement modernized techniques of The .Restaurants management especially in Financial accounts System current Restaurants System needs to change it from traditional or manual system to technical or automated system. Finally, this study is specific to self-employment assist to achieve their goals and strategy in reducing the time and efforts to provide unique products.

CHAPTER TWO
LITERATURE REVIEW

2.1 Role of Information Technology in the Academic System

The introduction of computer into information technology has massively improved the information need of organization; the success of this machine is dependent on the knowledge base. Therefore, one can be prompted to ask aloud “what is a computer” defined a computer as An electronic device that can perform automatically at a high speed of A sequence of logical operations according to instructions giving to it inform of pre-arranged program [4].

Define a computer as an electronic device capable of accepting data and instruction; process the data base on the instruction to generate result or output in such a manner that is yet to be equaled by any other known machine to mankind [5]. Define computer by saying that computers are looked upon as obedient servants who are ever ready to free man from tedious procedures and produce result as compared with human computing time [6].

Define a computer as a machine that is capable of accepting input data, store and process the database on the instructions giving by the computer users and in this way produce expected result, generally called output [7].

World net describes an information system (I.S) as systems consisting of all communication channels used within an organization and include software and hardware. It may also be define as a system that collect and process data (information) and provide it to manager of all levels that use it for decision making, planning, program implementation and control.

The aim of restaurant sale point system to financial accounts and management of items, food, money and materials in Self-employment using computer software is to improve the quality and accuracy of information provided to all involved as well as assisting workers in compiling and reporting information, making work lesser for the management.information technology has been an integral part of the freelance system for several decades.

The world is entering an era in which technology will literally transform every aspect of business, every aspect of life and every aspect of society [8]. Since the arrival of internet technology, school system has taken a new shape style with a blend of convenience and satisfaction.

That computer base education includes both computer-assisted instruction programs that interact with students in a dialogue and a broader array of educational computer applications such as simulations or instructions in computer programming. Learning from a student bedroom, office or anywhere in the world has made its way into university system With the advent of internet technology.

Information technology has always helped the university system to educate student in better way. To explain few examples, the intelligent

master sheet is a method where the teachers obtain information of students more easier. This is safe, fast. Filling out the documents and comparing options and writing for Approval is a time consuming process. Through the internet, this process is made much easier and sometimes the approval is made within minutes. This explains an efficient way of obtaining and saves time and money for the candidates [9].

2.2 Data and Information

The concept of data and information are very important in understanding issues that go with development and implementation of a computer software based online clearance system. The term “data” and “information” are used interchangeably every day conversation as meaning the same thing. Too many manager and information specialist. However, these terms have distinct meaning.

Data simply consist of raw unprocessed facts while information is a data that have been processed by the computer [10]. Gives the following definition of data; a graphic or textual representation of facts concepts, numbers, letters, symbols or instructions suitable for communication, interpretation or processing.

Data is the basic element of information that is use to described objects, ideas, conditions or situations [11]. Defines data and information as Data is fact events, transactions and so on, which have been recorded.

They are the raw materials from which information is produced. Information is data that has been produced in such a way as to be useful to the recipient. Data are fact obtained by observation, counting, measuring, weighing etc.

Which are often records of day-to-day transactions of the organization. For example the date, amount, and other details of an invoice or Cheese, payroll details of payment, the number of a student living in a particular hostel and soon [10].

That concept of information in an organization sense is more complex and difficult than the frequent use of this common word would suggest [11]. That information is data that have been processed, transmitted by the recipient, interpreted and understood by the recipient.

Here it should be noted that the user, not just the sender is involved in The transformation of data into information. There is a process of thought and understanding involved and it follows that a given message can have different meaning to different people.

Based on this, one can conclude that data which has been analyzed summarized or processed in some other fashion to produce a message or report which is conveniently deemed “management Information” only becomes information if it is understood by the recipient. Therefore it the user who determine whether a report contains information or just processed data [12].

