Gym Management System

UNDERGRADUATE PROJECT

Submitted in partial fulfillment of the requirements of software

development project II for the degree of

B.Sc. Engg. in CSE

UNDER SUPERVISION OF:

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Dhaka-1216, December 2023

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Declaration of Authorship

We hereby declare that the project entitled Gym Management System submitted in partial fulfilment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering of Bangladesh University of Business and Technology (BUBT) is our own work and that it contains no material which has been accepted for the award to the candidate(s) of any other degree or diploma, except where due reference is made in the text of the project. To the best of our knowledge, it contains no materials previously published or written by any other person except where due reference is made in the project.

Signature of Developers,

_____

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Certificate

This is to certify that the project called, “Gym Managment System” and submitted by Md. Nawrose, Id No:21225103248; Md. Shobahan Dewan, ID: 21225103241 ; Jannatul Ferdush, ID: 21225103243 ; Md. Mahedi Hasan ID: 21225103252 and Md.Motahar Hossain Mohim ID: 21225103229 in partial fulfilment of the requirement of form the work done by them under my supervision.

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Dedication

Our Loving Parents and Teachers whose Support give us Strength and determination to accomplish our Goal. . .!!

Abstract

Gym Management System is a model system to store information about gym of the city public gym like new member profile, new member records, add new staff, gym equipment list, search member, delete member, exit and logout. The system is designed to meet the objectives of gym users dealing with information systems. As project mainly concentrate on Gym Management System so keeping the friendly user interface the system should provide all necessary gym users information facilities. A Login Form which asks the User to browse the whole system and perform different operations step by step such as Saving, Updating, Deleting and loading records as well as providing the facility to Administrator to generate the sequence by hiding un-necessary tasks from the user. Also, the system is capable of managing records for all the gym users. Our project explains about the Gym Management System. This project mainly explains the various actions related to gym user's details. This project shows some ease in adding, editing and deleting the student details. It also provides a less time-consuming process for adding new member, adding staff, search new member and deleting new member of the gym users.

Acknowledgement

We like to say our gratitude to our creator Allah to let us into the world and our parents, who supported us in this whole study and always prayed for our success and good health. We express our deep sense of gratitude to our project instructor Anusha Aziz for his expert guidance stimulating discussions as well as continued impetus throughout the period of this project and endless patience towards the completion of this project. We feel very proud to work with him. Without the inspiring enthusiasm and encouragement of our supervisor, this work could not have been completed. We thank all the staffs and graduate students at Bangladesh University of Business and Technology (BUBT) and all the friends for their support and encouragement. We would also like to extend our elder and younger brothers. Finally, we wish to express our gratitude to Bangladesh University of Business and Technology (BUBT) for providing an excellent environment for research and all the other facilities to complete the project successfully.

With best regards,

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Approval

I do hereby declare that the project works presented here with entitled as, Gym Management System are the outcome of the original works carried out by Md.Nawrose , Md.Shobahan Dewan , Jannatul Ferdush , Md.Mahedi Hasan , Md.Motahar Hossain Mohim under my supervision. I further declare that no part of this project has been submitted elsewhere for the requirements of any degree, award or diploma or any other purposes except for this project. I further certify that the dissertation meets the requirements and standard for the degree of Doctor of Philosophy in Computer Science and Engineering.

_____

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Chapter 1

Introduction

1.1 Introduction

Gym Management System deals with all kind of gym user's details, staff and equipment related details too. The gym management system is an automated version of manual gym management system. It can handle all details about a gym user. The details include gym users fast name, last name, email, gym time, date of birth, gender, mobile number, address, membership time, gym join date. In case of manual system, they need a lot of time, manpower etc. Here almost all work is computerized. So, the accuracy is maintained. Maintaining backup is very easy. It can do with in a few minutes. Our system has one type of accessing mode is administrator. Gym management system is managed by an administrator. It is the job of the administrator to insert update and monitor the whole process. When an admin login in the system admin can input gym users details for any gym users of his gym. Admin can also find any gym users or gym staff by mobile number and he can also see these details by search member. Our system has five modules, they are new member, new staff, equipment, search member, delete member these modules and its attributes with entity relationship module presented in figure section. After the devastation caused by the Corona Virus people got aware of the importance of a healthy lifestyle and a sound body & mind. Compared to the timeframe before the outbreak people tend to bend more towards healthy lifestyle. Because of this, it can be seen that the Gym membership has increased and new Gym facilities got established around the world. Our goal is to help these newly formed Gym facilities along with the old ones to manage and store their crucial information safely, efficiently and conveniently.

Chapter 2

Project Review

2.1 Project Database

Project management skills are put to good use for this project. Having gone through project management modules in Time Series Analysis, Optimization and with two interns Project Management for Business and IT respectively, they enhanced my knowledge on managing a project. Project management focuses on achieving the objectives by applying five processes presented in Figure below.

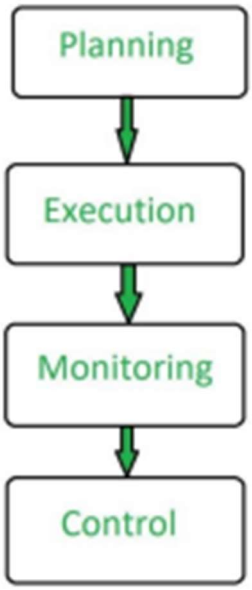

Figure: 1.1 Project management skills.

2.2 GYM Management System

It is helpful for everyone. It saves our time. They record all gym users and gym staff details.

2.3 GYM Management and Database management system

A database is an integrated collection of data, usually so large that it has to be stored on secondary storage devices such as disks or tapes. This data can be maintained as a collection of operating system files, or stored in a DBMS (database management system). A Database Management System (DBMS) is computer software designed for the purpose of managing databases based on a variety of data models. A DBMS is a complex set of software programs that controls the organization, storage, management, and retrieval of data in a database. DBMS are categorized according to their data structures or types; sometime DBMS is also known as Database Manager. It is a set of pre written programs that are used to store, update and retrieve a Database. When a DBMS is used, information systems can be changed much more easily as the organization's information requirements change. New categories of data can be added to the database without disruption to the existing system. Organizations may use one kind of DBMS for daily transaction processing and then move the detail onto another computer that uses another DBMS better suited for random inquiries and analysis.

Advantages of DBMS

• Improved strategic use of corporate data

• Reduced complexity of the organization's information systems environment.

• Reduced data redundancy and inconsistency

• Enhanced data integrity

• Application-data independence

• Improved security

• Reduced application development and maintenance costs

• Improved flexibility of information system

• Increased access and availability of data and information

• Logical Physical data independence

• Concurrent access anomalies.

• Facilitate atomized problem.

• Provides central control on the system through DBA

2.4 Data management

According to gym users records manual prepared by admin the creation and maintenance of records relating to the staff of this are essential to:

• managing the relationship between the staff and the gym users.
• providing support and other services and facilities to the gym users.

A gym users record/data contains information directly related to a gym user, which means that the record is personally identifiable. Personal identifiers that relate a record to a gym users include gym users name, gym user's email, gym users phone number. Gym users and staff records/data presented by the admin. Admin can manage everything such as message, feedback and also can change all information.

Chapter 3

Technology

3.1 Software

Software is a set of computer programs and associated documentation and data. This is in contrast to hardware, from which the system is built and which actually performs the work.

3.1.1 Microsoft Visual Studio

Microsoft Visual Studio is an integrated development environment (IDE) from Microsoft. It is used to develop computer programs, as well as websites, web apps, web services and mobile apps. Visual Studio uses Microsoft software development platforms such as Windows API, Windows Forms, Windows Presentation Foundation, Windows Store and Microsoft Silverlight. It can produce both native code and managed code.

Visual Studio includes a code editor supporting IntelliJ Sense (the code completion component) as well as code refactoring. The integrated debugger works both as a source-level debugger and a machine-level debugger. Other built-in tools include a code profiler, designer for building GUI applications, web designer, class designer, and database schema designer. It accepts plug-ins that expand the functionality at almost every level—including adding support for source control systems (like Subversion and Git) and adding new toolsets like editors and visual designers for domain-specific languages or toolsets for other aspects of the software development lifecycle (like the GYM Fitness System: Team Explorer).

