Ministry of Education and Science of Ukraine
Ternopil Ivan Puluj National Technical University

Faculty of Computer Information System and Software Engineering
(full name of faculty)
Department of Computer Science
(full name of department)

QUALIFYING PAPER

For the degree of

Master's thesis
(degree name)

topic: Research and creation of an Online Insurance Management System

Submitted by: sixth year student VI ,   group   ICAм-62

specialty   124 System analysis
(code and name of specialty)

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Ternopil
2021

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Faculty   Faculty of Computer Information Systems and Software Engineering
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« »	2021

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ASSIGNMENT
for QUALIFYING PAPER

for the degree of   Master's thesis
<div align="center">(degree name)</div>

specialty   124 System analysis
<div align="center">(code and name of the specialty)</div>

student   Oluka George Paul Ifeanyi
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1. Paper topic   Research and creation of an Online Insurance Management System

Paper supervisor   Iaroslav Lytvynenko, PhD, Professor
<div align="center">(surname, name, patronymic, scientific degree, academic rank)</div>

Approved by university order as of « _27_ » _____ 09 _____ 2021   № _____ _4/7-793_

2. Student's paper submission deadline   02.12.2021

3. Initial data for the paper

4. Paper contents (list of issues to be developed)
Abstract, 1. Analytical review in the field of research, 2. Analysis of the insurance system 3. System design and implementation

4. Occupational Health and Emergency safety

Conclusion, Bibliography, Annexes

5. List of graphic material (with exact number of required drawings, slides)
Slide №1 Title of paper, coals

Slide №2 What is Insurance management system?

Slide №3 Benefit of the new system over the existing system

Slide №4 Insurance policy holders service. Slide №5 Architecture

Slide №6 Home page. Slide №7 Client Registration page

Slide №8 Life insurance claim form. Slide №9 Admin area overview (Dashboard).

Slide №10 Clients registered on the Management System. Slide №11 Product list area. Slide №12 Policies available on the Web application. Slide №13 Customer's profile displayed to the company staff. Slide №14 Conclusion

6. Advisors of paper chapters

Chapter	Advisor's surname, initials and position	Signature, date	
		assignment was given by	assignment was received by
Occupational Health	Dmytrotsa L.P.		
Emergency safety	Lazaryuk V.		

7. Date of receiving the assignment   September 27, 2021

TIME SCHEDULE

LN	Paper stages	Paper stages deadlines	Notes
1.	Familiarity with the qualifying paper's assignment.	27.09.2021	Completed
2.	Sources on heart rate variability were selected.	27.09.2021-08.10.2021	Completed
3.	Processing of Chapter I Analytical review in the field of research»	08.10.2021-22.10.2021	Completed
4.	Forming of Chapter I Analytical review in the field of research»	22.10.2021-08.11.2021	Completed
5.	Processing and Outline of the Chapter II «Analysis of the insurance system»	08.11.2021-22.11.2021	Completed
6.	Processing and Outline of the Chapter III «System design and implementation»	22.11.2021-25.11.2021	Completed
			Completed
7.	Execution of the task assigned to the subdivision «Occupational Health»	25.11.2021	Completed
8.	Execution of the task assigned to the subdivision «Emergency safety»	30.11.2021	Completed
9.	Registration of qualification paper	12.12.2021	Completed
10.	Standardization control	15.12.2021	Completed
11.	Plagiarism check	06.12.2021	Completed
12.	Preliminary defense of qualifying paper	07.12.2021	Completed
13.	Defense of qualification paper	23.12.2021	

Student   _____ (signature)   Oluka George Paul Ifeanyi _____ (surname and initials)

Paper supervisor   _____ (signature)   Iaroslav Lytvynenko _____ (surname and initials)

ANNOTATION

Research and creation of an Online Insurance Management System // Diploma thesis Master degree // Oluka George Paul Ifeanyi // Ternopil' Ivan Puluj National Technical University, Faculty of Computer Information System and Software Engineering, Department of Computer Science // Ternopil', 2021 // P. 59, Tables – 3, Fig. – 12, Annexes. – 9, References – 17.

The modern system of insurance companies is characterized by a manual the method, as a consequence, poses a serious threat to the operation of the service and too much workload on staff. The manual method involves marketing staff moving from one place to another to meet their requirement broker, as well as files and data of his broker are stored in the closet, which is easily destroyed by rodents. Regarding this method of computer insurance an application for the insurance company will be developed this will be possible remotely connect insurance brokers anywhere so they can perform their actions insurance services, as well as their data will be stored in a secure database.

Keywords: BUSINESS PERFORMANCE, ENTERPRISE RESOURCE INSURANCE SYSTEM, BUSINESS BENEFITS

LIST OF SYMBOLS, SYMBOLS, UNITS, ABBREVIATIONS AND TERMS

Insurance – promises to cover certain potential future losses in exchange for recurring payments. Insurance is meant to protect human life.

Policy – A rule that defines a specific action.

Services – Intangible economic activity is not stored and no ownership arises. Services are   consumed at the point of sale.

Company – A voluntary association formed and organized to conduct business. Company types include sole proprietorship, partnership, and limited liability

Company application – Computer software used to perform a specific function.

Webbase site – ACCESS ONLY ON THE INTERNET

Modern – A New Era of Different Ways of Working

Strategy – A Method Used to Perform Certain Tasks

Qualities – A unique feature of one object that distinguishes it from another.

Organization – A cooperative society with the same motives and goals.

Remote location – Anywhere with Internet access.

Access – Permission to website etc

Table of content

INTRODUCTION

The modern system of insurance companies is characterized by a manual the method, as a consequence, poses a serious threat to the operation of the service and too much workload on staff. The manual method involves marketing staff moving from one place to another to meet their requirement broker, as well as files and data of his broker are stored in the closet, which is easily destroyed by rodents. Regarding this method of computer insurance an application for the insurance company will be developed this will be possible remotely connect insurance brokers anywhere so they can perform their actions insurance services, as well as their data will be stored in a secure database.

Insurance is an important area of the business services industry. US insurance industry is one of the largest sources of income and the fifth largest industry center. The project is based on the implementation of a web application for insurance services, showing the rates offered by various insurance agencies. The main types of insurance considered in this project are home insurance, car insurance, farm insurance and health insurance. Depending on user information, real time rates are generated by different companies. This project is designed for provide and manage good customer relationships.

This process is faced with difficulties that make it less efficient and time consuming; this necessitated a move to a digital method which is currently being used by most insurance companies. This if less difficult and faster than the manual arrangement but the proposed online insurance management system will cut the time consumption to the barest minimum while maximizing efficiency. It will remotely connect the agency's representatives to any area where clients might be and also be able to meet clients request and safely collect and store client information all in a small amount of time.

To achieve this tasks I would make use of Microsoft Visual Studio 2021 for the application development and Microsoft Access 2019 for data storage.

Protection is a significant space of the business administrations area. The US protection industry is one of the biggest pay generators for and the fifth biggest industry in midtown. The task depends on the execution of a web application for protection administrations. Shows rates presented by various protection offices. The fundamental kinds of protection shrouded in this task are home protection, accident coverage, rural protection and health care coverage. As indicated by client data, constant statements are produced by various organizations. This venture focuses on to guarantee and deal with a decent client relationship.

1 ANALYTICAL REVIEW IN THE FIELD OF RESEARCH

1.1 Research methodology methodology

The success of a web application is not primarily determined by its technical characteristics or the quality of its layout. The high visibility and compatibility of web applications allows competitors to adopt the specification and quality of the layout very quickly. Therefore, these qualities will not achieve a sustainable competitive advantage. In contrast, a critical factor in the success of a web presence can be seen in the relationship between business and marketing strategy on the one hand and web strategy on the other. A network built and tuned into your overall marketing strategy is unlikely to be replicated in the short term.

The use of structural systems analysis and design methodologies is adopted as a research methodology practice tool. How you collect your data is a very important factor when using SSADM.