2.4 Data Bases

In the early days of computerization, it was normal to maintain specific files for individual application. Data were processed centrally in batches and there was little or no online interrogation of data. This approach is wholly inefficient for most of today's data processing systems.

Supporting this enumerated the problems that result from organizing the data using the file system [13].

a. There exist high redundancies between files which result from the fact that the information is replicated in different places, and that these replications are not controlled by a central monitor

b. Inconsistencies might result from the possibilities that a program makes changes on the files it uses without these changes being made (at the same time) by all other programs that uses the files.

c. There exist in flexibility against changes in the application: if new actions or event arise in the course of time, these can be realized at a substantial expense of time.

d. The work of many programmers involved is characterized by low productivity, seems program maintenance is expensive: if the structure of an existing file has to be modified during its life time, then all application programs have to be modified correspondingly.

e. Finally, there is the problem of adopting and maintaining standards (with respect to coding data format etc.), which is important for exchanging data or for migration to new operating systems, or even to a new computer system.

To overcome these problems, data bases were developed. It is now common for large organizations to organize their operational data using the data base technology. The subject of data is adequately covered in many works in data base technology.

Data base as a collection of data supporting the operation of an organization. Quoting CIMA, provide a more detailed definition [13]. A data base is a file of data structured in such a way that it may serve a number of applications without its structure being dictated by any one of those applications, the concept being that programs are written round the data base rather than files being structured to meet the need of particular programs [10].

Dealt extensively on the need for the use of computer on such data base systems like computerized clearance systems [6]. In the world "At the center of any information system is a data base, which is any collection of related information grouped together as a single item [5]. The term can also apply to the ways in which information is catalogued, analyzed, stored and used manually". The view that without computer, effective handling of candidate records cannot be achieved effectively in a data base, all the data is defined together rather than each file being defined separately [7].

In fact, all the literature consulted seems to support the fact that a data base is a collection of structured data with the structure of data being independent of any particular application.

Specify the need for data base [10], listed the following advantages:

a. Sharing: in an organization, information from one department can be readily shared with others.

b. Security: users are giving password or access only to the kind information they need to know. Thus, the payroll department may have access to employees pay rate but they would not.

c. Fewer files: with several departments having access to one files, there are fewer files therefore, excess storage or what is called redundancy is reduced.

d. Data Integrity: older filing system many times did not have integrity i.e. a change made in the file in one department might not be made in the file in another department. As one might expect, these can cause serious problems and conflict when data is used for important decision affecting But department. To advantages enumerated above, at abs [4].

a. Standard/access protocols can be enforced.

b. Currency of data can be maintained.

c. Data/program independent can be maintained.

d. Conflicting requirement can be balanced among users.

In these days of integrated networks, the database appeared as the most logical method for organizing the operational data of large organizations. One may as well say that these advantages give the database the attraction over the traditional file processing method.

2.5 Visual Basic (VB.NET)

Is a multi-paradigm, object oriented programming language, implemented on the .NET Framework. Microsoft launched VB.NET in 2002 as the successor to its original Visual Basic language. Although the ".NET" portion of the name was dropped in 2005, this article uses "Visual Basic [.NET]" to refer to all Visual Basic languages releases since 2002, in order to distinguish between them and the classic Visual Basic.

Along with Visual C#, it is one of the two main languages targeting the .NET framework. Microsoft's integrated development environment (IDE) for developing in Visual Basic .NET language is Visual Studio.

Most of Visual Studio editions are commercial; the only exceptions are Visual Studio Express and Visual Studio Community, which are freeware. In addition, .NET Framework SDK includes a freeware command-line compiler called vbc.exe. Mono also includes a command-line VB.NET compiler its advantages are:

1. Easy and fast language for creating Windows applications.
2. It supports object oriented programming, but not fully.
3. Visual Basic is the object language of the curve.
4. Easy to learn and understand.
5. Easily detectable errors.
6. Its adoption of HTML made it easy to use and understand.
7. When you write correct commands, they give you examples to confirm that the code is correct.
8. Allows you to skip some errors when typing a specific code.

