Customer Request Management System

A

PROJECT REPORT

ON

Customer Request Management System

SUBMITTED TO

VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)

FOR THE AWARD OF

Bachelor Of Computer Application

BCA-III (SEM VI)

SUBMITTED BY

Mr. Shreyash Shivaji Ghodake

Mr. Jaykumar Dipak Galange

UNDER THE GUIDANCE OF

Miss. S. S. Kagale

THROUGH

VIVEKANAND COLLEGE, KOLHAPUR

2022-23

VIVEKANAND COLLEGE, KOLHAPUR (Autonomous)
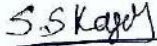

CERTIFICATE

This is to certify that,

Mr. Shreyash Shivaji Ghodake

Mr. Jaykumar Dipak Galange

B.C.A-III (SEM-VI) has submitted this project entitled Customer Request Management System for the present semester. This project is carried out under my guidance and supervision. Best of my knowledge, this is their original work and has not been presented earlier

Place: Kolhapur

Date: 31/03/2023

Miss. S. S. Kagale

(Guide)

Mr. V. B. Pujari

HEAD
(HOD)
DEPARTMENT OF B. C. A.
VIVEKANAND COLLEGE, KOLHAPUR
(AUTONOMOUS)

Examiner:

1)

DECLARATION

DECLARATION

We undersigned hereby declare that this report entitled Customer Request Management System is our original work prepared under the guidance of Miss. S. S. Kagale.
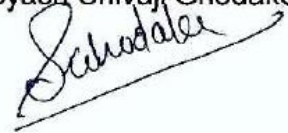
In this project, reports are based on the data collected by our self. We declare that, we have referred the books given in references for certain of the project work and have not copied any written material. We understand that any such copy is liable to be punished in any way, the college authorities deemed to fit.

Place: Kolhapur

Date: 31/03/2023

Yours faithfully,

Mr. Shreyash Shivaji Ghodake

Mr. Jaykumar Dipak Galange

ACKNOWLEDGEMENT

ACKNOWLEDGEMENT

It is our great pleasure that we submitted the project entitled <u>Customer Request Management System</u> we thankfully acknowledged the endless help and support that we have obtained from Mr. S. S. Kale (Co-ordinator Dept. of BCA) from the stage the project was conceived. The journey of this project was possible due to our project guide Miss. S. S. Kagale for giving us valuable guidance for the completion of the project.

Last but not least, we would like to express our sincere gratitude to those who have helped directly or indirectly in our project.

Place: Kolhapur

COMPCARE COMPUTER CENTRE

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Tel - +91-231-2535599 CELL:+91-9922986599,E-

MAIL:info@techcompcare.com

ate: 15/03/2023

TO WHOM IT MAY CONCERN

We are pleased to accept your request told by students and provide permission for doing project at our concern for Mr. Shreyash Shivaji Ghodake and Mr. Jaykumar Dipak Galange, students of Vivekanand College Kolhapur. We are glad that they were came here and collected the information and work on their project for the period from 15th Feb 2023 to 28th Feb 2023. I hope that the information that is we provided, are very useful to you for your project work.

Thank you for visiting.

With best wishes.

Name: Mr. Neha Aiwale
      (Co-Ordinator)

Sign:

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INTRODUCTION

INTRODUCTION

This work is a development of a simple yet effective system to manage the incoming work/service requests in Compcare Computer Center The project created will serve as a Customer Request Management System within an enterprise environment. The system will be primarily used to create, respond to and regulate service requests through the customer's employees and service provider.

The system will also enable employees/users to service request allocation for other employees. For example, if an customer's employee faces any technical issues then the concern person will register the case through call/mail, then call co-ordinator within internal organization will note down and assign it to engineer then he visits the customer's place and resolve the issue. Once the problem is verified to be resolved, the request would be completed.

The created system will act as a portal where the internal users would be able to store data of service requests, track the status of the requests, take necessary follow up actions and also provide feedback regarding the requests. It is error free, secure, reliable and fast management system.

EXISTING SYSTEM

In the existing system all the work are done manually. This results in difficulty for the operators who handle the case request information. The current system is that all the records starting from getting the case request to completion of request are maintained manually which results in difficulty. Due to such difficulty sometimes, some of the data may also get misplaced by engineers.

