# GOLD LOAN DATABASE MANAGEMENT SYSTEM

A mini project report submitted to Kongu Arts and Science College (Autonomous), Erode. in partial fulfillment of the requirement for the award of the degree of

## MASTER OF COMPUTER APPLICATIONS

Submitted by

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# KONGU ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

Affiliated to Bharathiar University, Coimbatore

Approved by UGC, AICTE, New Delhi & Re-accredited by NAAC

DBT Star College Scheme

Nanjanapuram, Erode – 638 107.

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(ISO 9001:2015 Certified Institution)

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# **DEPARTMENT OF COMPUTER SCIENCE (P.G.)**

**REGISTER NO. : 21PCAT020** 

CLASS : II M.C.A

Certified that the	is is the bonafide record of work done by the above
student in the	
during the academic year	
LAB IN-CHARGE	HEAD OF THE DEPARTMENT
Submitted for the mini project vi	va-voce examination held on

**INTERNAL EXAMINER** 

**EXTERNAL EXAMINER** 



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# 1. INTRODUCTION

## 1.1 ABOUT THE PROJECT

The project GOLD LOAN DATABASE MANAGEMENT SYSTEM is used to maintain the gold loan record. It includes all the necessary features and functions to keep the records. The system was user friendly to use. It reduces manual work.

If the customer wants a gold loan, he must create the CUSTOMER ID. So that the staff can identify the customer. After creating CUSTOMER ID, we need to create LOAN ID. For the creation of LOAN ID, the customer must provide the necessary details. Creating LOAN ID is save in CUSTOMER ID. The loan amount was generated based on gold quality, quantity and current gold price. Then the interest rate is based on the financial company or gold loan providing banking policy. Employees can also monitor whether the loan payment is pending or the loan is closed.

# 1.2 SYSTEM SPECIFICATION

## 1.2.1 HARDWARE SPECIFICATION

**SYSTEM** : I3 PROCESSOR

**RAM** : 4 GB DDR 2

**HARD DISK** : 250 GB

**MONITOR** : 14" COLOR MONITOR

**KEYBOARD** : STANDARD 104 KEYS

MOUSE : OPTICAL MOUSE

# 1.2.2 SOFTWARE SPECIFICATION

**OPERATING SYSTEM:** WINDOWS 11

**FRONT END** : MICROSOFT VISUAL STUDIO.NET2010

**CODE-BEHIND FILE:** C#.NET

BACK END : MICROSOFT SQL SERVER 2008

#### 1.2.3 SOFTWARE DESCRIPTION

#### C#.NET

C#.NET is the part of the Visual Studio .NET. It is fully supported by the .NET framework as it is popularly known as full fledge object oriented programming language. It means that it has all the property that a normal to OOP (Object Oriented Programming) language would have, inheritance, polymorphism, classes, objects, methods and all the concepts that come to mind whole referring to OOP languages like Java or C#.

C#.NET includes background compilation, which means that it can flat syntactical errors immediately, while you are typing. C#.NET also supports late binding. In the Visual Studio.NET IDE (Integrated Development Environment). It also provides default values for optional parameters, and for having a collection of controls available to the developer.

C# developers can also create multithreaded, scalable applications using explicit free threading. Various other new language features are in C#.NET are structured exception handling, custom attributes, and Common Language Specification (CLS) compliance. The classes, objects and components created by the user in C#.NET can use any CLS-compliant language. Assemblies, namespaces and attributes are some of the CLS features that are used in C#.NET programs.

#### **C#.NET ADVANTAGES**

- C# language is projected to be a simple, modern, general-purpose, object-oriented programming language.
- C# helps you to import a namespace and use the classes in a component-no COM plumbing or registry lookups required.
- C# supports XML comments to add comments to code. The comments are planned into XML format and can then be used as needed to document your code.
- C# provides operator overloading which is not available in VB.NET.
- C# allows you to access memory directly using unsafe code blocks.
- C# is based on reflection mechanism which is biggest advantage of C#.

# **MICROSOFT SQL SERVER 2008**

SQL Server is a relational database management system that's capable of handling large amounts of data and many concurrent users while preserving data integrity and providing many advanced administration and data distribution capabilities. The SQL server component acts as a gateway between the clients and the physical data. No client applications have direct access to the data.

