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SAVITRIBAI PHULEPUNE UNIVERSITY

A MINI PROJECT REPORT ON

"Contact Management System"

Submitted by Group Id BE2020A11:

- 1. Sharvari Birute.
- 2.Chetana Mahajan.
- 3.Hemal Sawdekar

Under The Guidance of

Prof. Vivek Waghmare



DEPARTMENT OF COMPUTER ENGINEERING

Sandip Institute of Technology And Research Centre, Nashik Mahiravani, Trimbak Road, Tal Dist. Nashik – 422 213, Maharashtra, India.

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Sharvari Birute. Chetana Mahajan. Hemal Sawdekar (B.E Computer Engg.)

Abstract

Much of our daily communication activity involves managing interpersonal communications and relationships. Despite its importance, this activity of contact management is poorly understood. We report on field and lab studies that begin to illuminate it. A field study of business professionals confirmed the importance of contact management and revealed a major difficulty: selecting important contacts from the large set of people with whom one communicates. These interviews also showed that communication history is a key resource for this task. Informants identified several history-based criteria that they considered useful. Contact management is a new class of software designed for the manager or telemarketer who needs to efficiently schedule appointments, track business contacts, remember related information, and integrate all of these things while on the telephone. The rapid growth of contact management is built upon the microcomputer revolution and promises to change the way we do business in the office. There is no doubt that a contact manager can increase productivity and that the use of contact management software will continue to spread while it increases in sophistication. This article describes contact management and how it can be integrated into business education.

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INTRODUCTION

Complete Contact Book is an application based project. It is designed for people to store the information about their contacts. Rather than going through the pages of their diaries and copies to search a person information, a person can simply use this software to view any of his stored contacts. A user can also add or update or delete the contact information according to his need. Big Organizations need to have this software in order to keep the records of thousands of his employees at one place without any paper work. Also registers maintained for this purpose can be left around, or can be destroyed in any accident, but in software no such problem will occur This software also provides an option to connect to facebook, it also provides the report, you can also view people through various groups.

Overview

The project Complete Contact Book provides a person to add its personal information like name, company, phone number, designation, etc. to the database. A user can search any other person or can update or add a new contact onto the software. Also, user can view the report generated or can view the groups according to a common field.

Project provides a questionnaire and suggestions page for the betterment of the project

Methodology

In an application based system like Contact Book, there is a scope for a large number of platforms, languages, web servers and frameworks to choose from. Before selecting from this large array of technologies the following aspects have been kept in mind:

- Performance
- Reliability
- Portability
- Security
- Performance
- Fast speed
- Cost Constraint
- Time Constraint

The project Contact Book could have been built by various technologies like VB.net, C#, C++, Java.

I chose VB.net as my front end to build this project because

- It is easy to understand
- It is easy to install
- It has a good GUI which makes it very easy to work with.
- MSDN library supports us and give us all the help needed while we come through any errors or problems.
- I was convenient to work with it.

I didn't chose others because

- They don't have GUI which makes it difficult to understand
- No built libraries to solve the problems.
- It was inconvenient to work with them.

To develop this package different types of tools and database are used which are as follows:

- ➤ VB.NET 2008
- > Framework 4.0
- ➤ Microsoft MYSQL Server 2008

Microsoft Word

Scope of Project

1.2Purpose and Scope

1.3.1. <u>Purpose</u>:

The overall purpose of this project is to develop a Visual Basic .net which will provide an interface between controls applications written in the VB.net language and the MYSQL Server Management. One aspect of this work will be to develop a language independent object-oriented model to the accelerator devices.

Contact Book will have the following key goals:

- Provide an easy interface for user.
- Easy to store records
- No need to remember while storing that on what page we are storing as software will automatically search the name you enter
- Updation can be done.
- Deletion can also be done when you do not need a contact.
- You can search a contact through his/her name, part of name, or through id.
- You can view group of people according to various options like group of people of same address or group of people of same company etc.
- Reports can be viewed to show an abstract form of contact book containing all the contacts together at one place
- Reports can be converted as a pdf file to store as a shortcut, no need to run the software again and again
- User can automatically connect themselves to social media site
- User can give all suggestions they need and can save their files.

1.3.2. <u>Scope</u>:

The main scope and deliverables of the project would be to:

- Understand and prepare detailed user requirement and specifications
- Prepare high level and detailed design specifications of the system
- Prepare Test Plan & Test cases
- Develop the system and coding
- Perform unit testing, integration testing and system testing
- Demonstrate a bug free application after suitable modification, if needed

1.3.3. Applicability:

The application is to be deployed as a application based program which would be accessible to the issued people only. Searching of contacts can be done and nothing can be done without entering in the software as it is password protected. Reports are generated electronically and could be converted into pdf files for later use and can be kept as a record on client side.