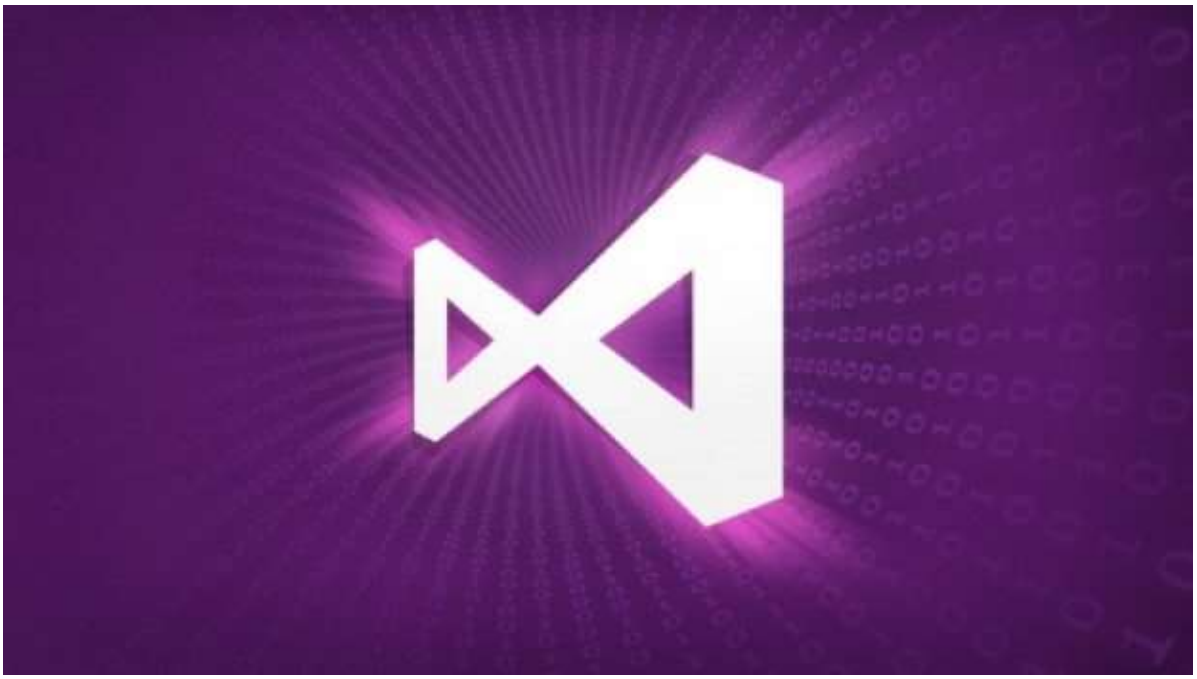

Figure: 3.1.1.1 Visual Studio 2022.

Visual Studio supports 36 different programming languages and allows the code editor and debugger to support (to varying degrees) nearly any programming language, provided a language-specific service exists. Built-in languages include C, C++, Visual Basic .Net, C#, F#, JavaScript, TypeScript, XML, XSLT, HTML, and CSS. Support for other languages such as Python,[9] Ruby, Node.js, and M among others is available via plug-ins. Java (and J#) were supported in the past. The most basic edition of Visual Studio, the Community edition, is available free of charge. The slogan for Visual Studio Community edition is "Free, fully-featured IDE for students, open-source and individual developers". The latest production-ready Visual Studio version is 2022, with older versions such as 2019 and 2017 on Extended Support, and 2012 and 2013 on Mainstream Support. [Wikipedia]

3.2 Programming Language

3.2.1 C# Language

During the development of the .NET Framework, the class libraries were originally written using a managed code compiler system called *"Simple Managed C"* (SMC). In January 1999, Anders Hejlsberg formed a team to build a new language at the time called Cool, which stood for "C like Object Oriented Language". Microsoft had considered keeping the name "Cool" as the final name of the language, but chose not to do so for trademark reasons. By the time the .NET project was publicly announced at the July 2000 Professional Developers Conference, the language had been renamed C#, and the class libraries and ASP.NET runtime had been ported to C#. Hejlsberg is C#'s principal designer and lead architect at Microsoft, and was previously involved with the design of Turbo Pascal, Embarcadero Delphi (formerly Code Gear Delphi, Emprise Delphi and Borland Delphi), and Visual J++. In interviews and technical papers, he has stated that flaws in most major programming languages (e.g., C++, Java, Delphi, and Smalltalk) drove the fundamentals of the Common Language Runtime (CLR), which, in turn, drove the design of the C# language itself. James Gosling, who created the Java programming language in 1994, and Bill Joy, a co-founder of Sun Microsystems, the originator of Java, called C# an "imitation" of Java; Gosling further said that "[C# is] sort of Java with reliability, productivity and security deleted." Klaus Kreeft and Angelika Langer (authors of a C++ streams book) stated in a blog post that "Java and C# are almost identical programming languages. Boring repetition that lacks innovation," "Hardly anybody will claim that Java or C# are revolutionary programming languages that changed the way we write programs," and "C# borrowed a lot from Java - and vice versa. Now that C# supports boxing and unboxing, we'll have a very similar feature in Java." In July 2000, Hejlsberg said that C# is "not a Java clone" and is "much closer to C++" in its design.

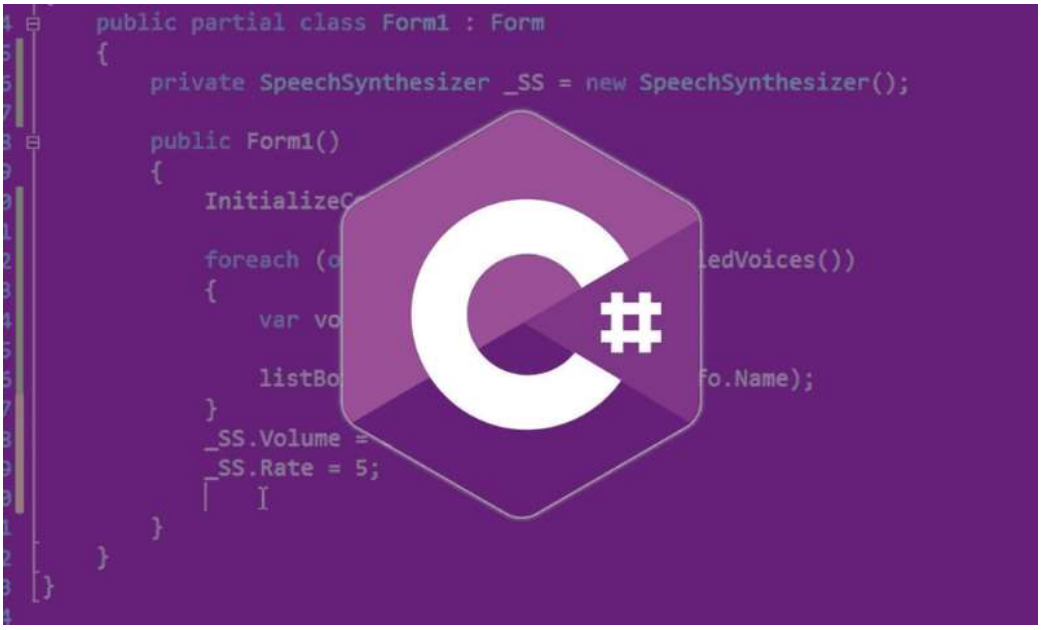

Figure: 3.2.1.1 C# Programming Language.

Since the release of C# 2.0 in November 2005, the C# and Java languages have evolved on increasingly divergent trajectories, becoming two quite different languages. One of the first major departures came with the addition of generics to both languages, with vastly different implementations. C# makes use of reification to provide "first-class" generic objects that can be used like any other class, with code generation performed at class-load time.[28] Furthermore, C# has added several major features to accommodate functional-style programming, culminating in the LINQ extensions released with C# 3.0 and its supporting framework of lambda expressions, extension methods, and anonymous types. These features enable C# programmers to use functional programming techniques, such as closures, when it is advantageous to their application. The LINQ extensions and the functional imports help developers reduce the amount of boilerplate code that is included in common tasks like querying a database, parsing an xml file, or searching through a data structure, shifting the emphasis onto the actual program logic to help improve readability and maintainability. C# used to have a mascot called Andy (named after Anders Hejlsberg). It was retired on January 29, 2004. C# was originally submitted to the ISO subcommittee JTC 1/SC 22 for review, under ISO/IEC 23270:2003, was withdrawn and was then approved under ISO/IEC 23270:2006. The 23270:2006 is withdrawn under 23270:2018 and approved with this version. [Wikipedia]

3.3 Database

3.3.1 MySQL

MySQL is written in C and C++. Its SQL parser is written in yacc, but it uses a home-brewed lexical analyzer. MySQL works on many system platforms, including AIX, BSDi, FreeBSD, HP-UX, ArcaOS, Eco Station, i5/OS, IRIX, Linux, macOS, Microsoft Windows, NetBSD, Novell NetWare, OpenBSD, Open Solaris, OS/2 Warp, QNX, Oracle Solaris, Symbian, SunOS, SCO Openserve, SCO UnixWare, Sano's and Tru64. A port of MySQL to OpenVMS also exists. The MySQL server software itself and the client libraries use dual licensing distribution. They are offered under GPL version 2, or a proprietary license. Support can be obtained from the official manual. Free support additionally is available in different IRC channels and forums. Oracle offers paid support via its MySQL Enterprise products. They differ in the scope of services and in price. Additionally, a number of third-party organizations exist to provide support and services. MySQL has received positive reviews, and reviewers noticed it "performs extremely well in the average case" and that the "developer interfaces are there, and the documentation (not to mention feedback in the real world via Web sites and the like) is very, very good". It has also been tested to be a "fast, stable and true multi-user, multi-threaded SQL database server".