### The features of the SQL Server

- It is a client-server architecture and not shared-file application as Access. Symmetric Multiprocessing (SMP) supports up to 32 simultaneous processors. It can have database up to 1 terabyte in size.
- It can handle up to 32,767 simultaneous user connections.

A language used to insert, retrieve, modify, and delete data in a relational database. SQL also contains statements for defining and administering the objects in a database. SQL is the language supported by most relational databases, and is the subject of standards published by the International Standards Organization (ISO) and the American National Standards Institute (ANSI) SQL server 2000 uses the SQL language called transact-SQL.

SQL server Query Analyzer is a graphical toll that allows you to

- Edit and SQL scripts. View a graphical representation of a query's (Estimated) execution plan. Return query results to grid or text.
- Perform index analysis.
- Retrieve Transact-SQL syntax help to view statistic information about an executed query.

#### **FEATURES**

- Symmetric Multiprocessing (SMP) supports up to 32 simultaneous processors.
- It can have database up to 1 terabyte (1024 GB) in size.
- It can handle up to 32,767 simultaneous user connections.
- It provides data integrity, data recovery and functionalities that are transparent to the developer.
- SQL Server optimizes network resources. Only the data requested by the client needs to be sent across the network.
- Security can be enforced at ones central location.

## **BENEFITS OF SQL**

- SQL has become the database language of choice because it is flexible, powerful and easy to learn.
- SQL is a non-procedural language.
- Process sets of records rather than just one at a time and provides automatic navigation to the data. SQL provides commands for a variety of tasks including: querying data, creating, updating and replacing and inserting, updating and deleting rows.
- All major relational database management systems support SQL thus one can transfer all the skills gained with SQL from one RDBMS to another.



## 2. SYSTEM STUDY

#### 2.1 EXISTING SYSTEM

In this existing system the record of the gold loan is done by manual process. It this existing system the record is maintain in the large note. All the record are can't able to access or understand by any staff. Then staff need to check the loan payment details of the loan and then loan records are check by monthly wise at last year end staff need to check the pending loan details and reporting to head.

#### 2.1.1 DRAWBACKS

- More Manual Work.
- Difficult to Search Loan details.
- Maintenance the recodes and retrieval the data is head.
- More time will be taken.

#### 2.2 PROPOSED SYSTEM

In the proposed system of gold loan database management system, the staff can maintain the records of the customer, loan and payment details also. And the it was easy to maintain. Then it was easy to creating the new customer or loan recode. Loan data was related to the CUSTOMER ID. So that user can find the customer details and also current and previews loan details. In the payment it has the two types to pay loan. First payment is the paying the interest of the loan and then it was monitoring monthly wise. Second Payment is the closing loan. Paying the total loan sanction amount including the interest amount to close loan. If need to change any data to the customer bio then admin can change the data of the customer. And also, admin can take a monthly, daily and also year wise of loan payment details.

#### 2.2.1 ADVANTAGES

- It reduces the time.
- The System has the Advanced Searching option it makes easy to search the data.
- User friendly interfaces.
- Reduces the manual work.



# 3. SYSTEM AND DEVELOPMENT

#### 3.1 FILE DESIGN

This system contains the menus for various kinds of operations. Menus and Files are Created for displaying the information about user and company. This system also contains the command buttons as part of the user interface. Information systems in business are file and database oriented. Data are accumulated into files that are proposed or maintained by the system. The system analyst is responsible for designing files, determining their contents and selecting a method for organizing the data. System analysis decide the following input design details like, what data to input, what medium to use, how the data should be arranged or coded, data items and transaction needing validations to detect errors and at last the dialogue to guide user in providing input.

#### 3.2 INPUT DESIGN

The input design is the link between the information system and the user. It comprises the developing specification and procedures for data preparation and those steps are necessary to put transaction data into a usable form for processing can be achieved by inspecting the computer to read data from a written or printed document. The design of input focuses on controlling the amount of input required, controlling the errors, avoiding delay, avoiding extra steps and keeping the process simple. Input Design considered the following things:

- The dialog to guide the operating personnel in providing input.
- Methods for preparing input validations and steps to follow when errors occur.

#### **CUSTOMER DETAIL**

Customer details are accepted by input to maintain in the system to with respective to the loan. Input Design is the process of converting a user-oriented description of the input into a computer-based system. This design is important to avoid errors in the data input process and show the correct direction to the management for getting correct information from the computerized system.