1.3 Project Objective

For easy and convenient processing we need to develop software which works as per our requirements. While preparing this software we got to remember few things i.e. this software must have a friendly environment, in other words it should not be much complicated to handle, it should have options for future modifications in the society. For smooth functioning, we had to prepare a database by which we could enter the required data in their respective locations. In this data base all the records of daily transactions made are stored i.e. Contact Details, so that we can use them in future whenever needed. From security point of view this software has a special login name and password allotted to their Administrator. Other than that no one could use this and on entering an illegal password or login name an error message get displayed.

The major specifications of project are:

- To allow only authorized user to access various function and processed available in the system.
- Locate any Contact wanted by the user.
- Reduced written work and problem of storing the diaries as most of the work done by computer.
- Provide greater speed & reduced time consumption

Advantages

- **3.** Better, longer-lasting customer relationships
- 2. Deeper insight into your customers
- 3. Improved data management
- 4. Increased productivity
- 5. Contact management increases customer satisfaction
- 6. Reduced expenditures
- 7. The ability to personalize customer interactions
- 8. Better alignment and collaboration across teams
- 9. Improved customer experience
- 10. Insight into your results and data-driven decision making

Specific Requirements:

1. Requirement Analysis

The Contact Book requires computerizing its storage of contacts in order to provide fully service to automate the following activities. The requirements from the proposed software are as follows:

- Contact Information Handling
- Adding a new contact
- Deleting a contact
- Updating a contact
- Searching a contact

3.1 Problem Definition

The problem here is that storing the contact information on paper is little bulky and is difficult to manage and store these papers. They can be forgotten where they were placed or could be destroyed by the small animals like rat etc. For a personal purpose it could be managed but for organizations where there is a need to keep these information's for later use it will create a problem if such thing happens.

So, why don't we keep it in our computer as a record? You may say that we could have used WORD or NOTEPAD, yes we could have used but in that case it would be a little difficult to search a contact or delete one or add a contact after scrolling thousands of pages of word but the software CONTACT BOOK provides a total and an easy interface to add, search, delete a contact without going through pages. All that work will be done by he software itself.

3.2 Requirements Specification

• User Requirements:-

A careful study of the requirement of the end user; i.e. the Contact Book should meet the following requirements:

- ➤ User should be able to add image for his contact
- No User without the correct login and password may be allowed to enter the project
- User should be provided with an option to add the record just by adding the fields value.
- ➤ User could be able to delete any record he/she wants.
- ➤ User should be able to search a record either by entering name or part of name or by choosing groups.
- User should be able to update the record.
- > User should be able to connect to facebook.
- User should be able to see the records in a file and in report also.
- Although the system is to be installed in a low end system with Windows based OS at present, in future it should be portable to a higher end system with Linux OS
- The system should have a relatively lower memory and bandwidth requirement
- Logical Database Requirements:-

The database of the Contact Book consists of five tables. First table consists of the basic information of the record. The next table consists of the address details, The third table consists of the phone details. The next table consists of other details. The last table consists of image of the contact.

Keeping in view these requirements, data dictionary of the Contact Book is convinced.

Data Dictionary

me	scription
me,aname,pname,oname	me of the contact
signation	e designation of contact
mpany	e company where the contact works
ffice	ldress of office of contact
esidence	esent address of contact of his living
ermanent	rmanent address of contact
ffice	ntact no. of office
esidence	ntact no. of residence
nobile	ntact no. of mobile
x	x number of contact
nailId	nail id of contact
ebsite	ebsite address of contact

Functional Requirements:-

The Functional Requirements of the project are as follows:

- To provide the functionality to person to view details of contact.
- To provide login interface through which only authorized user can pass by.
- The application provide contact the option to add the photo from any file in its pc..
- This system should handle multiple contacts at the same time.
- To functionally enable Contacts define criteria and create Admin.
- The application also provides an option to view group belonging to a person.

Non Functional Requirements:-

The Non-Functional Requirements of the project are as follows:

- The system should be reliable and robust.
- The system should be User friendly.
- The system should be completely Consistent and Secure.

Performance Requirements:

As Contact Book is an application based system, the application should be installed in Windows.

Usage of software should not cause consumption.

In order to assess the performance of a system the following must be clearly specified:

- Response Time
- Workload
- Scalability
- Platform

The response time should be less than 2-3 minutes.

The workload should not be so much which hangs the system.

The scalability required is often driven by the lifespan and the maturity of the system.

The platform on the system who runs is Windows.

Description

Hardware Interfaces Requirement

- Core 2 Duo System.
- 500 Gb HDD.
- 1GB RAM.