Chapter 4

System Analysis & Architectural Design:

4.1 System User Analysis

The “Gym Management System” has one type of user and they can access the system.

User:

- Admin

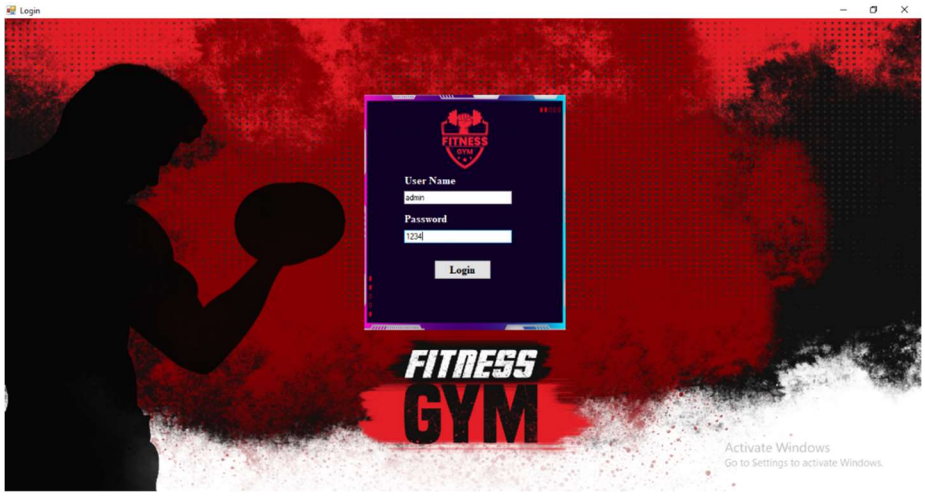

Figure: 4.1.1 Admin login page.

4.1.1 Admin:

In this system admin can access all the modules. They can add member, add staff, search member, search staff, delete member, delete staff, logout, payment view all record of gym users and also can update or modify of gym users & gym staff. Any second party couldn’t access these options.

4.2 Architectural Design:

Gym management system is a system which has major components such as add gym member, add staff, equipment update, view equipment, search member, search staff, delete member, delete staff, payment, logout. It performs specific statement for admin. Admin can add gym member, add staff, equipment update, view equipment, search member, search staff, delete member, delete staff, payment, logout. Admin can view gym user list.

After running the system, it will display the page like this and it's not the home page

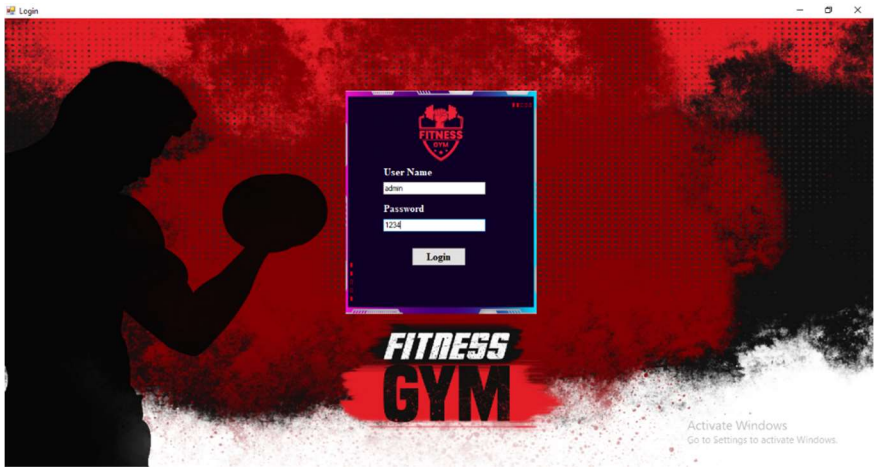

Figure: 4.2.1 Admin login page.

After inserting user name & password then click login button the user gets main interface of this project.

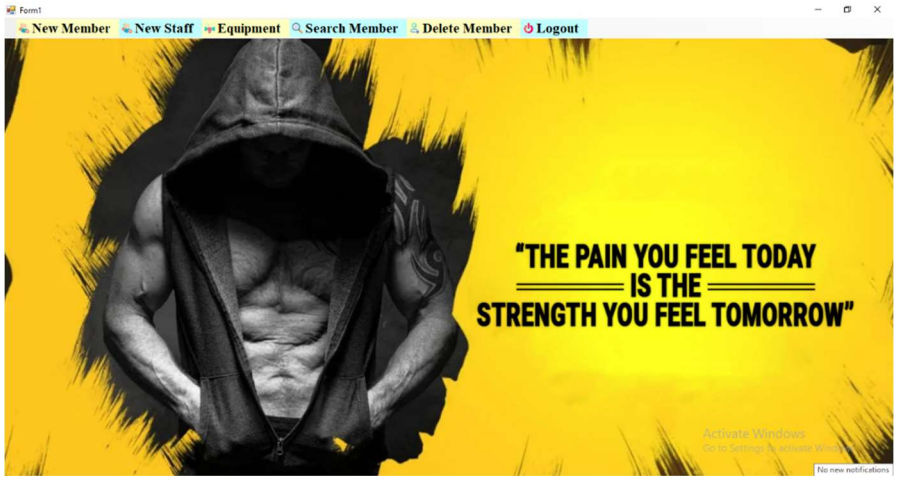

Figure: 4.2.1 Main Interface.

The complete design of this system is in chapter 5(Access System).

Chapter 5

5.1 Access System

5.1.1 Description

By reading this chapter user can know about every option of this system as like, how to operate this system, who can operate this system and all restrictions.

5.2 Manual

At the first execution the system you can see this page Figure: 5.2.1 Admin login page.

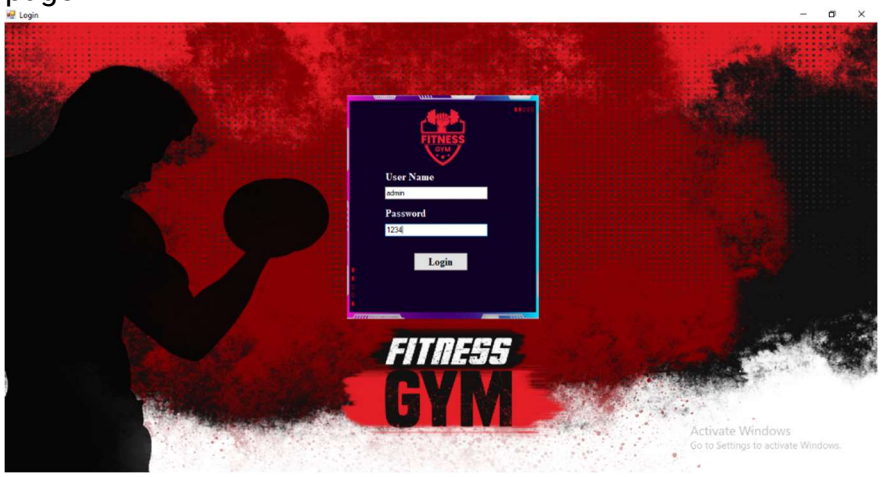

Figure: 5.2.1 Admin login page.

Then inserting user name & password then click login button and see the home page and the home page look like this, where you can see the options serially like. Proper username and password admin gets the option list:

- New Member
- Add Staff
- Equipment

- ❖ Search
- ❖ Delete
- ❖ Logout

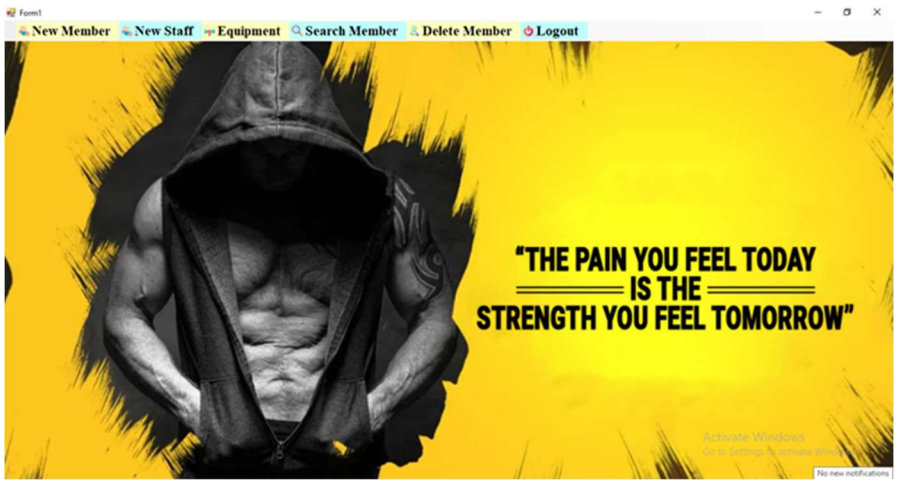

Figure: 5.2.2 Main interface.