The drawback of the existing system is that it is very difficult to retrieve data from engineers as it was done on papers and sometimes it is misplaced. It is difficult for call coordinator to handle the whole systems manually and to store data in case files for future references, because it may not available in proper format due to some reasons.

Moreover, it is very difficult to retrieve data. Insufficient data may lead to inconsistency. That will create impact on the quality of service provided by the Compcare Computer Centre.

Thus, the existing system is time consuming and not able to store and get the case data whenever required by management.

NEED AND SCOPE OF THE SYSTEM

- Today, the primary aim of organization is growth of revenue generation along with reduction of the capital costs being a high priority. Improving the level of satisfaction of customers and reducing the costs incurred for the operations have now become significantly critical for organizations. Reducing unnecessary paper work and bureaucracy for carrying out operations aid the organizations to increase and boost their productivity.

- More, this is where an effective Case Request Management System becomes important to organization. Meeting the customer service requests plays a critical role in providing the necessary service to end-users with many companies realizing they need to formalize the request process. economical and safer means of storing and keeping track of information. Easier access to information, as well as more accurate and faster results.

PROPOSED SYSTEM

OBJECTIVES

- To promote level of customer satisfaction.

- To articulate and route requests accurately and appropriately.

- Case requests are properly logged and populated.

- Case request status is accurately reported

- The objective of a project in C#.NET would be to develop a computerized system to manage and organize the operations of a Compcare Computer Center.

- The goal of the system would be to improve the efficiency and effectiveness of case request operations, and to help ensure the quality service of Compcare Computer Center.

- To ensure that all aspects of the windows application (e.g. design, features, functionality)are compatible with any computer system.

REQUIREMENT GATHERING

The most important part is to gather the correct information for developing
Customer Request Management

Observation:

On site observation means observing the format of how the case records are saved,

How current process is running and what is scope of improvement.

Purpose:

The main purpose of our application is to provide best solution to maintain case data
to the company.

Scope:

Overall brief view of Case Request Management application is to provide all
information about service provided by the Compcare Computer Centre to their
customers.

SYSTEM ANALYSIS

SITE MAP

```
                              SITE MAP
                                 |
   ┌──────┬──────┬──────┬────────┼────────┬──────┬──────┬──────┐
   ▼      ▼      ▼      ▼        ▼        ▼      ▼      ▼
```

| Dashboard | Add Case | New Cases | Case Working | Report | Client | Engineer | User |

```
                      ▼            ▼
                 ┌─────────┐  ┌──────────┐
                 │ Assign  │  │ Update   │
                 │ case    │  │ working  │
                 └─────────┘  └──────────┘
```
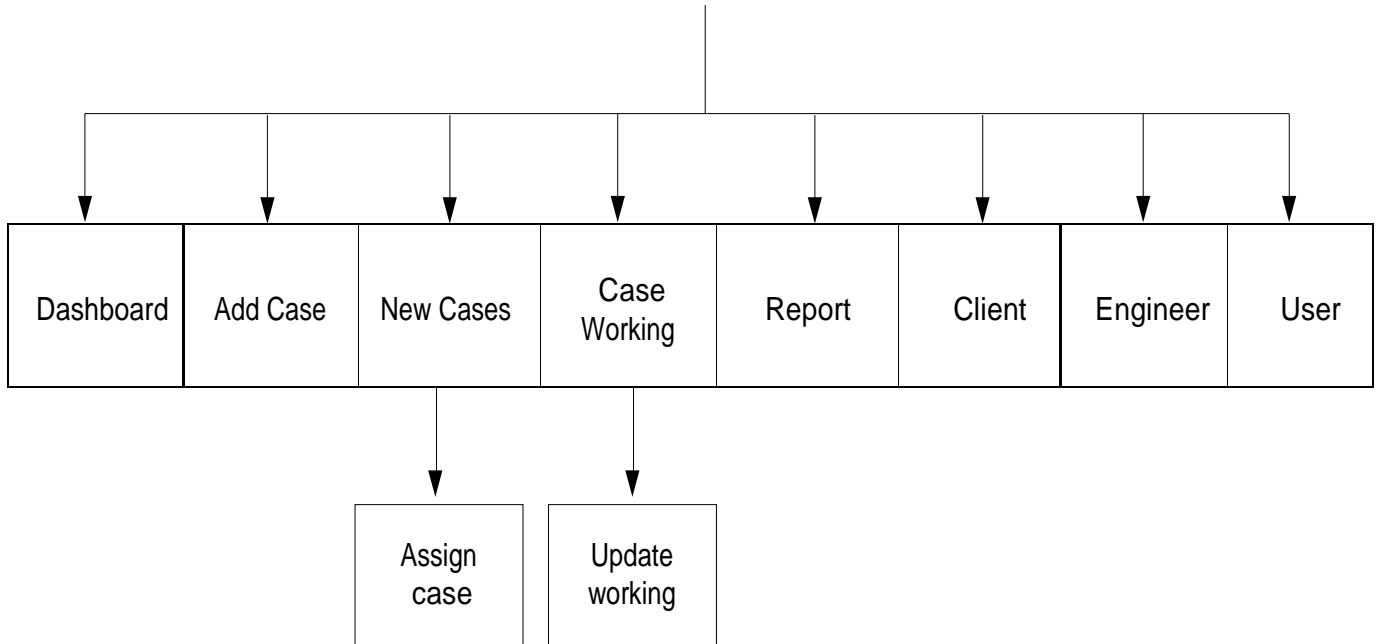
TECHNOLOGY USED