Software Requirements

- Windows 7
- Visual Studio 2010.
- C# .Net
- SQL 2008

Program Coding

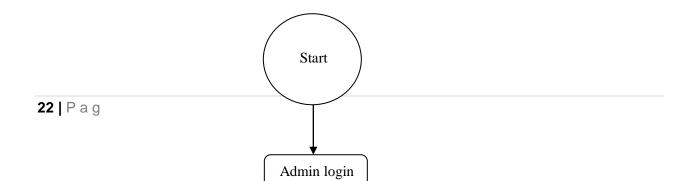
```
#include<iostream>
#include<conio.h>
#include<fstream>
using namespace std;
string fname, lname,phNum;
void addContact();
void searchContact();
void help();
void self_exit();
bool check_digit(string);
bool check_num(string);
int main()
{
       short int choice;
       system("cls");
       system("color 0A");
       cout<<"\n\n\n\n~~~~~~~";
       cout<<"\n-----;
       cout << "\n\t OPTIONS: ";
       cout << "\n\t1. Add Contact\n\t2. Search Contact\n\t3. Help\n\t4. Exit\n\t>";
       cin>>choice;
       switch (choice)
              case 1:
              addContact();
              break;
```

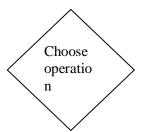
```
case 2:
                 searchContact();
                 break;
                 case 3:
                 help();
                 break;
                 case 4:
                 self_exit();
                 break;
                 default:
                          cout<<"\n\tOOps!! Invalid Input";</pre>
                          cout<<"\n\n\t Press Any Key to continue!...";
                          getch();
                          main();
        return 0;
}
void self_exit(){
        system("cls");
        cout<<"\n\n\tThank You For Using!!";</pre>
        exit(1);
}
void help(){
        cout<<"\n\n\tThis Displays Help!";
}
void addContact(){
        ofstream phone("number.txt", ios::app);
        system("cls");
        cout<<"\n\n\tEnter First Name: ";
        cin>>fname;
        cout<<"\n\tEnter last Name: ";
        cin>>lname;
        cout<<"\n\n\t Enter 10 digits phone Number: ";
        cin>>phNum;
        if(check_digit(phNum))
                 if(check_num(phNum))
                          if(phone.is_open())
                                   phone<<fname<<": "<< phNum<<endl;
                                   cout<<"\n\tContact Saved Successfully!";
                          else
                                   cout<<"\n\t OOPS!! Something went wrong!";</pre>
                 else{
                          system("cls");
                          cout<<"\n\n\t OOPS! You entered a non Integer value!";</pre>
                 }
```

```
}
         else
                 cout<<"\n\n\t Please Enter 10 DIGITS!!!!.";
                 addContact();
         }
         phone.close();
}
void searchContact()
         system("cls");
         ifstream myfile("number.txt");
         bool found = false;
         string keyword;
         cout<<"\n\t Enter Name To Search: ";
         cin>>keyword;
         while(myfile >> fname>> lname>> phNum)
                 if(keyword == fname|| keyword == lname)
                          system("cls");
                          cout<<"\n\n\t Hurray!! Contact Find!!!!";</pre>
                          cout<<"\n\n\tFirst Name: "<<fname;
                          cout<<"\n\tLast Name: "<<lname;
                          cout<<'"\n\tPhone Number: "<<phNum;</pre>
                          found = true;
                          break;
                  }
         if(!found){
                 cout<<"\n\n\t OOPS!! No Contact Found!!!";
         }
}
bool check_digit(string x)
         if(x.length() == 10)
                 return true;
         return false;
}
bool check_num(string x){
         bool check = true;
         for(int to the = 0; i < x.length(); i++)
                 if(!(int(x[i]) >= 48 \&\& int(x[i]) <= 57))
```

Procedural Design:-

Logic Diagrams: A **flowchart** is a type of <u>diagram</u> that represents an <u>algorithm</u> or <u>process</u>, showing the steps as boxes of various kinds, and their order by connecting them with arrows



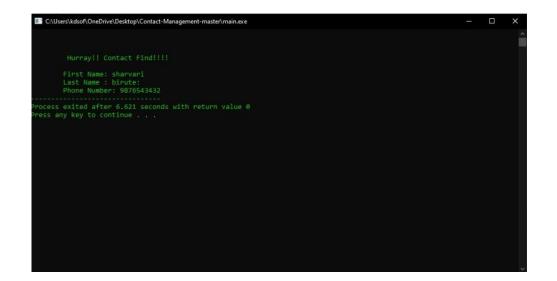


OUTPUT:-

```
Contact Management!!!

OPTIONS:

1. Add Contact
2. Search Contact
3. Help
4. Exit
>
```



Conclusion

The Contact Book project has been successfully completed by the developer well within the scheduled time and all the functional requirements of the project that were set in the SRS have been fully achieved. The external interface requirements and Input/output formats have also been implemented as per the requirement specifications. The security aspects of the system have been a particular concern and it has been implemented in a unique manner. The logical design was carried out in a very thorough manner and a modular approach was adopted, with each developer given the responsibility of one module. Special attention was given to the implementation of database constraints and towards maintaining the integrity of the database, so that even if the coding fails at some place, the data integrity will not be violated. At the end of it, all the modules were integrated without any problem and the system was observed functioning as a whole in the predicted manner. Extensive testing of the system, as well as that of the all the modules have been done using various test cases and it was revealed that the system is operating well within the prescribed parameters and the expected outcome of the test cases were observed in most cases. A few coding errors were detected following the extensive testing, which were minor in nature and the same have been rectified promptly.

The system is now fully functional and ready to be deployed on-site.