If admin clicks the add member info button, admin get option to add member information. And input all information correctly.

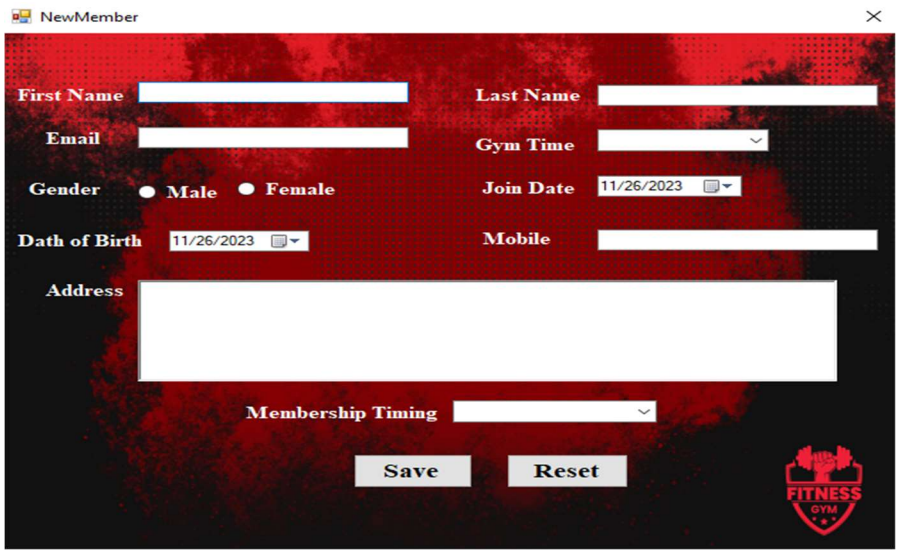

Figure: 5.2.3 Add Member interface.

In next button new staff admin clicks the new staff info button admin get option to new staff information. And input all information correctly.

Figure: 5.2.5 New Staff interface.

If admin clicks the Equipment button, admin get option to add new equipment information. And when all information input correctly click the save button.

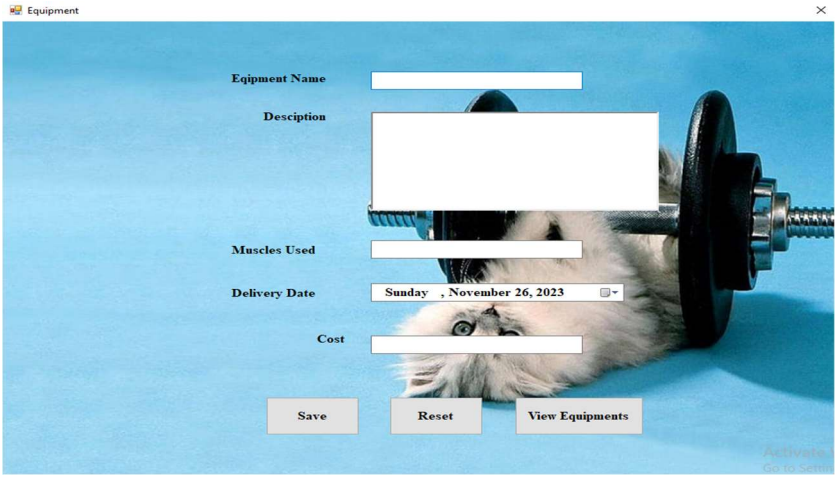

Figure: 5.2.6* Equipment *interface.

Admin clicks the View Equipment button, admin gets the data records of every existing gym instrument.

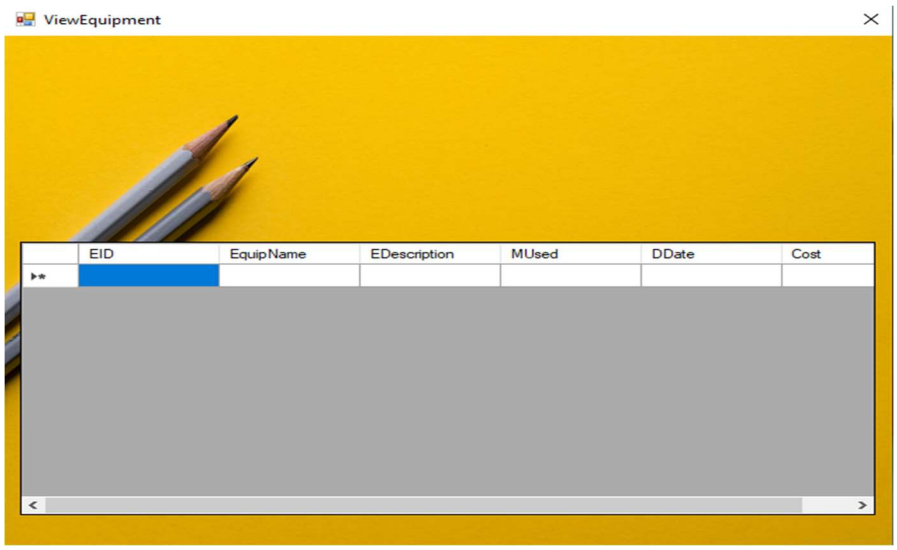

Figure: 5.2.7 View* Equipment *interface.

If admin clicks the Search Member button, admin get two option to search gym user or gym staff information.

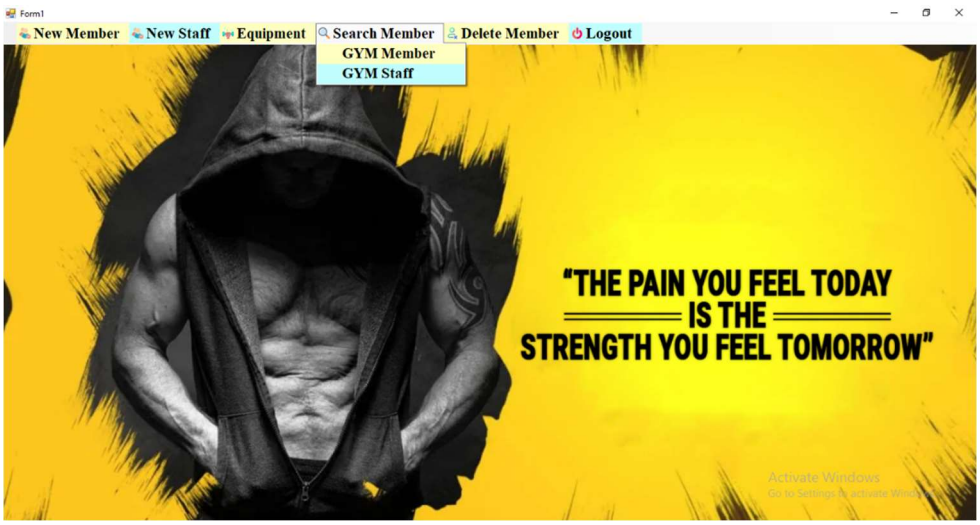

Figure: 5.2.8 Search interface.

if Admin can also search information for any particular gym users or gym staff by providing the gym users or gym staff mobile number.

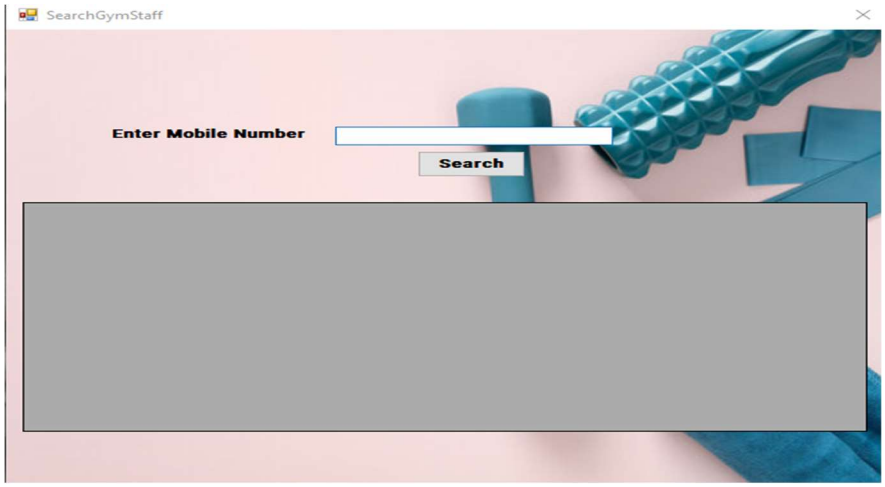

Figure: 5.2.9 Search Gym user's interface.