1.C#

C# is a general object-oriented programming (OOP) language for networking and Web development. C# is specified as a common language infrastructure (CLI) language.

In January 1999, Dutch software engineer Anders Hejlsberg formed a team to develop C# as a complement to Microsoft's NET framework. Initially, C# was developed as C- Like Object Oriented Language (Cool). The actual name was changed to avert potential trademark issues. In January 2000, NET was released as C#. Its NET framework promotes multiple web technologies. The term is sometimes spelled as C Sharp or C-Sharp.

The term's # character derives its name from the musical sharp key, which denotes a one semitone pitch increase. C# is pronounced "see sharp."
C# improved and updated many C and C++ features, including the following:

C# has a strict Boolean data variable type, such as bool, whereas C++ bool variable types may be returned as integers or pointers to avoid common programming errors.

C# automatically manages inaccessible object memory using a garbage collector, which eliminates developer concerns and memory leaks.

C# type is safer than C++ and has safe default conversions only (for example, integer widening), which are implemented during compile or runtime.

No implicit conversions between Booleans, enumeration members and integers (other than 0) may be converted to an enumerated type. User-defined conversions must be specified as explicit or implicit, versus the C++ default implicit conversion operatorsand copy constructors.

C# Features

1. Simple
2. Modern programming language
3. Object oriented
4. Type safe
5. Interoperability
6. Scalable and Updateable
7. Component oriented
8. Structured programming language
9. Rich Library
10. Fast speed

2.ADO.NET:

ADO.NET is a set of classes (a framework) to interact with data sources such as databases and XML files. ADO is the acronym for ActiveX Data Objects. It allows us to connect to underlying data or databases. It has classes and methods to retrieve and manipulate data.

The following are a few of the .NET applications that use ADO.NET to connect to a database, execute commands and retrieve data from the database.

- ASP.NET Web Applications
- Console Applications
- Windows Applications

There are the following two types of connection architectures:

1. **Connected architecture:** The application remains connected with the database throughout the processing.

2. **Disconnected architecture:** The application automatically connects/disconnects during the processing. The application uses temporary data on the application side called a Data Set.

3. MS-SQL Server:

Microsoft SQL Server is a relational database management system developed by Microsoft. As a database server, it is a software product with the primary function of storing and retrieving data as requested by other software applications—which mayrun either on the same computer or on another computer across a network (including the Internet).

Microsoft markets at least a dozen different editions of Microsoft SQL Server, aimed at different audiences and for workloads ranging from small single-machine applicationsto large Internet-facing applications with many concurrent users. The history of Microsoft SQL Server begins with the first Microsoft SQL

Server product– SQL Server 1.0, a 16-bit server for the OS/2 operating system in 1989 - and extendsto the current day.