• The program accepts customer and loan records

- The process maintains the customer, loan and payment details
- New and Previews details

It is achieved by creating user-friendly screens for the data entry to handle large volumes of data. The goal of designing input is to make data entry easier and to be free from errors. The data entry screen is designed in such a way that all the data manipulates can be performed. It also provides record viewing facilities.

#### 3.3 OUTPUT DESIGN

A quality output is one, which meets the requirements of the end user and presents the information clearly. In any system results of processing are communicated to the users and to other system through outputs. In output design it is determined how the information is to be displaced for immediate need and also the hard copy output. It is the most important and direct source information to the user. Efficient and intelligent output design improves the system's relationship to help user decision-making.

- Designing computer output should proceed in an organized, well thought out manner; the right output must be developed while ensuring that each output element is designed so that people will find the system can use easily and effectively.
- When analysis design computer output, they should Identify the specific output that is needed to meet the requirements.
- Select methods for presenting information.
- The output form of an information system should accomplish one or more of the following objectives.

The output is designed in such a way that it is attractive, convenient and informative as the outputs is the most important sources of information to the users; better design should improve the system's relationships with us and also will help in decision-making. Form design elaborates the way output is presented and the layout available for capturing information.

## 3.4 DATABASE DESIGN

Data base design is required to manage the large bodies of information. The management of data involves both the definition of structure of the storage of information and provisions of mechanism for the manipulation of information. In addition to the database system must provide for the safety of information handled, despite the system crashes due to attempts art unauthorized access. For developing an efficient database, we will have to fulfil certain conditions such as:

- Control redundancy.
- Ease of use.
- Data Independence.
- Accuracy and integrity.
- Avoiding inordinate delays.
- Recovery from failure.
- Privacy and security.
- Performance.

There are 6 major steps in design process. The first 5 steps are usually done on paper and finally the design is implemented.

- Identify the table and relationships.
- Identify the data that is needed for each table and relationship.
- Resolve the relationship.
- Verify the design.
- Implement the design

#### **NORMALIZATION**

Normalization is a technique that is more applicable to record-based data models. Each of the process can be carried out independently to arrive at normalized tables. Normalization refines the data structure and data are group in simple way as possible. So later changes can be bringing about the least impact on database structure and eliminates data redundancy.

#### **DATA INTEGRITY**

Data integrity refers to the procedure that ensures correctness of the data entered in the database. Functions have been provided in the software, which check data while being entered. Integrity problems are occurred due to hardware or software mal functions such as power failure and disk crashes. Side effect from the program development may also be the reason.

#### **DATA CONSISTENCY**

Problem with data consistency occur when adding records without first checking for records with same key or deleting records without deleting other related records. Likewise, the software is coded such that primary keys can't be duplicated. For developing an efficient database, we have to fulfill certain conditions such as:

- Control redundancy
- Ease of use
- Data independence
- Privacy and security
- Performance

# 3.5 SYSTEM DEVELOPMENT

Equipment Maintenance System is widely understood to the most effective tool to improve the quality of instruction in colleges. Timely and accurate information is useful in virtually every stage of the decision-making process. Problems are identified when information reveals that some .net of performance can be place in the hands of decision makers. This project will be done using .NET as front end, and MSSQL as back end.

#### 3.5.1 MODULES DESCRIPTION

#### **USER MODULE**

- Contain login form.
- Consist of home page where all the menus are shown.
- New customer entry forms which user can add the records.
- New loan entry form which user can add the records.
- User can pay the loan Interest amount and closing the loan
- User can search the particular loan or customer details using search.
- If the customer forgot Loan ID and Customer ID using Advance search, we can retrieve the ID.

## **ADMIN MODULE**

- Contain login form.
- Consist of home page where all the menus are shown.
- Edit the customer details.
- Maintain the Customer, Loan and Payment details.
- Take the payment report (year, daily or Monthly).



# 4. TESTING AND IMPLEMENTATION

#### SYSTEM TESTING

System testing is the stage of implementation, which is aimed at ensuring that the system works accurately and efficiently before live operation commences. Testing is vital to the success of the system. System testing makes a logical assumption that if all the parts of the system are correct, the goal will be successfully achieved. The candidate system is subject to a variety of tests.