1.2 Method of data collection

After meeting the software requirements, the next step was to find information on the subject. This information gathering process was conducted through a variety of sources, including:

- Observation / Participant Observation.
- Surveys.
- Interviews.
- Secondary Data Analysis / Archival Study.

1.3 Feasibility study

During a feasibility study for the following factors, a research process should be carried out to establish the feasibility of adopting the technology as a result of the

investigation in order to obtain accurate results.

- Service level of the technology
- Total number of usage of technology
- The average increase of users of the technology
- Future modification of the technology

1.4 Service Level of the Technology

The web application is expected to provide insurance policy holders service such as;

- Life insurance
- Medical insurance
- Motor insurance
- Home insurance
- Travel insurance

The use of structural systems analysis and design methodologies is adopted as a research methodology practice tool.

Table 1 – Total Number of Usage of the Technology

INSURANCE	YEAR	TOTAL NUMBER POLICY HOLDERS
IGI COMPANY NIGERIA	2011 – 2013	1,567,483
MENDSON USA	2011 – 2013	56,767,324
REVOLD USA	2011 – 2013	7,345,765

1.5 Average increase of users annualy

For insurance companies, the number of customers always increases due to additional benefits. Each insurer's average increase in subscribers is estimated at

90,000, with some subscribers being able to reissue insurance by the company as a result of that growth.

1.6 Future Modification of the Technology

Over time, various technologies continue to evolve and people's tastes change, so the basic web application will change some functions based on human taste and, if necessary, the whole system. Another essential data collection method is:

- File downloads from internet
- Newspaper, journals and articles
- Other publications concerning companies
- Personal observation.

During a feasibility study for the following factors, a research process should be carried out to establish the feasibility of adopting the technology as a result of the investigation in order to obtain accurate results.

2 ANALYSIS OF THE INSURANCE SYSTEM

2.1 Analysis of the system design

The insurance industry is undergoing fundamental change. The first trend is market saturation, while in the '50s the market growth was almost 15% per year but only 3% per year. As demand declines, traditional markets are increasingly dominated by consumers. In the past, customers have had close relationships with insurers. However, customers have already become more price sensitive for higher quality products. The second trend is competition for power.

This trend is driven in part by market saturation and consumer influence. In a shrinking market, insurance's natural response to declining profits is to increase competition within the industry. Another important factor stimulating competition is the entry of suppliers from other business sectors into the insurance market. First, there are banks and companies that provide financial services.

Necessary response to the above trend, which can be said to be a success factor in the actual insurance industry situation:

- A shift from product orientation to customer orientation

- Market segmentation (e.g. house vs. Industry)
- Development of new individualized product

- More emphasizes on financial services and financial market functions

- Drawing to foreign market
- Cost reduction

The Internet can help eliminate these success factors. Information can be tailored to your needs. A single marketing segment is also possible if required. The Internet is

a new distribution channel that supports all phases of e-commerce (EC), from contact to contract. Web applications can provide powerful software to help you customize a product or product bundle. The Internet is also a global environment where insurance companies can easily and efficiently enter new markets around the world. Finally, like all information systems, web-based systems can reduce costs by facilitating management processes.

2.1 Typical example of a scenario

Typical example of a scenario where using the web application can be benefit to insurance service

CHALLENGE: Your customer has a minor car accident in which he collides with a small truck on the highway, damaging both vehicles. You need to help him quickly, start the claim process, and fix his car.
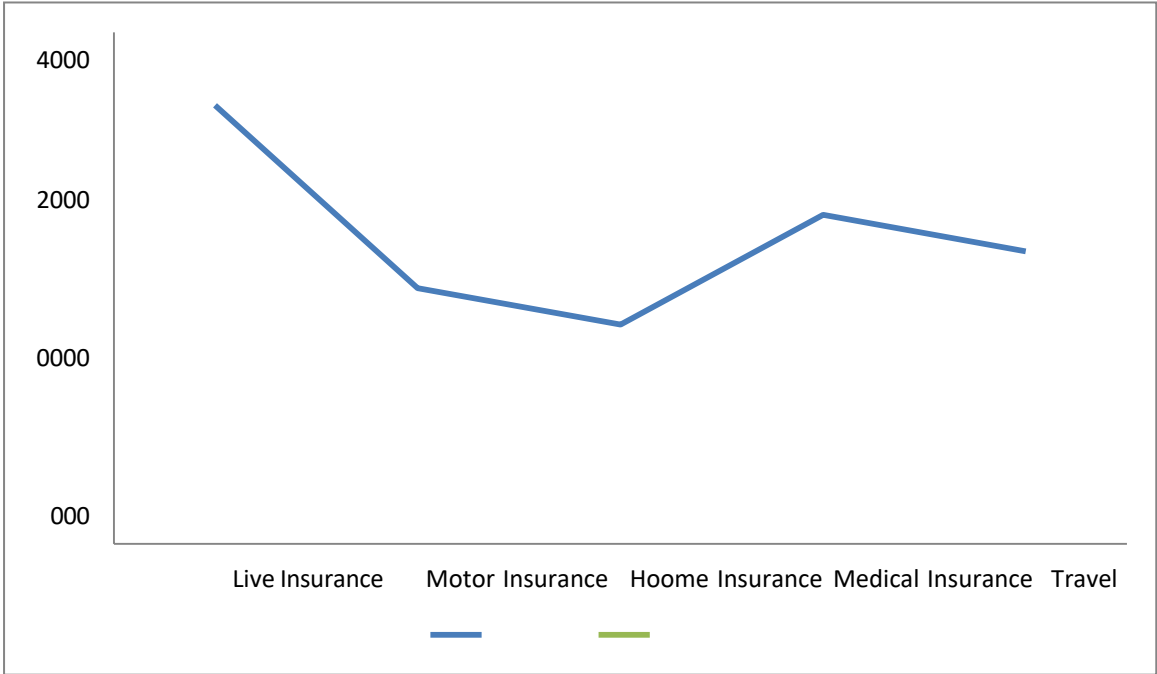
Figure 1 – Customer's policies and claims, view insurance information

Solution: View a customer's policies and claims, view insurance information

and accident photos, and quickly provide insurance information using a web application that can consolidate customer insurance information from multiple systems in one place. Impact of the accident on future insurance premiums. You can also use the maps included in this web application to identify and direct you to body repair shops and car rental companies close to your location. And when he asks you for help, you can do everything quickly, wherever you are. From your office to your desktop computer, from your home to your laptop, or your cell phone or other mobile device on the go.

Benefit: Insurance companies can use web applications to develop rich web applications that transform the customer experience. With access to these applications anytime, anywhere, and on any device, agents can provide instant, top-notch support to their customers, regardless of when and where the customer picks up their phone.

3 SYSTEM DESIGN AND IMPLEMENTATION

3.1 System design

System design is the process of defining the architecture, components, modules, interfaces, and data for a system that meets specified requirements. It can also be viewed as the application of systems theory to product development. Before developing software, certain factors should be considered, such as:

- Purpose of the software
- Cost of maintenances
- Customer needs

Easy adaptability to conditions and modification of the existing feature
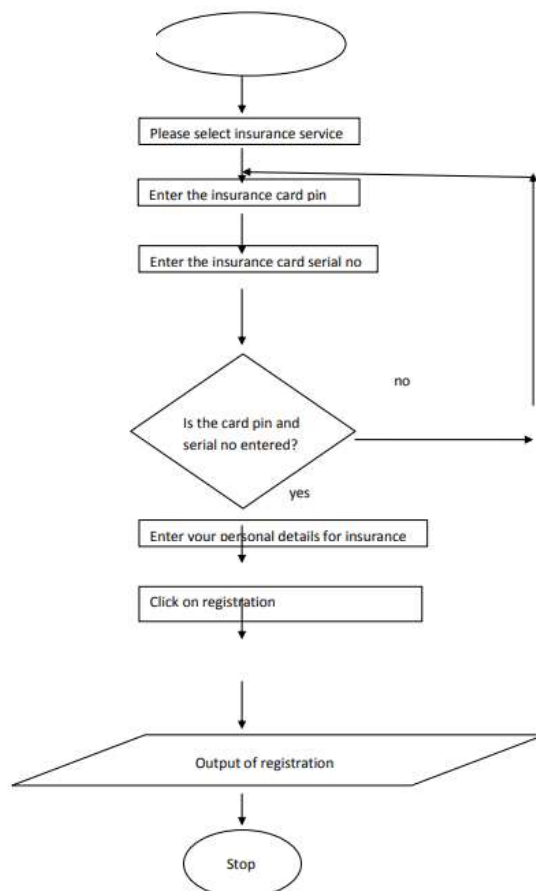
The system flow chart

Figure 3.1 – General flow chart for insurance service process

The graphic representation of a step-by-step approach to the registration process in the flowchart above shows how people using this insurance service application must follow the procedure to achieve the registration process. This is because it is a very important process for the service. You can receive records of broker policies and store them in a database for reference purposes.