Features of MS-SQL Server:

- Cross-platform support
- Triggers
- Cursors
- Updatable views
- Online Data Definition Language (DDL)
- Information schema
- Query caching

IMPLEMENTATION

IMPLEMENTATION

Hardware Requirements:-

        Hardware interface describe the logical and physical characteristics of each interfacebetween the software product and the hardware components of the system.

Device name   :-   hp

Processor   :-   11th Gen Intel(R) Core(TM) i5-11300H @ 3.10GHz

Installed RAM :-   8.00 GB (7.75 GB usable)

System type   :-   64-bit operating system, x64-based processor

Pen and touch :-   No pen or touch input is available for this display

Software Requirements:-

        Software interface describe the connections between this product and other specific software components (name and versions), including database, operating system. Tools, integrated commercial components. It describes the service and the natural communications.

Operating System: Windows 10 Above

Front-End Design:

        Microsoft Visual Studio 2022

Back-End Design:

        Microsoft SQL Server Management Studio 2019

Entity Relationship Diagram (ERD)
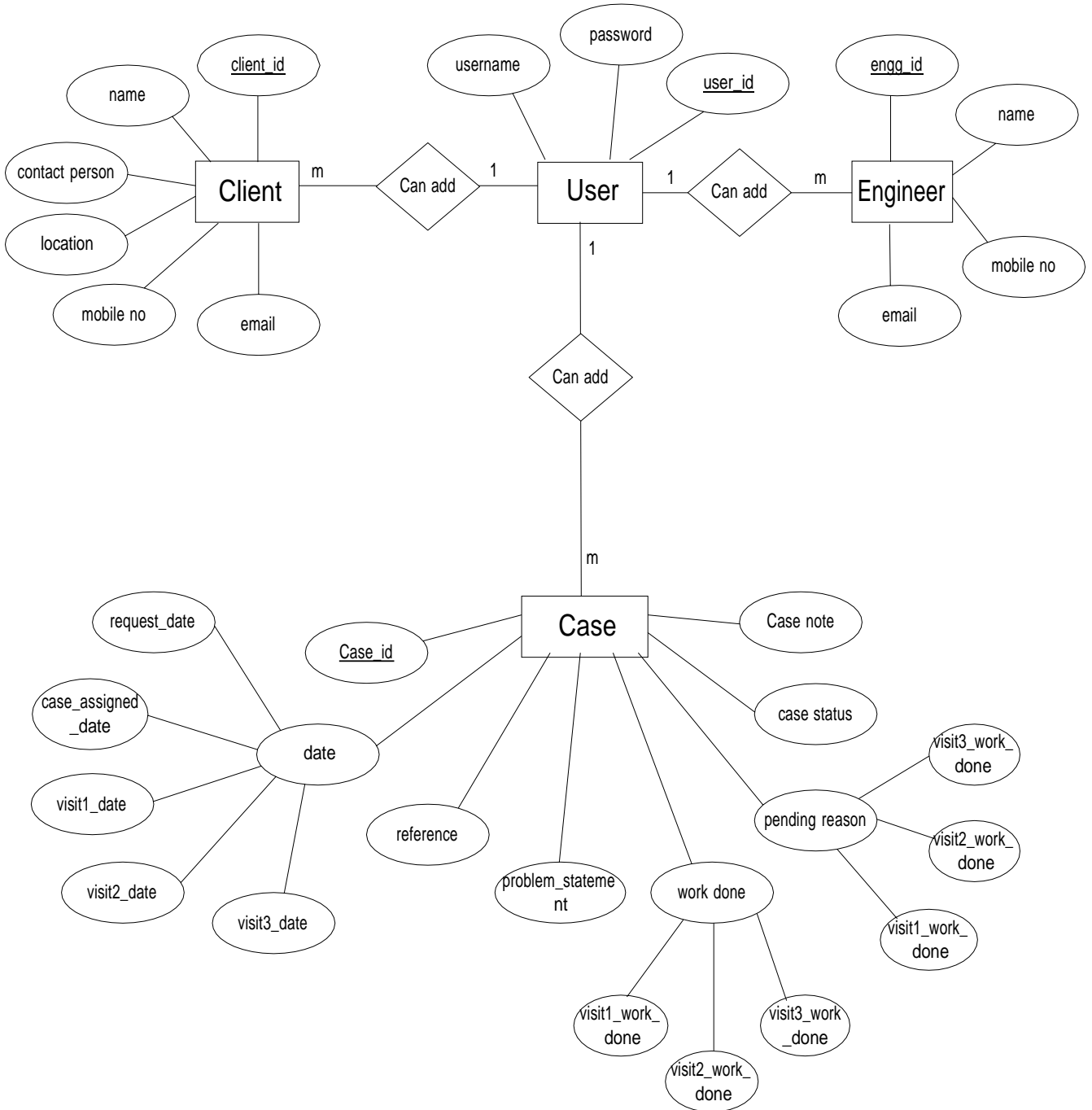
DATA FLOW DIAGRAM