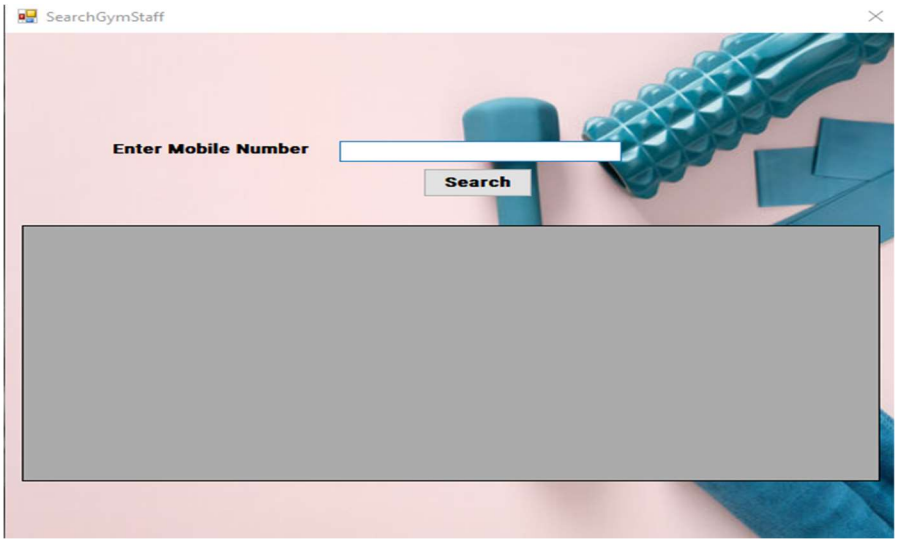

Figure: 5.2.10 Search **Gym Staff** *interface.*

If admin clicks the Search Member button, admin get two option to search gym user or gym staff information.

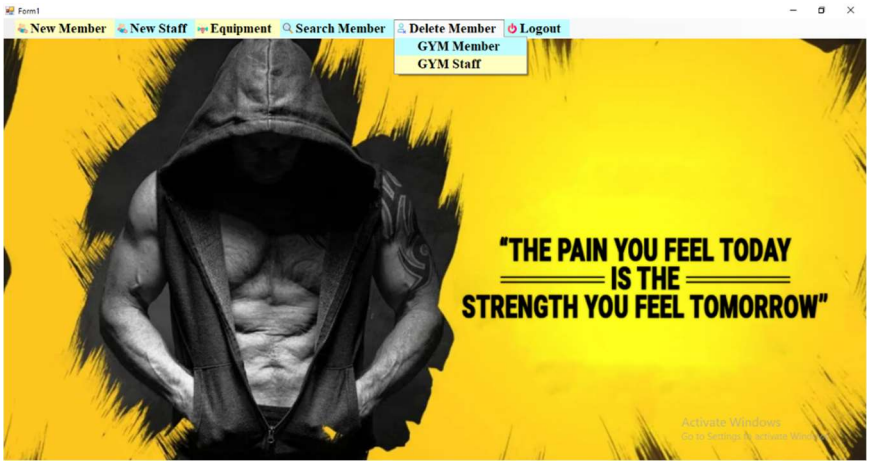

Figure: 5.2.11 Delete interface.

Admin can also delete information for any particular gym users or gym staff by providing the gym users or gym staff id.

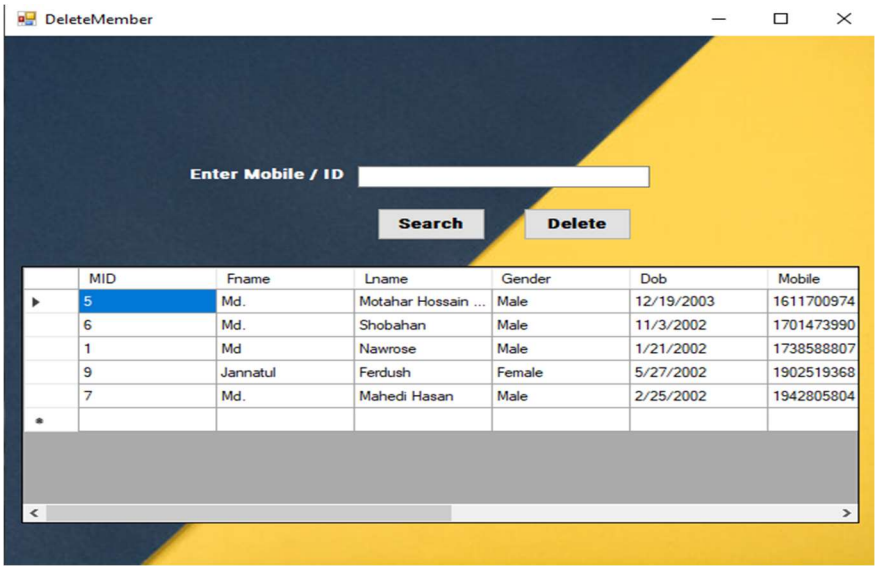

Figure: 5.2.12 Delete* Gym Member *interface

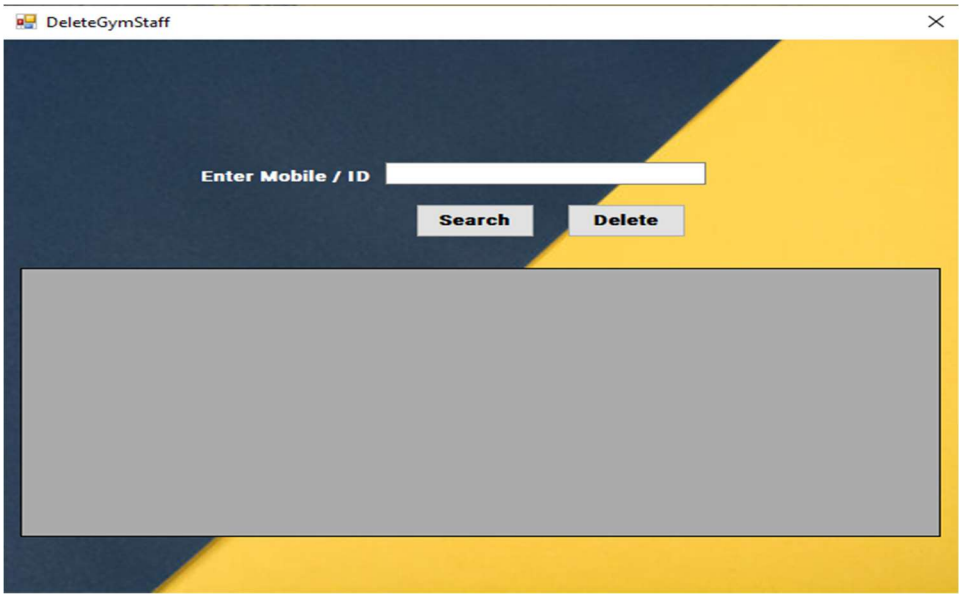

Figure: 5.2.13 Delete* Gym Staff *interface.

If Admin clicks the logout button, admin gets to see message box.

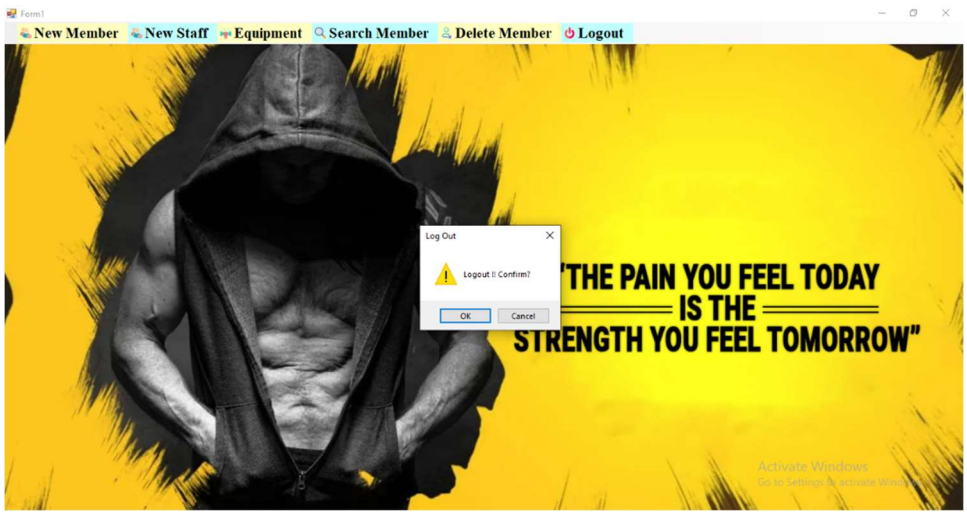

Figure: 5.2.14 Logout interface.