3.2 Procedure diagram of users

This article provides a basic explanation of the sequence of operations in the software and describes the different steps and different features discovered to help uncover the relationships that exist between certain types of features. It starts with the first format (startup format). In the process, there is a link between each shape, which can be achieved using an event called a click. There are many relationships.
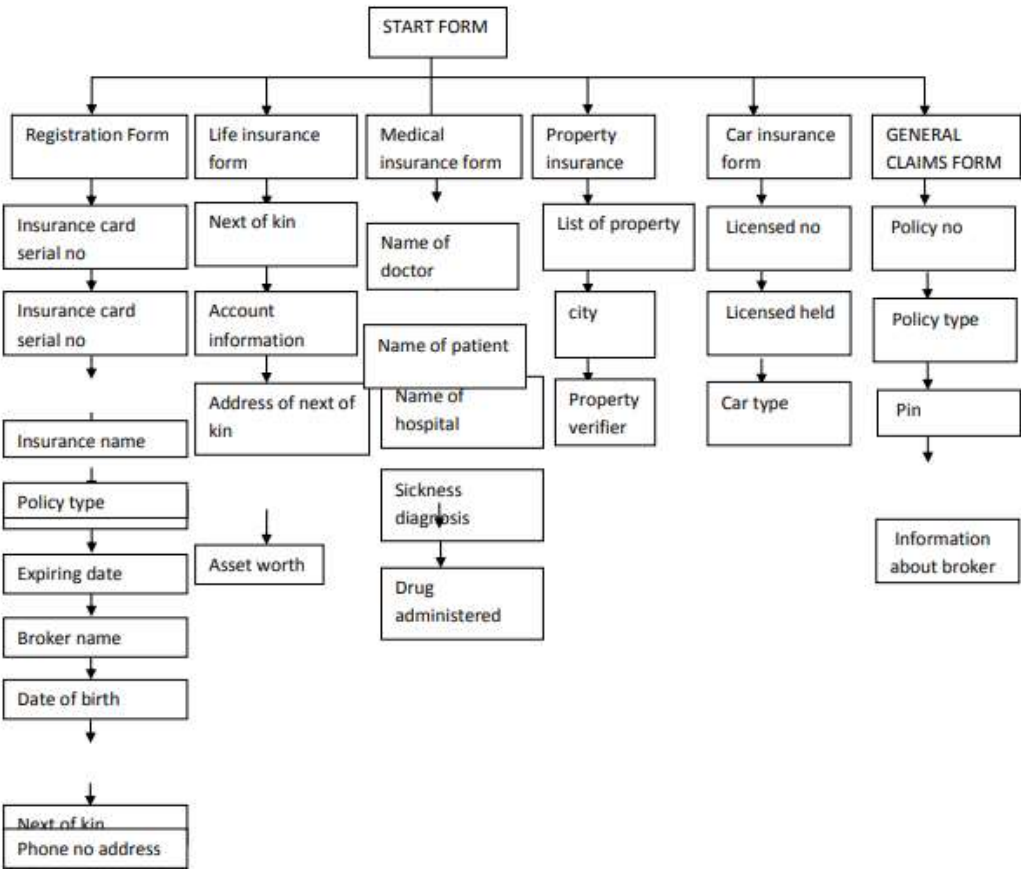

Figure 3.2 – Procedure diagram of users

3.3 Start form

As you can see in the procedural diagram above, the start page is usually the parent node that connects other information. Information on the start page includes:

- Registration button

- Life insurance button

- Medical insurance button

- Property insurance button

- Car insurance button

- General claims button

These buttons are all referred to as objects that create their own interactions with specific events that can be clicked or double-clicked, depending on the action the user wants to perform. The registration button usually informs the user of the registration form, the life insurance button connects the user to the life insurance form, and the health insurance button connects the user to the health insurance form implemented in this project. The event that drives the object is a click, and the user needs it. Click the button to display the action name displayed as the button text. If the user clicks this button without first registering, they will be presented with a secure form asking them to confirm their registration status if they can simply verify that they are connected to the form they want to perform an action on, otherwise they will be prompted to register before registering. You can use this service.

3.4 Registration form

The link object for this form is a button called the Register button. This form is what every broker needs to do business. Because it is this form that helps insurance services track the activity of an insurance broker. It has the following features:

Insurance card serial no:

- Card pin

- Insurance name

- Policy no

- Policy type

- Name of broker

- Date of birth

- Expiring date

All of this information is required during the registration process.

3.5 Life insurance form

This form will help assign that person life insurance and the following to achieve his or her well-being in his or her absence. This feature includes

- Next of kin

- Address of next of kin

- Bank info

- Asset worth

- Medical insurance form

The health insurance form covers people in need of treatment and is already insured under this policy. Because you are insured, you are entitled to treatment and information about the treatment you received will be entered into this form for future reference and include:

3.6 Property insurance form

This form helps to insure an individual's property in the event of property damage as a result of certain natural disasters. Individuals can use this form to recover this property. Features required for filling:

- List of property

- **Company verifier**

- **City located**

3.7 Car insurance form

This form helps the car owner insure his car, which requires the car owner to indicate some characteristics of the car, including:

- License no

- License type

- License date

- Car Type

3.8 General claims and form

It is the form in which the insurance value of the customer is maintained for the company. This form can be used by customers who know how much they will be billed after certain insurance has expired. Information provided includes:

1. Policy no
2. Policy type
3. Card pin

If the insurance broker enters this information correctly, all of that broker's information will be displayed, including the registration process.
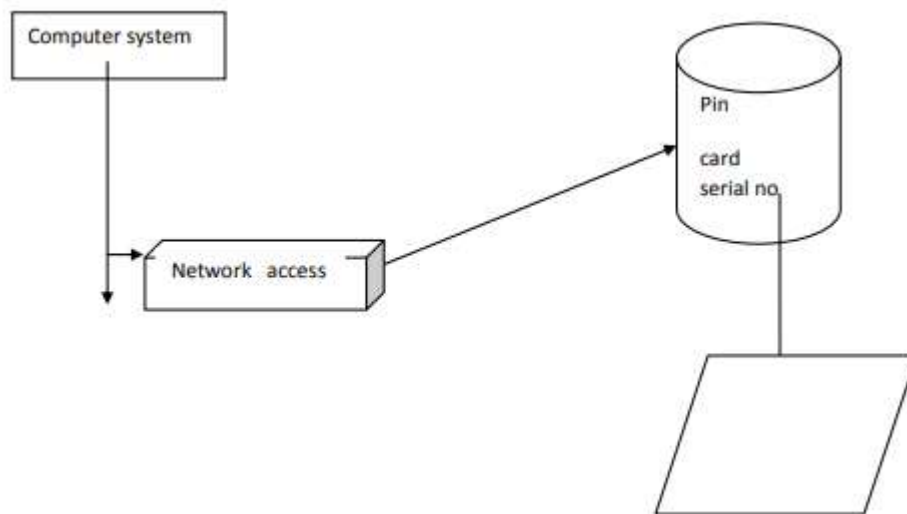
3.9 System architectural diagram

Figure 3.3 – System architectural diagram

The role of the Information systems to provide information to management which will enable them to make decisions which ensure that the organization is controlled. The organization will be in control if it is meeting the needs of the environment. In relation to control systems can be classified into open-loop and closed-loop.