During the analysis and designing of a system, it is necessary to study the in which data is flowing through various process within the scope of the system. It is necessary to find out how data is organized, used or referred, changed or stored and where it is show as output.

Data flow diagram (DFD) is one of the popular, graphical tools used to depict the flow of data through a system DFD show the process data, sort data, flow and the source and the and the destination entities.

Zero Level DFD

Admin

Add Case →

Add Engineer →

Add Client →

← Reports

CRM

Attend Case →

← Update Status

Engineer

First Level DFD

Engineer

Add →

← Retrieve

Attend →

Admin

Manage →

← Reports

CRM

Add →

← Retrieve

Case

Get Update →

← Call/Mail
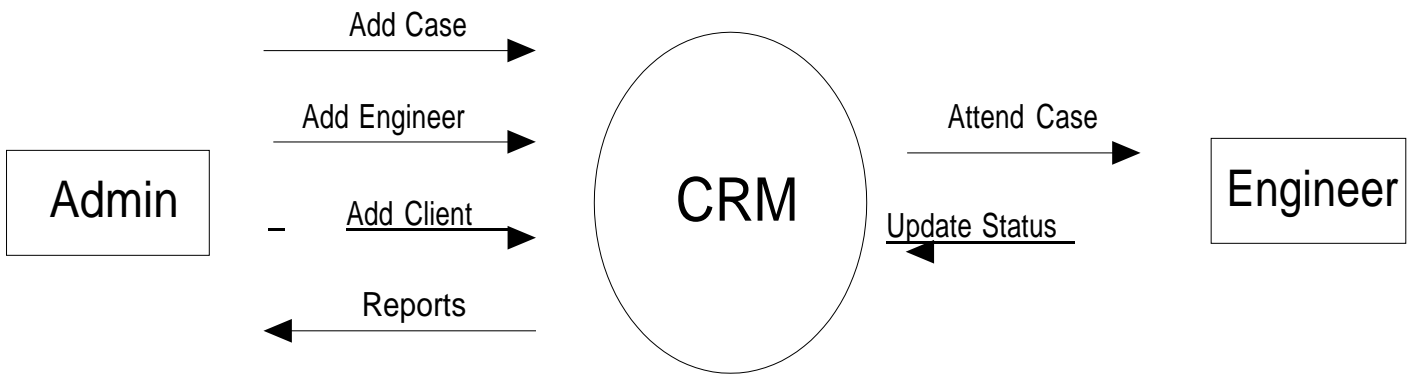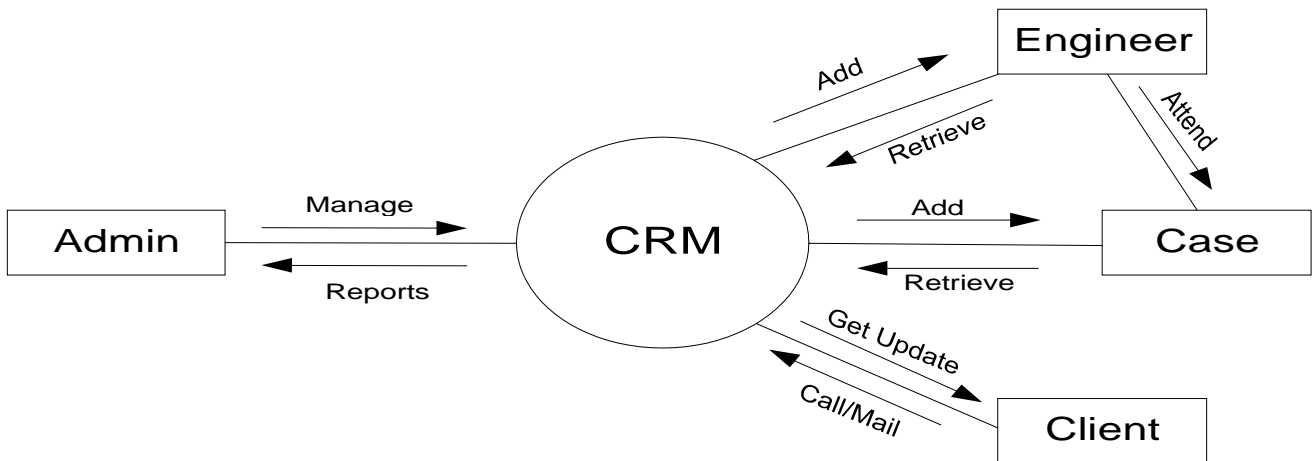
Client