5.3 E-R Diagram:

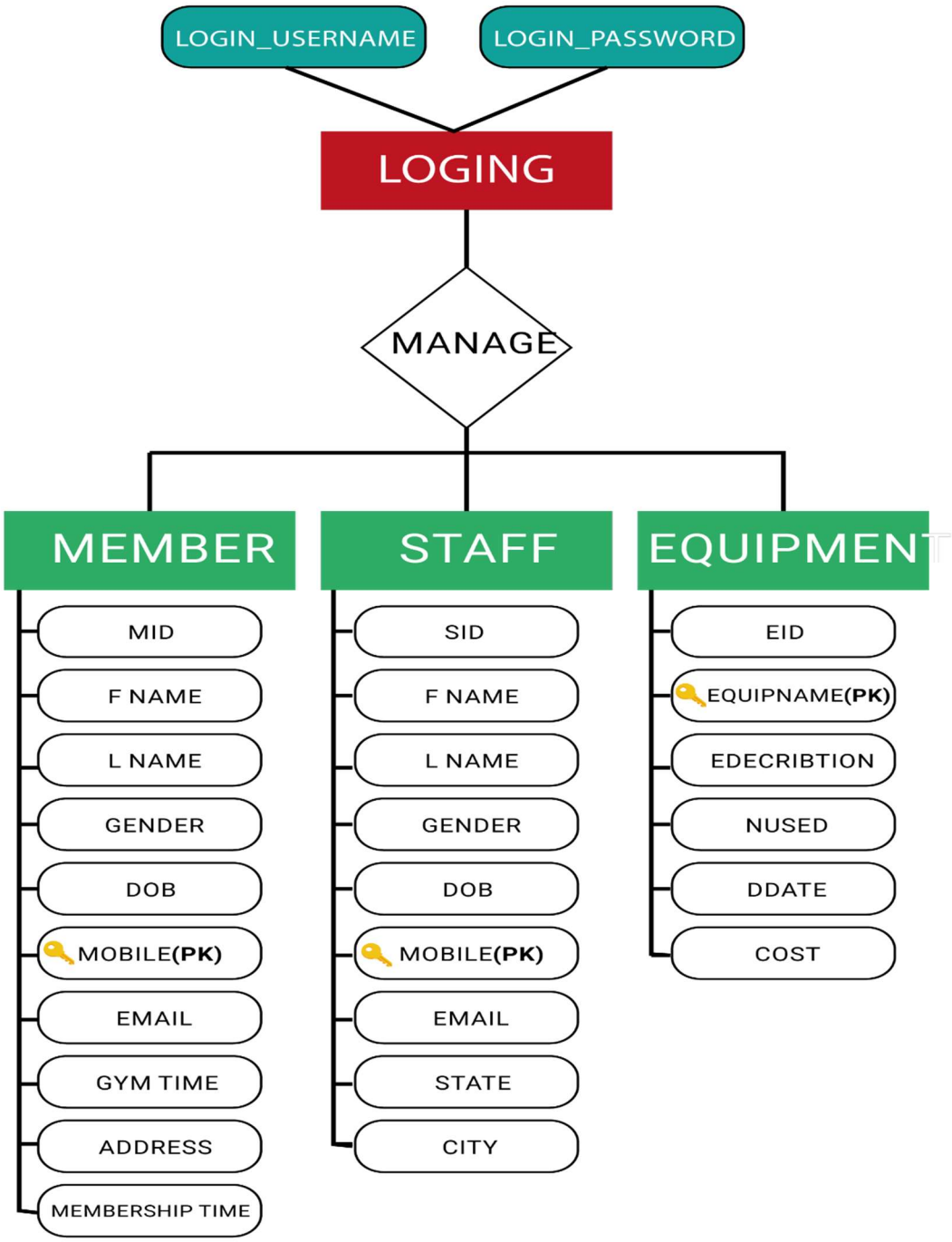

Figure: 5.2.1 ER Diagram.

Chapter 6

6.1 Code Analysis:

From1:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ei_Project_r_hobe_nah
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }
        Boolean b = true;
        private void toolStripMenuItem1_Click(object sender, EventArgs e)
        {
            {
                if (b == true)
                {
                    menuStrip1.Dock = DockStyle.Left;
                    b = false;
                    toolStripMenuItem1.Image =
Image.FromFile(@"C:\Users\UseR\Desktop\New folder (2)\img2.jpg");
                }
                else
                {
                    menuStrip1.Dock = DockStyle.Top;
                    b = true;
                    toolStripMenuItem1.Image =
Image.FromFile(@"C:\Users\UseR\Desktop\New folder (2)\img1.jpg");
                }
            }
        }

        private void Form1_Load(object sender, EventArgs e)
        {

        }

        private void newMemberToolStripMenuItem_Click(object sender, EventArgs e)
        {
            NewMember nm = new NewMember();
            nm.Show();
```

```
        }

        private void logoutToolStripMenuItem_Click(object sender, EventArgs e)
        {
            if (MessageBox.Show("Logout !! Confirm?", "Log Out",
MessageBoxButtons.OKCancel, MessageBoxIcon.Warning) == DialogResult.OK)
            {
                this.Close();
                Login lg = new Login();
                lg.Show();
            }
        }

        private void exitToolStripMenuItem_Click(object sender, EventArgs e)
        {
            if (MessageBox.Show("This will close your application. Confirm ?",
"CLOSE", MessageBoxButtons.YesNo, MessageBoxIcon.Information) == DialogResult.Yes)
            {
                Application.Exit();
            }
            else
            {
                MessageBox.Show("Welcome Back", "Welcome", MessageBoxButtons.OK,
MessageBoxIcon.Information);
            }
        }

        private void newStaffToolStripMenuItem_Click(object sender, EventArgs e)
        {
            NewStaff ns = new NewStaff();
            ns.Show();
        }

        private void equipmentToolStripMenuItem_Click(object sender, EventArgs e)
        {
            Equipment eq = new Equipment();
            eq.Show();
        }

        private void deleteMemberToolStripMenuItem_Click(object sender, EventArgs
e)
        {

        }

        private void searchMemberToolStripMenuItem_Click(object sender, EventArgs
e)
        {

        }

        private void gYMMemberToolStripMenuItem_Click(object sender, EventArgs e)
        {
            SearchMember sm = new SearchMember();
            sm.Show();
        }

        private void gYMStaffToolStripMenuItem_Click(object sender, EventArgs e)
```

```
        {
            SearchGymStaff sgs = new SearchGymStaff();
            sgs.Show();
        }

        private void gYMMemberToolStripMenuItem1_Click(object sender, EventArgs e)
        {
            DeleteMember dm = new DeleteMember();
            dm.Show();
        }

        private void gYMStaffToolStripMenuItem1_Click(object sender, EventArgs e)
        {
            DeleteGymStaff dgs = new DeleteGymStaff();
            dgs.Show();
        }
    }
}
```

Login:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ei_Project_r_hobe_nah
{
    public partial class Login : Form
    {
        public Login()
        {
            InitializeComponent();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            if (txtBoxUserName.Text == "admin" && txtBoxPassword.Text == "1234")

            {
                Form1 fm = new Form1();
                fm.Show();
                this.Hide();
            }
            else
```

```
            {
                MessageBox.Show("Incorrect User ID or Password", "Error",
MessageBoxButtons.OK, MessageBoxIcon.Error);
            }
        }

        private void Login_Load(object sender, EventArgs e)
        {

        }
    }
}
```

New Member:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ei_Project_r_hobe_nah
{
    public partial class NewMember : Form
    {
        public NewMember()
        {
            InitializeComponent();
        }

        private void richTextBox1_TextChanged(object sender, EventArgs e)
        {

        }

        private void btnSave_Click(object sender, EventArgs e)
        {
            String fname = txtFirstName.Text;
            String lname = txtLastName.Text;

            String gender = "";

            bool isChacked = radioButton1.Checked;

            if(isChacked)
```

```
            {
                gender = radioButton1.Text;
            }
            else
            {
                gender = radioButton2.Text;
            }