Architectural design simply models the interactions between user devices. A computer system must be installed and connected to the network. Before a broker can use this service, they first purchase an insurance scratch card that includes: Serial no

3.10 Pin which need to be scratched off

When you open the app, you need to enter and pin your scratch card serial number information to keep it safe and ensure that only the person who purchased the scratch card can register and complete the process.

Network Access

This helps establish a connection between the computer system and the service database. Without a network connection, users cannot access information about receiving advertisements from the database.

DATA BASE

For all the information that needs to be acquired, the information that needs to be stored in a database system, which is a collection of related information, the database helps to store all the information and details about the insurance broker. Security is also very important to any database and the security used in this database is the admin pin and admin password.

3.11 System implementation

The system was implemented using the Visual Studio platform and Microsoft Access 2007 as the database. When querying and retrieving information, the sql programming language was also used to query and retrieve information from databases.
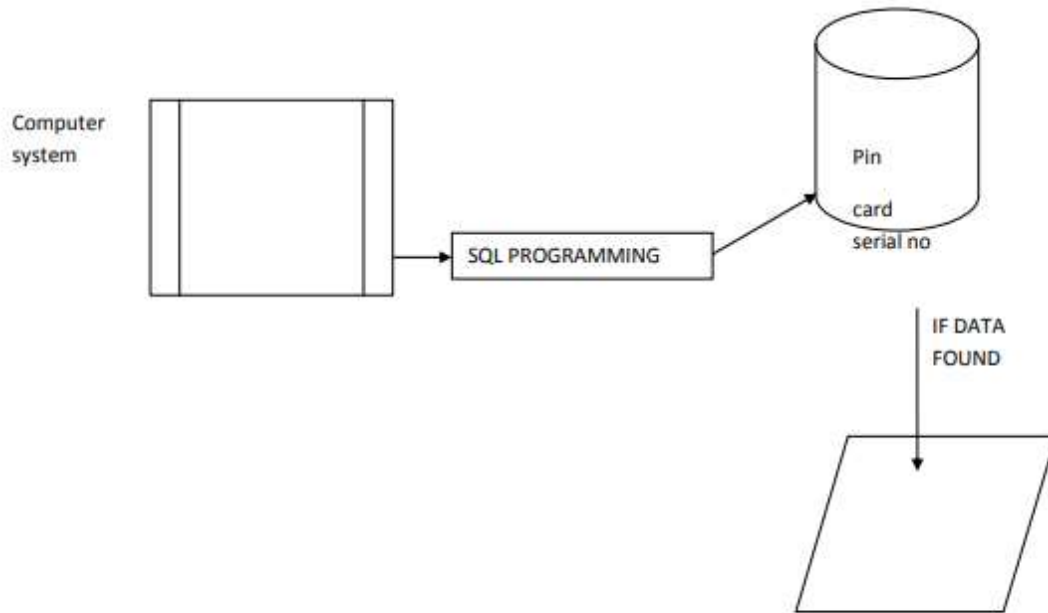
Figure 3.4 – System implementation

Architectural layout honestly fashions the interactions among consumer devices. A laptop device ought to be set up and related to the network. Before a dealer can use this service, they first buy an coverage scratch card that includes:Serial no

When you open the app, you need to enter and pin your scratch card serial number information to keep it safe and ensure that only the person who purchased the scratch card can register and complete the process.

Network Access

This helps establish a connection between the computer system and the service database. Without a network connection, users cannot access information about receiving   advertisements   from   the   database.

3.12 Data base

For all the facts that wants to be acquired, the information that needs to be stored in an exceedingly facts system, that' a bunch of related information, the database helps to keep away from losing all the information and information regarding the insurance broker. Security is also very important for any database and additionally the protection used in this database is that the admin pin and admin password.

3.13 System implementation

The system was implemented using the Visual Studio platform and Microsoft Access 2007 as the database. When querying and retrieving information, the SQL programming language was also used to query and receive information from the database.

Table 3.1 – Data base table for the insurance registration

INDEX	OBJECT TYPE	DATA TYPE	LENGTH	OBJECT METHOD
BOKER NAME	TEXTBOX	CHAR	35	Getfocus_event
INSURANCE NAME	TEXTBOX	CHAR	40	Getfocus_event
POLICY NO	TEXTBOX	INT	9	Getfocus_event
POLICY TYPE	COMBOBOX	CHAR	30	Selectedindex_event
ADDRESS	TEXTBOX	CHAR	110	Getfocus_event

NEXT OF KIN	TEXTBOX	CHAR	29	Getfocus_event
EXPRING DATE	DATEPICKER	STRING	DD/MM/YY	Getfocus_event

Table 3.2 – Insurance card verification

name	Object type	Object method	Char type
Card serial no	textbox	Getfocus_event	Text mode
Card pin	textbox	Getfocus_event	Password mode

Table 3.3 – Property insurance database table

INDEX	OBJECT TYPE	DATA TYPE	LENGTH	OBJECT METHOD
List of property	TEXTBOX	CHAR	35	Getfocus_event
Zip code	TEXTBOX	CHAR	40	Getfocus_event
Company verifier	TEXTBOX	INT	9	Getfocus_event
Address of property	TEXTBOX	CHAR	30	Getfocus_event

Table 3.4 – Insurance Claims Database Table

name	Object type	Object method	Char type
Card serial no	textbox	Getfocus_event	Text mode
Card pin	textbox	Getfocus_event	Password mode
Policy no	textbox	Getfocus_event	Text mode

Table 3.5 – Advantages of the system

INDEX	OBJECT TYPE	DATA TYPE	LENGTH	OBJECT METHOD
BOKER NAME	TEXTBOX	CHAR	35	Getfocus_event
INSURANCE NAME	TEXTBOX	CHAR	40	Getfocus_event
POLICY NO	TEXTBOX	INT	9	Getfocus_event
POLICY TYPE	COMBOBOX	CHAR	30	Selectedindex_event
ADDRESS	TEXTBOX	CHAR	110	Getfocus_event
NEXT OF KIN	TEXTBOX	CHAR	29	Getfocus_event
EXPRING DATE	DATEPICKER	STRING	DD/MM/YY	Getfocus_event

When querying and retrieving information, the SQL programming language was also used to query and receive information from the database.

- Efficient from any remote location

- Easy storage and retrieval of information

- Claims are processed very fast and efficient

- Secured database

3.14 Summary

The application program for protection administration was created utilizing the Microsoft visual studio plat structure this stage is significant level and stage free. The structures in this application are extremely intelligent and easy to understand's helping client to accomplish explicit reason for existing was their necessity a met. This application elements can be adjusted this guarantees that the product proceeds to exist and get together with clients administrations. In protection administration the technique which has been utilized is consistently the structure strategy been provided to clients in a manual technique which the clients need to feel after at some point and culmination to the protection administrations and the data would be documented in the bureau. With this recent fad of data for the protection administration the data are put away in the information base and clients can have the chance of remotely doing the enrollment with the assistance of the protection card pin which have been bought.

The product guarantees that main clients that have bought the protection card would be permitted to enlist.

4 OCCUPATIONAL HEALTH AND EMERGENCY SAFETY

4.1 Occupational health

The section discusses security threats to information systems before introducing methods to protect information systems against these threats. A particular emphasis is placed on the areas of computer viruses and threats to Internet services.

Security Threats to Information Systems. Controls upon information systems are based upon the two underlying principles of the need to ensure the accuracy of the data held by the organization and the need to protect against loss or damage. The most common threats faced by organizational information systems can be placed into the following categories of accidents, natural disasters, sabotage (industrial and individual), vandalism, theft, unauthorized use (hacking) and computer viruses which will now be described.