SYSTEM DESIGN

DATABASE DESIGN

This table is used to Add Client Information

Column Name	Data Type	Allow Nulls
c_id	int	☐
c_name	varchar(50)	☐
c_location	varchar(50)	☐
c_contact_person	varchar(50)	☐
c_mob_no	varchar(50)	☐
c_email	varchar(50)	☐
		☐

This table is used to Add Engineer Information

Column Name	Data Type	Allow Nulls
engg_id	int	☐
engg_name	varchar(50)	☐
engg_mob_no	varchar(50)	☐
engg_email	varchar(50)	☐
		☐

This table is used to Add and Update Case Requests
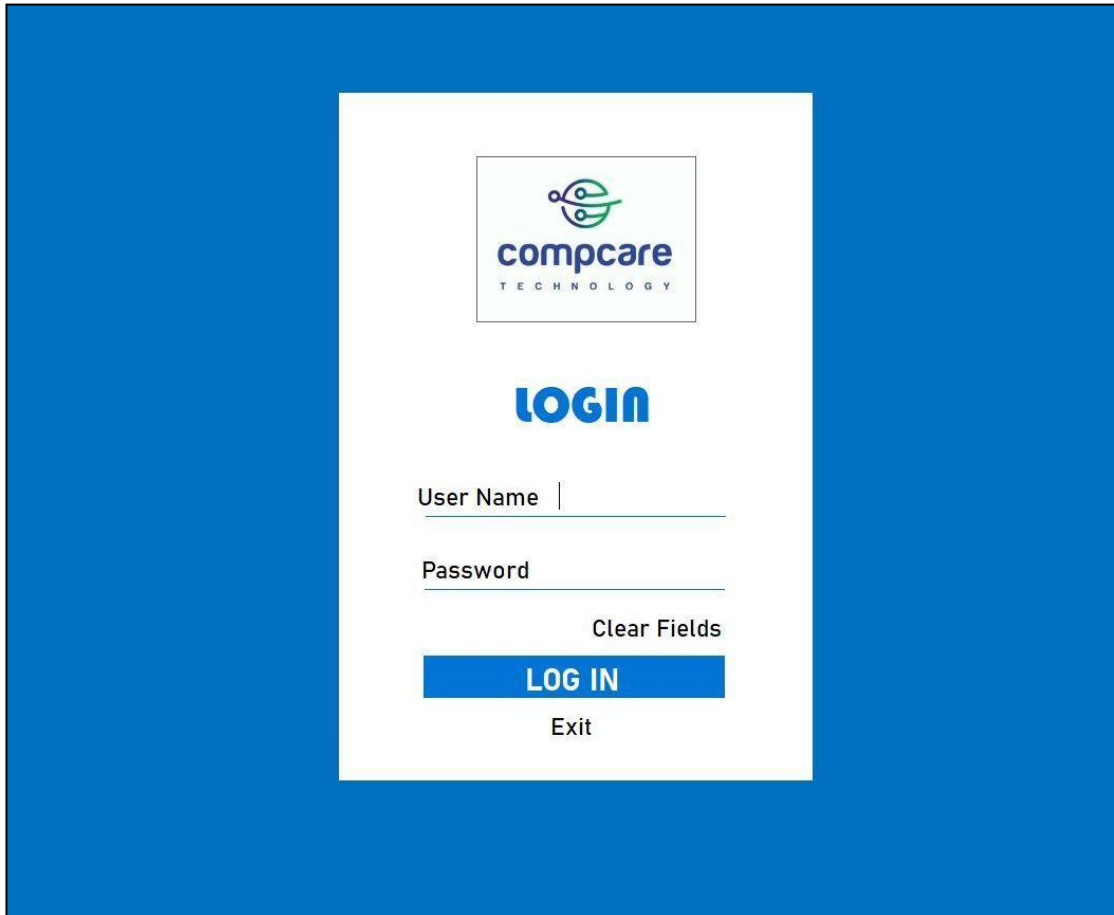
	Column Name	Data Type	Allow Nulls
🔑	case_id	int	☐
	req_date	datetime	☐
	case_reference	int	☑
	c_name	varchar(50)	☐
	c_contact_person	varchar(50)	☐
	c_mob_no	varchar(50)	☐
	c_email	varchar(50)	☐
	c_location	varchar(50)	☐
	case_type	varchar(50)	☐
	case_medium	varchar(50)	☑
	case_ps	varchar(100)	☐
	engg_name	varchar(50)	☑
	assigned_date	datetime	☑
	visit1_date	datetime	☑
	visit1_engg	varchar(50)	☑
	visit1_work_done	varchar(100)	☑
	visit1_pending_reason	varchar(100)	☑
	visit2_date	datetime	☑
	visit2_engg	varchar(50)	☑
	visit2_work_done	varchar(100)	☑
	visit2_pending_reason	varchar(100)	☑
	visit3_date	datetime	☑
	visit3_engg	varchar(50)	☑
	visit3_work_done	varchar(100)	☑
	visit3_pending_reason	varchar(100)	☑
	case_status	varchar(10)	☑
	case_note	varchar(100)	☑
			☐

This table is used to Add Users

Column Name	Data Type	Allow Nulls
u_id	int	☐
u_name	varchar(50)	☐
u_mobile_no	varchar(50)	☐
u_email	varchar(50)	☐
u_password	varchar(50)	☐
		☐

OUTPUT SCREEN

This is Login page

This is Dashboard

This form is used to Add New Case

This form is used to view New Cases

This form is used to Assign New Cases

This form is used to Working Cases

This form is used to retrieve All Reports

This form is used to update Case Working