            String dob = dateTimePickerDOB.Text;
            Int64 mobile = Int64.Parse(txtMobile.Text);
            String email = txtEmail.Text;
            String joindate = dateTimePickerJoinDate.Text;
            String gymTime = comboBoxGymTime.Text;
            String address = txtAddress.Text;
            String membership = comboBoxMembership.Text;


            SqlConnection con = new SqlConnection();
            //con.ConnectionString = " data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
            con.ConnectionString = " data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
            SqlCommand cmd = new SqlCommand();
            cmd.Connection = con;

            cmd.CommandText = "insert into NewMember
(Fname,Lname,Gender,DOB,Mobile,Email,JoinDate,GymTime,Maddress,MembershipTime)
values ('" + fname + "','" + lname + "','" + gender + "','" + dob + "','" + mobile
+ "','" + email + "','" + joindate + "','" + gymTime + "','" + address + "','" +
membership + "')";

            SqlDataAdapter DA = new SqlDataAdapter(cmd);
            DataSet DS = new DataSet();
            DA.Fill(DS);
            MessageBox.Show("Data Saved.");
        }

        private void btnReset_Click(object sender, EventArgs e)
        {
            txtFirstName.Clear();
            txtLastName.Clear();
            radioButton1.Checked = false;
            radioButton2.Checked = false;

            txtMobile.Clear();
            txtEmail.Clear();

            comboBoxGymTime.ResetText();
            comboBoxMembership.ResetText();
            txtAddress.Clear();

            dateTimePickerDOB.Value = DateTime.Now;
            dateTimePickerJoinDate.Value = DateTime.Now;
        }
    }
}
```

New Staff:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Net;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ei_Project_r_hobe_nah
{
    public partial class NewStaff : Form
    {
        public NewStaff()
        {
            InitializeComponent();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            String fname = txtFname.Text;
            String lname = txtLname.Text;

            String gender = "";
            bool isChecked = radioButton1.Checked;

            if (isChecked)
            {
                gender = radioButton1.Text;
            }
            else
            {
                gender = radioButton2.Text;
            }
            String dob = dateTimePickerDOB.Text;
            Int64 mobile = Int64.Parse(txtMobile.Text);
            String email = txtEmail.Text;
            String joindate = dateTimePickerJOINDate.Text;
            String state = comboBoxState.Text;
            String city = comboBoxCity.Text;


            SqlConnection con = new SqlConnection();
            con.ConnectionString = " data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
            SqlCommand cmd = new SqlCommand();
            cmd.Connection = con;

            cmd.CommandText = "insert into NewStaff
(Fname,Lname,Gender,DOB,Mobile,Email,JoinDate,State,City) values ('" + fname +
"','" + lname + "','" + gender + "','" + dob + "','" + mobile + "','" + email +
"','" + joindate + "','" + state + "','" + city + "')";
```

```
            SqlDataAdapter DA = new SqlDataAdapter(cmd);
            DataSet DS = new DataSet();
            DA.Fill(DS);
            MessageBox.Show("Data Saved.");
        }

        private void btnReset_Click(object sender, EventArgs e)
        {
            txtFname.Clear();
            txtLname.Clear();
            radioButton1.Checked = false;
            radioButton2.Checked = false;

            txtMobile.Clear();
            txtEmail.Clear();

            comboBoxState.ResetText();
            comboBoxCity.ResetText();


            dateTimePickerDOB.Value = DateTime.Now;
            dateTimePickerJOINDate.Value = DateTime.Now;
        }
    }
}
```

Equipment:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Reflection;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using static System.Windows.Forms.AxHost;
using static System.Windows.Forms.VisualStyles.VisualStyleElement.ListView;
using System.Xml.Linq;

namespace ei_Project_r_hobe_nah
{
    public partial class Equipment : Form
    {
        public Equipment()
        {
```

```
            InitializeComponent();
        }

        private void label2_Click(object sender, EventArgs e)
        {

        }

        private void button1_Click(object sender, EventArgs e)
        {
            String equipname = txtEquipName.Text;
            String description = txtDescription.Text;
            String mused = txtMusclesUsed.Text;
            String ddate = dateTimePickerDeliverDate.Text;
            Int64 cost = Int64.Parse(txtCost.Text);


            SqlConnection con = new SqlConnection();
            con.ConnectionString = " data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
            SqlCommand cmd = new SqlCommand();
            cmd.Connection = con;
            cmd.CommandText = "insert into Equipment
(Equipment,EDescription,MUsed,DDate,Cost) values ('" + equipname + "','" +
description + "','" + mused + "','" + ddate + "','" + cost + "')";
            //('" + EquipName + "','" + Cost"')


            SqlDataAdapter DA = new SqlDataAdapter(cmd);
            DataSet DS = new DataSet();
            DA.Fill(DS);
            MessageBox.Show("Data
Saved.","Inserted",MessageBoxButtons.OK,MessageBoxIcon.Information);
        }

        private void button2_Click(object sender, EventArgs e)
        {
            txtEquipName.Clear();
            txtDescription.Clear();
            txtMusclesUsed.Clear();
            txtCost.Clear();
            dateTimePickerDeliverDate.Value = DateTime.Now;

        }

        private void button3_Click(object sender, EventArgs e)
        {
            ViewEquipment ve = new ViewEquipment();
            ve.Show();
        }
    }
}
```

View Equipment:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ei_Project_r_hobe_nah
{
    public partial class ViewEquipment : Form
    {
        public ViewEquipment()
        {
            InitializeComponent();
        }

        private void dataGridView2_CellContentClick(object sender,
DataGridViewCellEventArgs e)
        {

        }

        private void ViewEquipment_Load(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection();
            con.ConnectionString = " data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
            SqlCommand cmd = new SqlCommand();
            cmd.Connection = con;

            cmd.CommandText = "select * from Equipment";
            SqlDataAdapter DA = new SqlDataAdapter(cmd);
            DataSet DS = new DataSet();
            DA.Fill(DS);

            dataGridView1.DataSource = DS.Tables[0];
        }
    }
}
```

Search Gym Users:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ei_Project_r_hobe_nah
{
    public partial class SearchMember : Form
    {
        public SearchMember()
        {
            InitializeComponent();
        }

        private void btnSearch_Click(object sender, EventArgs e)
        {

            if (txtSearch.Text != "")
            {

                SqlConnection con = new SqlConnection();
                con.ConnectionString = "data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
                SqlCommand cmd = new SqlCommand();
                cmd.Connection = con;

                cmd.CommandText = "select * from NewMember where Mobile = " +
txtSearch.Text + "";
                SqlDataAdapter DA = new SqlDataAdapter(cmd);
                DataSet DS = new DataSet();
                DA.Fill(DS);


                dataGridView1.DataSource = DS.Tables[0];
            }
            else
            {
                MessageBox.Show("Please Enter Some ID", "Message",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
                    }
        }

        private void SearchMember_Load(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection();
            con.ConnectionString = "data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
            SqlCommand cmd = new SqlCommand();
            cmd.Connection = con;
```

```
            cmd.CommandText = "select * from NewMember";
            SqlDataAdapter DA = new SqlDataAdapter(cmd);
            DataSet DS = new DataSet();
            DA.Fill(DS);


            dataGridView1.DataSource = DS.Tables[0];
        }
    }
}
```

Search Gym Users:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ei_Project_r_hobe_nah
{
    public partial class SearchGymStaff : Form
    {
        public SearchGymStaff()
        {
            InitializeComponent();
        }

        private void btnSearch_Click(object sender, EventArgs e)
        {

            if (txtSearch.Text != "")
            {

                SqlConnection con = new SqlConnection();
                con.ConnectionString = "data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
                SqlCommand cmd = new SqlCommand();
                cmd.Connection = con;

                cmd.CommandText = "select * from NewStaff where Mobile = " +
txtSearch.Text + "";
                SqlDataAdapter DA = new SqlDataAdapter(cmd);
                DataSet DS = new DataSet();
```

```
                DA.Fill(DS);


                dataGridView1.DataSource = DS.Tables[0];
            }
            else
            {
                MessageBox.Show("Please Enter Some ID", "Message",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
            }
        }

        private void SearchMember_Load(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection();
            con.ConnectionString = "data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
            SqlCommand cmd = new SqlCommand();
            cmd.Connection = con;

            cmd.CommandText = "select * from NewStaff";
            SqlDataAdapter DA = new SqlDataAdapter(cmd);
            DataSet DS = new DataSet();
            DA.Fill(DS);


            dataGridView1.DataSource = DS.Tables[0];
        }

        private void dataGridView1_CellContentClick(object sender,
DataGridViewCellEventArgs e)
        {

        }
    }

}
```