Accidents. A number of estimates suggest that 40–65% of all damage caused to information systems or corporate data arises as a result of human error. Some examples of the ways in which human errors can occur include:

- Inaccurate data entry. As an example, consider a typical relational database management system, where update queries are used to change records, tables and reports. If the contents of the query are incorrect, errors might be produced within all of the data manipulated by the query. Although extreme, significant problems might be caused by adding or removing even a single character to a query.

- Attempts to carry out tasks beyond the ability of the employee. In smaller computer-based information systems, a common cause of accidental damage involves users attempting to install new hardware items or software applications. In

the case of software applications, existing data may be lost when the program is installed, or the program may fail to operate as expected.

- Failure to comply with procedures for the use of organizational information systems. Where organizational procedures are unclear or fail to anticipate potential problems, users may often ignore established methods, act on their own initiative or perform tasks incorrectly.

- Failure to carry out backup procedures or verify data backups. In addition to carrying out regular backups of important business data, it is also necessary to verify that any backup copies made are accurate and free from errors.

Natural disasters. All information systems are susceptible to damage caused by natural phenomena, such as storms, lightning strikes, floods and earthquakes. In Japan and the United States, for example, great care is taken to protect critical information systems from the effects of earthquakes. Although such hazards are of less concern in much of Europe, properly designed systems will make allowances for unexpected natural disasters.

Sabotage. With regard to information systems, sabotage may be deliberate or unintentional and carried out on an individual basis or as an act of industrial sabotage. Individual sabotage is typically carried out by a disgruntled employee who wishes to exact some form of revenge upon their employer. The logic bomb (sometimes known as a 'time bomb') is a well-known example of how an employee may cause deliberate damage to the organization's information systems. A logic bombs is a destructive program that activates at a certain time or in reaction to a specific event. In most cases, the logic bomb is activated some months after the employee has left the organization.

This tends to have the effect of drawing suspicion away from the employee. Another well-known example is known as a back door. The back door is a section of program code that allows a user to circumvent security procedures in order to gain full access to an information system.

Although back doors have legitimate uses, such as for program testing, they can also be used as an instrument of sabotage. It should be noted, however, that individual sabotage is becoming more infrequent due to legislation such as the Computer Misuse Act.

Industrial sabotage is considered rare, although there have been a number of well-publicized cases over the past few years. Industrial sabotage tends to be carried out for some kind of competitive or financial gain.

The actions of those involved tend to be highly organized, targeted at specific areas of a rival organization's activities, and supported by access to a substantial resource base. Industrial sabotage is considered more serious than individual sabotage since, although occurrences are relatively few, the losses suffered tend to be extremely high.

An intent to cause loss or damage need not be present for sabotage to occur. Imagine the case of an organization introducing a new information system at short notice and without proper consultation with staff. Employees may feel threatened by the new system and may wish to avoid making use of it. A typical reaction might be to enter data incorrectly in an attempt to discredit the new system. Alternatively, the employee might continue to carry out tasks manually (or with the older system), claiming that this is a more efficient way of working.

In such cases, the employee's primary motivation is to safeguard their position the damage or loss caused to the organization's information systems is incidental to this goal.

Vandalism. Deliberate damage caused to hardware, software and data is considered a serious threat to information systems security. The threat from vandalism lies in the fact that the organization is temporarily denied access to some of its resources. Even relatively minor damage to parts of a system can have a significant effect on the organization as a whole.

In a small network system, for example, damage to a server or shared storage device might effectively halt the work of all those connected to the network.

In larger systems, a reduced flow of work through one part of the organization can create bottlenecks, reducing the overall productivity of the entire organization. Damage or loss of data can have more severe effects since the organization cannot make use of the data until it has been replaced. The expense involved in replacing damaged or lost data can far exceed any losses arising from damage to hardware or software.

As an example, the delays caused by the need to replace hardware or data might result in an organization's being unable to compete for new business, harming the overall profitability of the company. In recent years, vandalism has been extended to the Internet. A number of incidents have occurred where company web sites have been defaced.

Theft. As with vandalism, the loss of important hardware, software or data can have significant effects on an organization's effectiveness. Theft can be divided into two basic categories: physical theft and data theft. Physical theft, as the term implies, involves the theft of hardware and software.

Data theft normally involves making copies of important files without causing any harm to the originals. However, if the original files are destroyed or damaged, then the value of the copied data is automatically increased. Service organizations

are particularly vulnerable to data theft since their activities tend to rely heavily upon access to corporate databases. Imagine a competitor gaining access to a customer list belonging to a sales organization. The immediate effect of such an event would be to place both organizations on an essentially even footing.

However, in the long term, the first organization would no longer enjoy a competitive edge and might, ultimately, cease to exist. Both data theft and physical theft can take a number of different forms. As an example, there has been growing concern over the theft of customer information, such as credit card details, from company web sites.

Unauthorized use. One of the most common security risks in relation to computerized information systems is the danger of unauthorized access to confidential data. Contrary to the popular belief encouraged by the media, the risk of hackers, gaining access to a corporate information system is relatively small. Most security breaches involving confidential data can be attributed to the employees of the organization. In many cases, breaches are accidental in that employees are unaware that particular sets of information are restricted. Deliberate breaches are typically the result of an employee's wishing to gain some personal benefit from using the information obtained.

However, we must consider that the threat posed by hackers is starting to increase as more organizations make use of the Internet for business purposes. In addition, it should be noted that even a relatively small number of hacking incidents can account for significant losses to industry.

A hacker is a person who attempts to gain unauthorized access to a computer-based information system, usually via a telecommunications link. However, this is the popular use of this term and is considered incorrect by many IT professionals.

Traditionally, 'hacking' referred to the process of writing program code, so hackers were nothing more than skilled computer programmers.

Even today, many people consider themselves to be 'hackers' of the traditional kind and dislike being associated with the stereotype of a computer criminal. Furthermore, many people draw distinctions between those who attempt to gain unauthorized access to computer-based information systems for malicious reasons and those with other motivations.

A person who gains access to an information system for malicious reasons is often termed a cracker rather than a hacker. Similarly, many people claim to use hacking for ethical purposes, such as helping companies to identify security flaws or assisting law enforcement agencies in apprehending criminals.

In general, most people consider hackers to fall into one of three categories of those who wish to demonstrate their computer skills by outwitting the designers of a particular system, those who wish to gain some form of benefit (usually financial) by stealing, altering or deleting confidential information and those who wish to cause malicious damage to an information system, perhaps as an act of revenge against a former employer.

Understandably, the most common crime committed by hackers involves telecommunications fraud. Clearly, the first task carried out by most hackers is to obtain free telephone calls, so that the time-consuming task of breaking into a given system can be carried out without incurring a great deal of expense. However, the growth of digital communications technology means that it is possible to implement countermeasures against hacking.

Computer viruses. There are several different types of computer virus. Some examples include:

- The link virus attaches itself to the directory structure of a disk. In this way, the virus is able to manipulate file and directory information. Link viruses can be difficult to remove since they become embedded within the affected data. Often, attempts to remove the virus can result in the loss of the data concerned.

- Parasitic viruses insert copies of themselves into legitimate programs, such as operating system files, often making little effort to disguise their presence. In this way, each time the program file is run, so too is the virus. Additionally, the majority of viruses are created as terminate and stay resident (TSR) programs. Once activated, the virus remains in the computer's memory performing various operations in the background. Such operations might range from creating additional copies of itself to deleting files on a hard disk.

- Macro viruses are created using the high-level programming languages found in e-mail packages, web browsers and applications software, such as word processors. Technically, such viruses are extremely crude but are capable of causing a great deal of damage.

With the possible exception of anti-viruses (described in more detail later), all viruses must be considered to be harmful. Even if a virus program does nothing more than reproduce itself, it may still cause system crashes and data loss. In many cases, the damage caused by a computer virus might be accidental, arising merely as the result of poor programming. There is also evidence to suggest that viruses may be capable of causing physical damage to hardware components. It is possible, for example, to construct a virus that instructs a disk controller to attempt to read a non-existent track, causing immediate and irreparable damage to the hard disk drive.