2.6 SQL (Structured Query Language):

Is a standard interactive and programming language for getting information from and updating a database. Although SQL is both an ANSI and an ISO standard, many database products support SQL with proprietary extensions to the standard language.

Queries take the form of a command language that lets you select, insert, update, find out the location of data, and so forth. There is also a programming interface Stonebreaker [15].

CHAPTER THREE

PRACTICAL PART

3.1 Chapter Summary:

1- Home Page

2- Types

3- ADD food

4-Sale food

3.2 Home Page

Resturant Sale Point

لوحة بيع

اضافة مواد

اضافة اصناف

3.3 Types

اسم الصنف

اضافة صنف

الصنف
طعام
حلويات

3.4 ADD food

الصف

السعر

الطعام

تحديد صورة

اضافة مواد

الصورة	السعر	رقم الصف	الطعام
	5500	2	مشكل 1
	8000	1	بيتزا

3.5 Sale food

Restaurant Sale Point

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CHAPTER FOUR

CONCLUSIONS AND

SUGGESTIONS

4.1 Conclusions

In this research we have built a Intelligent restaurant sale point System at the Self-employment using VB application language, which added high flexibility in the storage process providing data. Finally, our project is able to find the final result of the orders and then print the result. This application provides a convenient service for both customer, Time and effort in the process

4.2 Suggestions

Our suggestions for future work are:

1. We aspire to add new tools for security And facilitate and organize the work
2. Wish to adopt the system to be used online.

اشهد بأن اعداد هذا المشروع الموسوم

نظام ادارة المطاعم الذكي

والمعد من قبل الطلاب

سعد مهدي محمد
سجاد عباس صادق
حسن بشير هيلان

قد تم تحت اشرافي في قسم علوم الحاسوب / كلية العلوم/جامعة ديالى
وهي جزء من متطلبات نيل شهادة البكالوريوس في اختصاص
علوم الحاسوب

التوقيع:

الاسم:

المرتبة العلمية :

التاريخ :

References

- [1] Singhal, A., & Rogers, E. M. (1989). Indias information revolution.
- [2] Fagerberg , J. (1987). A technology gap approach to why growth rates differ. *Research policy*, 16(2), 87-99.
- [3] Sansanwal , D.N.: *Information Technology and Higher Education*. UNIVERSITY NEWS, Vol. 38, No. 46, 2000.
- [4] Funk M. (1980). *Perspective in education planning*. Ibadan, Nigeria Odun prints and pack, Agbowo.
- [5] Anigbogu G. (2000). *Systematic planning for educational change*. California: Mayfield publishing company.
- [6] Chimezie F. (2000). "Use of local area network in school. *ERIC Digest*" Syracuse , NY: ERIC Clearinghouse on information resources.
- [7] Obilikwu N.(1995). *Records management project Ibadan, Nigeria*. Adeyomi printing press.
- [8] Hewlett M. (1993). The internet in education column: *special issue+. "internet world", 6 (10).
- [9] Tarlor M. (1980). *Education and training achieve and records manager in the Africa*. Ibadan, Nigeria: Odun publishing company.
- [10] Lucey I. (1991). *Managing record in the Moden office*. Training the wild frontier. *Archivaria* 39 (spring).
- [11] Enwere J.C. (1992). *Records managements in Nigeria: to be or not to be?* Nigeria library or information science review. Lagos, Nigeria: Akin publishing ltd.
- [12] Oketunji S.F.(2002). *Information provision to academic research and development organization in the 21st century*. *The information manager* 2 (1).

[13] Clifton E.B. (1983). Management of records in Nigerian Universities. Problems and prospect. The flectional library 23 (30).

[17] IDAutomation.com, Inc. | IDAutomation.com, Inc. and Benjamin Johnson, Technical Support & Development