This form is used to Add/Update Clients

This form is used to Add/Update Engineers

This form is used to Add/Update Users

Reports Output

This is Client wise report

This is Engineer wise report

This is Specific Date wise (From-To) report

This is Case Status wise report

CONCLUSION

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This project has been created as per the requirements of the Compcare Computer Centre. Hence, many results can be obtained from this software. In this Windows Application, a proper design is essential. A bad design will lead to confusion and that can lead to a loss of business. In general, a proper working application is need to implement with smooth functionality. The developer needs to organized and analyze the users' statistics and the background of the users. Although it can be hard to come up with a design and advanced features that is well suited to all of the users, there will be a design that is appropriate for most of the users. The simple design with smooth implementation and satisfying results will ensures the effective case request handling and increase the performance of company and results int increase in the business.

LIMITATIONS

- We have used export excel in our windows application for transfer of case request information.

- This developed system is standalone system.

- Currently, this system used only internal team.

- We will develop a panel for client after which they are able to raise the request by themselves directly.

REFERENCES

REFERENCE/BOOKS

REFERENCES:

- Websites:
  - www.wikipedia.com
  - www.csharpcorner.com
  - www.w3school.com
  - www.youtube.com

BOOKS:

- ASP.NET C#   - By Prof Rajendra Salunkhe
- Microsoft Visual C#.net   - By Prof John Sharp