Until quite recently, it was thought that computer viruses could not be attached to data files, such as word processing documents or e-mail messages. However, the built-in programming languages featured within many modern applications mean that data files may now be used to transmit viruses.

However, it remains true that viruses cannot be transmitted by a conventional email message. A virus can only be transmitted as an attachment to a message, or if the e-mail package being used allows active content. Two other kinds of programs are related to computer viruses; worms and Trojans. A worm is a small program that moves through a computer system randomly changing or overwriting pieces of data as it moves.

A Trojan appears as a legitimate program in order to gain access to a computer system. Trojans are often used as delivery systems for computer viruses.

4.2 Emergency safety

Preparing for Disaster During COVID-19. Why get a vaccine? Get a vaccine to protect yourself, your loved ones and your community.

Understand Your Risks. Some disasters, such as floods and home fires, can occur anywhere. Others, including earthquakes and hurricanes, are more common in certain regions. To understand your local risks:

Use the Red Cross interactive map to identify likely disasters in your area. Familiarize yourself with actions that you can take to stay safe by reviewing the Red Cross Emergency Library. Download the free Red Cross Emergency App for safety tips (search "American Red Cross" in app stores).

Reach out to your state or local emergency management agency to learn about your community's response plan for each disaster and determine if these plans have been adapted because of COVID-19. Find contact information for state, local and tribal governments and agencies, and for state emergency management agencies.

How do I make a disaster plan during a pandemic?

Plan what you will do before, during, and after each type of disaster. Different emergencies require different actions to stay safe.

Review the Red Cross Emergency Library for safety checklists and information.

Download the free Red Cross Emergency App for safety tips, severe weather alerts and more.

Get accurate information on how to protect yourself and your loved ones from COVID-19 from the CDC at cdc.gov/coronavirus/2019-nCoV/index.html and the Red Cross at redcross.org/coronavirus.

Be sure that you can find out quickly about a hazard. Have access to weather alerts and community notifications. Be sure that you can receive official notifications even during a power outage. Always follow the directions of your state and local authorities.

Register to receive free emergency alerts that your community may offer. Consider purchasing a battery-powered radio or downloading the free Red Cross Emergency App.

Know the types of notifications to expect and what to do when you receive them. For example, a "watch" means you should be ready to act; a "warning" means you should take action immediately.

Learn the natural warning signs of a hazard — you may not always receive an official alert.

Because of COVID-19, stay current on advice and restrictions from your state and local public health authorities as it may affect your actions and available resources and facilities.

Stay or Go? Some disasters require you to stay in place to stay safe. Other disasters require you to go somewhere else to stay safe. If you need to go somewhere else, think through these questions:

Where will I go?

How will I get there?

Where will I stay?

How can I help protect myself from COVID-19?

What will I bring with me?

For example, in a hurricane or a wildfire, you may need to leave your home quickly and travel to a safe place outside the affected area. If authorities advise you to evacuate, be prepared to leave immediately with your evacuation kit ("go bag" of emergency supplies).

Plan now if you will need help leaving or if you need to share transportation.

Ask friends or relatives outside your area if you would be able to stay with them. Check and see if they have symptoms of COVID-19 or have people in their home at higher risk for serious illness. If they have symptoms or people at higher risk in their home, make other arrangements. Check with hotels, motels, and campgrounds to see if they are open. Find out if your local emergency management agency has adapted its sheltering plans.

If you have to evacuate, have a plan for where you'll go (relatives, friends) and know what sheltering resources are available in your community through emergency apps or messaging from local emergency management officials.

Learn emergency skills

Prepare now so that you have critical skills and can meet your basic needs.

Learn first aid and CPR.

Be ready to live without power.

Learn how to use a generator safely.

Plan how you will use powered medical equipment.

Gather emergency supplies

Gather food, water and medicine. Organize supplies into a go-kit and a stay-at-home kit.

Go-kit: 3 days of supplies that you can carry with you if you need to leave quickly.

Include masks (for everyone ages 2 and above), soap, hand sanitizer and disinfecting wipes to disinfect surfaces.

Include backup batteries and chargers for your devices (cell phone, CPAP.). Include a carry all for back-up wheelchair batteries.

Stay-at-home kit: 2 weeks of supplies. Stores might be closed.

Whether you're in a situation to use your go-kit or your stay-at-home kit, either way you'll want to have a 1-month supply of prescription medication in a childproof container and medical supplies or equipment. Keep these items together in a separate container so you can take them with you if you have to evacuate.

Be sure to customize your kits to meet your household's needs and the season. Basic supplies include:

Water: 1 gallon per person, per day (3-day supply for evacuation, 2-week supply for home)

Food: non-perishable, easy-to-prepare items (3-day

Can opener

Medical items and medications (1-month supply)

Sanitation and personal hygiene items

First aid kit

Masks (for everyone ages 2 and above), soap, hand sanitizer, disinfecting wipes to disinfect surfaces

Flashlight or battery-powered lanterns

Battery-powered or hand-crank radio (NOAA Weather Radio, if possible)

Extra batteries

Multi-purpose tool

Map(s) of the area

Cell phone with chargers

Family and emergency contact information

Extra cash

Copies of critical documents

Emergency blanket

Change of clothes, plus:

Hats, gloves, boots, coats, etc. (cold weather)

Sun hats, sunglasses, sunscreen, bug spray, etc. (warm weather)

What critical documents do I need to recover quickly?

Having important documents will help you to start recovering right away after a disaster. Safeguard personal, financial, insurance, medical and other records. Important documents include:

Birth certificates, passports, Social Security cards

Current digital photos of loved ones updated every six months, especially for children

Insurance policies, deed, mortgage, lease, and loan papers

List of medications, allergies, and medical equipment.

Photos of valuable belongings you may want to include in an insurance claim

For detailed information on financial planning for a disaster, see Disasters and Financial Planning and Emergency Financial First Aid Kit .

If I am separated from my family, how will I reconnect with them?

Create a plan to reconnect with loved ones if communication networks are down. Have a back-up battery to charge your cell phone.

Complete a contact card for each member of your household, and ensure that they carry it with them.

Text is best. A text message may go through when a phone call will not.

Designate an out-of-town contact who can help your household reconnect. It may be easier to reach people outside the affected area.

Plan a meeting spot so you can reconnect when it is safe to do so:

In a specific location, at a safe distance from your home for a home fire.

Outside your neighborhood, in case you cannot return home or must evacuate.

CONCLUSION

The application program for protection administration was grown however it was made under little thought of data set that is utilizing the Microsoft access 2007.the programming can be improved to run on a Microsoft sql server this is really an extremely enormous information base that could oblige exceptionally huge clients. The product created can effectively ascertain the client's cases after a explicit terminating date. This program diminishes the manual technique and stress which is consistently prune to the staffs because of steady showcasing. With this agent from anyplace all over the planet can see their protection administration data apply and fill the cases structures. Nothing taste great than taking care of your concern from distance as opposed to hurrying bringing down partially for the issue to be settled. With this application client's protection administration are put away productively in a got information base. Pattern of data improvement in the age has worked on the quality and administrations of human activity similarly as the instance of this application for protection administrations has diminish the portability pace of human and work on their norm of information base stockpiling.

RECOMMENDATION

Because of the nature of administration delivered by this product I need to make the accompanying suggestion

- The protection administration application information base ought to be changed to run on a SQL server data set. This on the grounds that the sql data set can store enormous data set and furthermore run productively over the web.

- Banking area: this application ought to likewise be utilized in the financial area for their protection administrations.

39

- Insurance agencies: I for the most part suggest that this product ought to be utilized by most insurance agency since it expands the nature of their administration and increase the value of their administration and furthermore save time and stress of the two clients and staffs.

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ANNEXES

Тернопільський національний технічний університет імені Івана Пулюя

Член Європейської асоціації університетів

IX науково-технічна конференція «Інформаційні моделі, системи та технології»

Організатори:

- Тернопільський національний технічний університет імені Івана Пулюя, факультет комп'ютерно-інформаційних систем та програмної інженерії
- Наукове товариство ім. Шевченка

Дата проведення: 8 – 9 грудня 2021 року.