Delete Gym Users:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
```

```
using System.Windows.Forms;

namespace ei_Project_r_hobe_nah
{
    public partial class DeleteMember : Form
    {
        public DeleteMember()
        {
            InitializeComponent();
        }

        private void btnDelete_Click(object sender, EventArgs e)
        {
            if (MessageBox.Show("This will your data.Confirm?", "Delete Data",
MessageBoxButtons.YesNo) == DialogResult.Yes)
            {

                SqlConnection con = new SqlConnection();
                con.ConnectionString = "data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
                SqlCommand cmd = new SqlCommand();
                cmd.Connection = con;

                cmd.CommandText = "delete from NewMember where MID = " +
textBox1.Text + "";
                SqlDataAdapter DA = new SqlDataAdapter(cmd);
                DataSet DS = new DataSet();
                DA.Fill(DS);
            }
            else
            {
                this.Activate();
                SqlConnection con = new SqlConnection();
                con.ConnectionString = "data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
                SqlCommand cmd = new SqlCommand();
                cmd.Connection = con;

                cmd.CommandText = "select * from NewMember";
                SqlDataAdapter DA = new SqlDataAdapter(cmd);
                DataSet DS = new DataSet();
                DA.Fill(DS);

                dataGridView1.DataSource = DS.Tables[0];
            }
        }
                private void DeleteMember_Load(object sender, EventArgs e)
                {
                    SqlConnection con = new SqlConnection();
                    con.ConnectionString = "data source = DESKTOP-
UTLE5RI\\SQLEXPRESS; database = gym; integrated security = True";
                    SqlCommand cmd = new SqlCommand();
                    cmd.Connection = con;

                    cmd.CommandText = "select * from NewMember";
                    SqlDataAdapter DA = new SqlDataAdapter(cmd);
                    DataSet DS = new DataSet();
                    DA.Fill(DS);
```

```
                dataGridView1.DataSource = DS.Tables[0];
            }

        private void button1_Click(object sender, EventArgs e)
        {

            if (textBox1.Text != "")
            {

                SqlConnection con = new SqlConnection();
                con.ConnectionString = "data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
                SqlCommand cmd = new SqlCommand();
                cmd.Connection = con;

                cmd.CommandText = "select * from NewMember where Mobile = " +
textBox1.Text + "";
                SqlDataAdapter DA = new SqlDataAdapter(cmd);
                DataSet DS = new DataSet();
                DA.Fill(DS);


                dataGridView1.DataSource = DS.Tables[0];
            }
            else
            {
                MessageBox.Show("Please Enter Some ID", "Message",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
            }
        }

        private void SearchMember_Load(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection();
            con.ConnectionString = "data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
            SqlCommand cmd = new SqlCommand();
            cmd.Connection = con;

            cmd.CommandText = "select * from NewMember";
            SqlDataAdapter DA = new SqlDataAdapter(cmd);
            DataSet DS = new DataSet();
            DA.Fill(DS);


            dataGridView1.DataSource = DS.Tables[0];
        }
    }

}
```

Delete Gym Staff:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace ei_Project_r_hobe_nah
{
    public partial class DeleteGymStaff : Form
    {
        public DeleteGymStaff()
        {
            InitializeComponent();
        }

        private void label1_Click(object sender, EventArgs e)
        {

        }

        private void btnDelete_Click(object sender, EventArgs e)
        {
            if (MessageBox.Show("This will your data.Confirm?", "Delete Data",
MessageBoxButtons.YesNo) == DialogResult.Yes)
            {

                SqlConnection con = new SqlConnection();
                con.ConnectionString = "data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
                SqlCommand cmd = new SqlCommand();
                cmd.Connection = con;

                cmd.CommandText = "delete from NewStaff where SID = " +
textBox1.Text + "";
                SqlDataAdapter DA = new SqlDataAdapter(cmd);
                DataSet DS = new DataSet();
                DA.Fill(DS);
            }
            else
            {
                this.Activate();
                SqlConnection con = new SqlConnection();
                con.ConnectionString = "data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
                SqlCommand cmd = new SqlCommand();
                cmd.Connection = con;

                cmd.CommandText = "select * from NewStaff";
                SqlDataAdapter DA = new SqlDataAdapter(cmd);
                DataSet DS = new DataSet();
```

```
                DA.Fill(DS);

                dataGridView1.DataSource = DS.Tables[0];
            }
        }

        private void button1_Click_1(object sender, EventArgs e)
        {

            if (textBox1.Text != "")
            {

                SqlConnection con = new SqlConnection();
                con.ConnectionString = "data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
                SqlCommand cmd = new SqlCommand();
                cmd.Connection = con;

                cmd.CommandText = "select * from NewStaff where Mobile = " +
textBox1.Text + "";
                SqlDataAdapter DA = new SqlDataAdapter(cmd);
                DataSet DS = new DataSet();
                DA.Fill(DS);


                dataGridView1.DataSource = DS.Tables[0];
            }
            else
            {
                MessageBox.Show("Please Enter Some ID", "Message",
MessageBoxButtons.OK, MessageBoxIcon.Warning);
            }
        }

        private void SearchMember_Load(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection();
            con.ConnectionString = "data source = DESKTOP-UTLE5RI\\SQLEXPRESS;
database = gym; integrated security = True";
            SqlCommand cmd = new SqlCommand();
            cmd.Connection = con;

            cmd.CommandText = "select * from NewStaff";
            SqlDataAdapter DA = new SqlDataAdapter(cmd);
            DataSet DS = new DataSet();
            DA.Fill(DS);


            dataGridView1.DataSource = DS.Tables[0];
        }
    }

}
```

Chapter 7

7.1 Database Query:

7.1.1 Table Query:

```
CREATE TABLE gym ;
```

7.1.2 New Member Query:

```
USE gym;

CREATE TABLE NewMember

(

MID int NOT NULL,

Fname varchar (150) NOT NULL,

Lname varchar (150) NOT NULL,

Gender varchar (20) NOT NULL,

Dob varchar (100) NOT NULL,

Mobile bigint NOT NULL IDENTITY (1,1) primary key,

Email varchar (150),

JoinDate varchar (100) NOT NULL,

Gymtime varchar (120) NOT NULL,

Maddress varchar (250) NOT NULL,

MembershipTime varchar (120) NOT NULL

) ;
```

7.1.3 New Staff Query:

```
USE gym;

CREATE TABLE NewStaff

(

SID int NOT NULL IDENTITY (1,1) ,

Fname varchar (150) NOT NULL ,

Lname varchar (150) NOT NULL ,

Gender varchar (20) NOT NULL ,

Dob varchar (100) NOT NULL ,

Mobile bigint NOT NULL PRIMARY KEY ,

Email varchar (150) ,

JoinDate varchar (100) NOT NULL ,

State varchar (100) NOT NULL ,

City varchar (100) NOT NULL

) ;
```

7.1.4 Equipment Query:

```
USE gym;

CREATE TABLE Equipment

(

 EID int NOT NULL IDENTITY (1,1) ,

 EquipName varchar (250) NOT NULL PRIMARY KEY ,

 EDescription varchar (250) NOT NULL ,

 MUsed varchar (250) NOT NULL ,

 DDate varchar (250) NOT NULL ,

 Cost bigint NOT NULL

) ;
```

Chapter 8

8.1 Future Work

Due to lack of knowledge and resource we couldn't do the project at hearts content. There is obviously room for improvement and we intent to work on this project further in future. There are some features that we would like to add in future like payment option to add some elaborated features. We would like to made this software more user friendly. We will also work on providing better security because it is two sophisticated system to get hacked.

8.2 Conclusion

To keep pace with the rapid evolving world, resorting to modern ICT is the only way. With the increasing demand of modern e-healthcare we need to come up with ideas that would provide simultaneously fast, efficient, time saving and user-friendly healthcare service. And we believe in our heart that our project meets these conditions. This gym management system can be useful for gym owners. gym owners or admin can use this system to find out all gym users, gym staff and equipment, while recipients can use them to find out gym users, gym staff and equipment. This particular application can also help gym manage their information more efficiently by providing real-time information. In conclusion, a gym management application is an essential tool that can help save time by making the process of gym users information more convenient and efficient. By using a gym management system, we can make a difference in someone's time by receiving information.

CHAPTER 9

9.1 References

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2.eXtreme .NET: Introducing eXtreme Programming Techniques to .NET Developers Author(s): Dr. Neil Roodyn.

3.Student's Essential Guide to .NET, 1st Edition Author(s): Tony Grimer

4.Professional DotNetNuke ASP.NET Portals Author(s): Shaun Walker, Patrick J. Santry, Joe Brinkman, Dan Caron.

9.2 Web References:

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➢ http://www.vb101.com

➢ http://www.codeguru.com