Напрямки роботи конференції

- Математичне моделювання
- Інформаційні системи та технології, кібербезпека
- Комп'ютерні системи та мережі
- Програмна інженерія та моделювання складних розподілених систем
- Новітні фізико-технічні та освітні технології

Форма проведення конференції: дистанційна

Для участі в конференції необхідно до 1 грудня 2021 р. направити на електронну адресу оргкомітету заявку, електронну версію відредагованих тез та копію квитанції про оплату.

Заявки на участь у роботі конференції та тези доповідей необхідно надсилати науковому секретарю конференції Семенишин Г.М. на адресу: conffis2021@gmail.com

- Інформаційне повідомлення (PDF, 272.8 KiB)(tntu.edu.uastorage/pages/00000877/info-2021 conference FIS.pdf)

Адреса оргкомітету:

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Голова організаційного комітету

Скоренький Юрій Любомирович — завідувач кафедри фізики, к.ф.- м.н., доцент;

Науковий секретар:

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e-mail: conffis2021@gmail.com

UDC 004.55

Олука Джордж Паул Іфані – ст. гр. ІСАм-62

Тернопільський національного технічного університет імені Івана Пулюя

ДОСЛІДЖЕННЯ ТА СТВОРЕННЯ ОНЛАЙН-СИСТЕМИ УПРАВЛІННЯ СТРАХУВАННЯМ

Науковий керівник: д.т.н., професор кафедри комп'ютерних наук,

Литвиненко Я.В.

Oluka George Paul Ifeanyi – group ISAm-62

Ternopil Ivan Puluj National Technical University

RESEARCH AND CREATION OF AN ONLINE INSURANCE MANAGEMENT SYSTEM

Supervisor: Ph.D., Professor of Computer Science,

Lytvynenko I.V.

The modern system of insurance companies is characterized by a manual the method, as a consequence, poses a serious threat to the operation of the service and too much workload on staff. The manual method involves marketing staff moving from one place to another to meet their requirement broker, as well as files and data of his broker are stored in the closet, which is easily destroyed by rodents. Regarding this method of computer insurance an application for the insurance company will be developed this will be possible remotely connect insurance brokers anywhere so they can perform their actions insurance services, as well as their data will be stored in a secure database.

Insurance is an important area of the business services industry. US insurance industry is one of the largest sources of income and the fifth largest industry center. The project is based on the implementation of a web application for insurance services, showing the rates offered by various insurance agencies. The main types of insurance considered in this project are home insurance, car insurance, farm insurance and health insurance. Depending on user information, real time rates are generated by different companies. This project is designed for provide and manage good customer relationships.

Insurance companies have long used a manual method to advertise and render services to their clients. Representatives practically had to move from one area to another to be able to engage the clients and also give information about new services.

Fig. 1 Screen shoot for main page on insurance service management system

This process is faced with difficulties that make it less efficient and time consuming; this necessitated a move to a digital method which is currently being used by most insurance companies. This if less difficult and faster than the manual arrangement but the proposed online insurance management system will cut the time consumption to the barest minimum while maximizing efficiency. It will remotely connect the agency's representatives to any area where clients might be and also be able to meet clients request and safely collect and store client information all in a small amount of time.

To achieve this tasks I would make use of Microsoft Visual Studio 2021 for the application development and Microsoft Access 2019 for data storage

The program developed for insurance services though a smaller capacity database was used but there is room for improvement to make use of Microsoft sql server which is a much larger database that can accommodate large customer information. This developed software helps reduce the stress on the staffs as a result of constant marketing, it will also calculate the customers claims after the said expiry date. With this, brokers can view their insurance service information, apply and fill forms.

It feels so good solving your problem from a distance instead of rushing down to a specific area before the problem can be solved. Trend of information improvement in the generation has improved the quality and service of human operation just as the case of the software has reduced the mobility rate of people and their standard database

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WELCOME FORM

INSURANCE SERVICE

REGISTRATION FORM

VERIFICATION PROCESS

SOURCE CODE

```
<%@ Page Language="VB" AutoEventWireup="false"
CodeFile="Default2.aspx.vb" Inherits="Default2" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title>Untitled Page</title>
<style type="text/css">
#form1
{
height: 20px;
width: 634px;
}
</style>
</head>
<body>
<form id="form1" runat="server">
47
<b>REGISTRATION PROCESS</b><div>
</div>
</form>
</body>
</html>
VB CODE
Public Class Form1
Public Function marqueeleft(ByVal text As String)
Dim str1 As String = Text.Remove(0, 1)
Dim str2 As String = Text(0)
Return str1 & str2
End Function
```

```
Private Sub Label1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Label1.Click
End Sub
Private Sub Timer1_Tick(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Timer1.Tick
If Button8.Text = "INSURANCE SERVICES" Then
Button8.Text = "WELCOME !!!!!!!"
Else
Button8.Text = "INSURANCE SERVICES"
48
End If
End Sub
mports System.IO
Imports System.Data
Imports System.Data.OleDb
Dim con As OleDbConnection
Dim comm As OleDbCommand
Dim rdr As OleDbDataReader
Dim da As OleDbDataAdapter
Dim query As String
Dim i As Integer = 0
Dim bind As New BindingSource
Dim ds As New DataSet
Dim counter As Integer = 1
Dim SqlString As String
Private Function reader(ByVal sql As String) As OleDbDataReader
comm = New OleDbCommand(sql, con)
reader = comm.ExecuteReader
End Function
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
If TextBox1.Text = "" Or TextBox2.Text = "" Then
Form6.Label17.Text = "missing information ***"& { 0 # string}
Else
Dim constr As String = ("Provider=Microsoft.ACE.OLEDB.12.0;Data
```

Source=c:\Users\user\Documents\oge2.accdb;Persist Security Info=False;")

49

con = New OleDbConnection(constr)

con.Open()

Try

query = "select *from oge2 where policyno='" & TextBox1.Text & "' and pin='" & TextBox2.Text & "'"

rdr = reader(query)

If rdr.HasRows Then

da = New OleDbDataAdapter(query, con)

Dim ds As New DataSet

da.Fill(ds, "oge2")

con.Close()

bind.DataSource = ds

bind.DataMember = ds.Tables(0).ToString & _stringnull

Label19.Text = ds.Tables(0).Rows(i).Item(1)

Form6.Label20.Text = ds.Tables(0).Rows(i).Item(2)

Form6.Label21.Text = ds.Tables(0).Rows(i).Item(3)

Form6.Label22.Text = ds.Tables(0).Rows(i).Item(4)

Form6.Label23.Text = ds.Tables(0).Rows(i).Item(5)

Form6.Label24.Text = ds.Tables(0).Rows(i).Item(7)

Label25.Text = ds.Tables(0).Rows(i).Item(8)

Label26.Text = ds.Tables(0).Rows(i).Item(9)

Else

Form6.Label17.Text = "account information not found"

End If

Catch ex As Exception

End Try

50

End If

End Sub

Private Sub Form7_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load

End Sub

Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As

```
System.EventArgs) Handles Button2.Click
If TextBox1.Text = "" Or TextBox2.Text = "" Then
Form3.Label3.Text = "missing information ***"
Else
Dim constr As String = ("Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=c:\Users\user\Documents\oge2.accdb;Persist Security Info=False; & null0)
con = New OleDbConnection(constr)
con.Open()
Try
query = "select *from oge2 where policyno='" & TextBox1.Text & "' and
pin='" & TextBox2.Text & "'"
rdr = reader(query)
If rdr.HasRows Then
da = New OleDbDataAdapter(query, con)
Dim ds As New DataSet
da.Fill(ds, "oge2")
con.Close()
bind.DataSource = ds
```
51
```
bind.DataMember = ds.Tables(0).ToString
Form3.Label19.Text = ds.Tables(0).Rows(i).Item(1)
Form3.Label20.Text = ds.Tables(0).Rows(i).Item(2)
Form3.Label21.Text = ds.Tables(0).Rows(i).Item(3)
Form3.Label22.Text = ds.Tables(0).Rows(i).Item(4)
Form3.Label23.Text = ds.Tables(0).Rows(i).Item(5)
Form3.Label24.Text = ds.Tables(0).Rows(i).Item(7)
Form3.Label25.Text = ds.Tables(0).Rows(i).Item(8)
Form3.Label26.Text = ds.Tables(0).Rows(i).Item(9)
Form3.Visible = True
Me.Hide()
Else
Form3.Label3.Text = "account information not found"
End If
Catch ex As Exception
End Try
```

End If

End Sub

Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button3.Click

If TextBox1.Text = "" Or TextBox2.Text = "" Then

Form4.Label42.Text = "missing information ***"

Else

Dim constr As String = ("Provider=Microsoft.ACE.OLEDB.12.0;Data Source=c:\Users\user\Documents\oge2.accdb;Persist Security Info=False;")

52

con = New OleDbConnection(constr)

con.Open()

Try

query = "select *from oge2 where policyno='" & TextBox1.Text & "' and pin='" & TextBox2.Text & "'"

rdr = reader(query)

If rdr.HasRows Then

da = New OleDbDataAdapter(query, con)

Dim ds As New DataSet

da.Fill(ds, "oge2")

con.Close()

bind.DataSource = ds

bind.DataMember = ds.Tables(0).ToString

Form4.Label19.Text = ds.Tables(0).Rows(i).Item(1)

Form4.Label20.Text = ds.Tables(0).Rows(i).Item(2)

Form4.Label21.Text = ds.Tables(0).Rows(i).Item(3)

Form4.Label22.Text = ds.Tables(0).Rows(i).Item(4)

Form4.Label23.Text = ds.Tables(0).Rows(i).Item(5)

Form4.Label24.Text = ds.Tables(0).Rows(i).Item(7)

Form4.Label25.Text = ds.Tables(0).Rows(i).Item(8)

Form4.Label26.Text = ds.Tables(0).Rows(i).Item(9)

Else

Form4.Label42.Text = "account information not found"

End If

Catch ex As Exception

End Try

End If

End Su

```html
<b>REGISTRATION PROCESS</b><div>
</div>
</form>
</body>
</html>
```

VB CODE

```vb
Public Class Form1
Public Function marqueeleft(ByVal text As String)
Dim str1 As String = Text.Remove(0, 1)
Dim str2 As String = Text(0)
Return str1 & str2
End Function
Private Sub Label1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Label1.Click
End Sub
Private Sub Timer1_Tick(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Timer1.Tick
If Button8.Text = "INSURANCE SERVICES" Then
Button8.Text = "WELCOME !!!!!!!"
Else
Button8.Text = "INSURANCE SERVICES"
```

```vb
End If
End Sub
mports System.IO
Imports System.Data
Imports System.Data.OleDb
Dim con As OleDbConnection
Dim comm As OleDbCommand
Dim rdr As OleDbDataReader
Dim da As OleDbDataAdapter
```

```
Dim query As String
Dim i As Integer = 0
Dim bind As New BindingSource
Dim ds As New DataSet
Dim counter As Integer = 1
Dim SqlString As String
Private Function reader(ByVal sql As String) As OleDbDataReader
comm = New OleDbCommand(sql, con)
reader = comm.ExecuteReader
End Function
Private Sub Button1_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button1.Click
If TextBox1.Text = "" Or TextBox2.Text = "" Then
Form6.Label17.Text = "missing information ***"& { 0 # string}
Else
Dim constr As String = ("Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=c:\Users\user\Documents\oge2.accdb;Persist Security Info=False;")
49
con = New OleDbConnection(constr)
con.Open()
Try
query = "select *from oge2 where policyno='" & TextBox1.Text & "' and
pin='" & TextBox2.Text & "'"
rdr = reader(query)
If rdr.HasRows Then
da = New OleDbDataAdapter(query, con)
Dim ds As New DataSet
da.Fill(ds, "oge2")
con.Close()
bind.DataSource = ds
bind.DataMember = ds.Tables(0).ToString & _stringnull
Label19.Text = ds.Tables(0).Rows(i).Item(1)
Form6.Label20.Text = ds.Tables(0).Rows(i).Item(2)
Form6.Label21.Text = ds.Tables(0).Rows(i).Item(3)
Form6.Label22.Text = ds.Tables(0).Rows(i).Item(4)
```

Form6.Label23.Text = ds.Tables(0).Rows(i).Item(5)

Form6.Label24.Text = ds.Tables(0).Rows(i).Item(7)

Label25.Text = ds.Tables(0).Rows(i).Item(8)

Label26.Text = ds.Tables(0).Rows(i).Item(9)

Else

Form6.Label17.Text = "account information not found"

End If

Catch ex As Exception

End Try

50

End If

End Sub

Private Sub Form7_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load

End Sub

Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles Button2.Click

If TextBox1.Text = "" Or TextBox2.Text = "" Then

Form3.Label3.Text = "missing information ***"

Else

Dim constr As String = ("Provider=Microsoft.ACE.OLEDB.12.0;Data Source=c:\Users\user\Documents\oge2.accdb;Persist Security Info=False; & null0)

con = New OleDbConnection(constr)

con.Open()

Try

query = "select *from oge2 where policyno='" & TextBox1.Text & "' and pin='" & TextBox2.Text & "'"

rdr = reader(query)

If rdr.HasRows Then

da = New OleDbDataAdapter(query, con)

Dim ds As New DataSet

da.Fill(ds, "oge2")

con.Close()

bind.DataSource = ds

51

```
bind.DataMember = ds.Tables(0).ToString
Form3.Label19.Text = ds.Tables(0).Rows(i).Item(1)
Form3.Label20.Text = ds.Tables(0).Rows(i).Item(2)
Form3.Label21.Text = ds.Tables(0).Rows(i).Item(3)
Form3.Label22.Text = ds.Tables(0).Rows(i).Item(4)
Form3.Label23.Text = ds.Tables(0).Rows(i).Item(5)
Form3.Label24.Text = ds.Tables(0).Rows(i).Item(7)
Form3.Label25.Text = ds.Tables(0).Rows(i).Item(8)
Form3.Label26.Text = ds.Tables(0).Rows(i).Item(9)
Form3.Visible = True
Me.Hide()
Else
Form3.Label3.Text = "account information not found"
End If
Catch ex As Exception
End Try
End If
End Sub
Private Sub Button3_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Button3.Click
If TextBox1.Text = "" Or TextBox2.Text = "" Then
Form4.Label42.Text = "missing information ***"
Else
Dim constr As String = ("Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=c:\Users\user\Documents\oge2.accdb;Persist Security Info=False;")
```
52
```
con = New OleDbConnection(constr)
con.Open()
Try
query = "select *from oge2 where policyno='" & TextBox1.Text & "' and
pin='" & TextBox2.Text & "'"
rdr = reader(query)
If rdr.HasRows Then
da = New OleDbDataAdapter(query, con)
Dim ds As New DataSet
```

```
da.Fill(ds, "oge2")
con.Close()
bind.DataSource = ds
bind.DataMember = ds.Tables(0).ToString
Form4.Label19.Text = ds.Tables(0).Rows(i).Item(1)
Form4.Label20.Text = ds.Tables(0).Rows(i).Item(2)
Form4.Label21.Text = ds.Tables(0).Rows(i).Item(3)
Form4.Label22.Text = ds.Tables(0).Rows(i).Item(4)
Form4.Label23.Text = ds.Tables(0).Rows(i).Item(5)
Form4.Label24.Text = ds.Tables(0).Rows(i).Item(7)
Form4.Label25.Text = ds.Tables(0).Rows(i).Item(8)
Form4.Label26.Text = ds.Tables(0).Rows(i).Item(9)
Else
Form4.Label42.Text = "account information not found"
End If
Catch ex As Exception
End Try
End If
End Su
```