A series of tests are performed for the proposed system before the system is ready for user acceptance testing.

The testing steps are:

- Unit testing
- Integration testing
- Validation testing
- Output testing
- User acceptance testing

## **UNIT TESTING**

In unit testing the user tests the programs making up a system. This test focuses on the modules, independently of one another to locate errors. This enables the tester to deduct errors in coding and logic that are contained within that module alone. The errors resulting from the interaction between modules are initially avoided.

In this system, each form is unit tested. For example, in login form, user name is tested with lengthy name to test the max size of the name field. Similarly, the passwords are entered in wrong manner and checked.

#### INTEGRATION TESTING

After testing all the modules, the modules are integrated and testing of the final system is done with the test data, specially designed to show that the system will operate successfully in all its aspects conditions. Thus the system testing is a confirmation that all is correct and an opportunity to show the user that the system works

#### **VALIDATION TESTING**

Validation testing can be defined in many ways but a simple definition is that validation succeeds when the software function in a manner that can be reasonably expected by the customer. After validation test has been conducted, one of two possible conditions exists.

In this project, file secure and file information are initially added. A file protection process is done and tested for correctness. A sample username and password is entered in login form to check whether the field accepts valid username or not.

## ACCEPTANCE TESTING

The users find no major problems with its accuracy the system passes through a final acceptance test. This last test confirms that the system meets the original goals, objectives and requirements established during design. User acceptance of a system is the key factor for the success of any system. The system under consideration is tested for user acceptance by constantly keeping in touch with the prospective system users at the time of developing and making changes where ever required.

The new system developed was tested by the acceptance testing method. Acceptance test incorporates both unit testing and integration testing. The user provided test area. Thus, the system was successfully tested and it satisfies the user requirements. Afterwards it was implemented successfully.

#### SYSTEM IMPLEMENTATION

This phase plans for the implementation of newly developed system. The change over plans selected is used to change existing system to the newly proposed system. The objective is to put the tested system into operation while holding costs, risk, and personal irritation to a minimum. It involves

- Creating computer compatible files.
- Training the operating staff.
- Installing terminals and hardware.



# 5. CONCLUSION

The "GOLD LOAN DATABASE MANGEMENT SYSTEM" meet all the requirements of the purser. The entire system is menu-driven and interactive. The system was developed on C#. Net environment. The system mainly developed for high user interaction and fast data transaction. The system is user-friendly software in which the faculty is able to get appropriate of the customer, loan and payment report.



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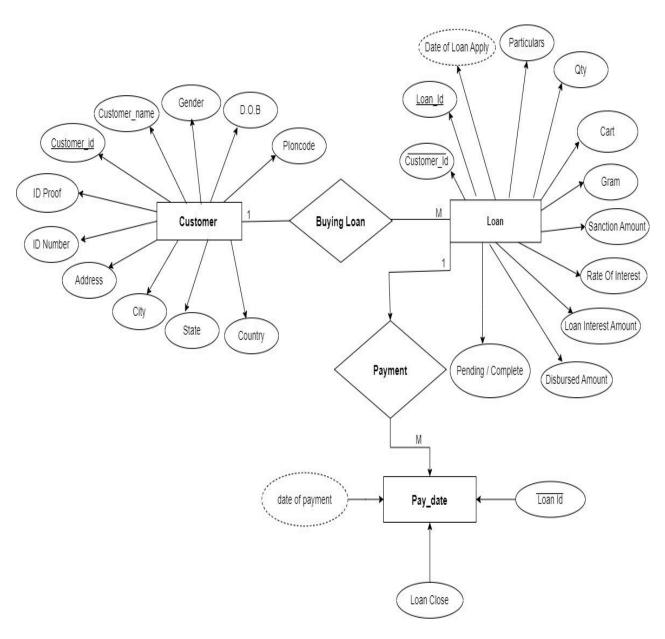
# WEBSITE REFERENCES

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- 3. www.quora.com
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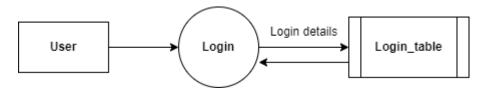
# **APPENDICES**

# A. ENTITY RELATIONSHIP DIAGRAM

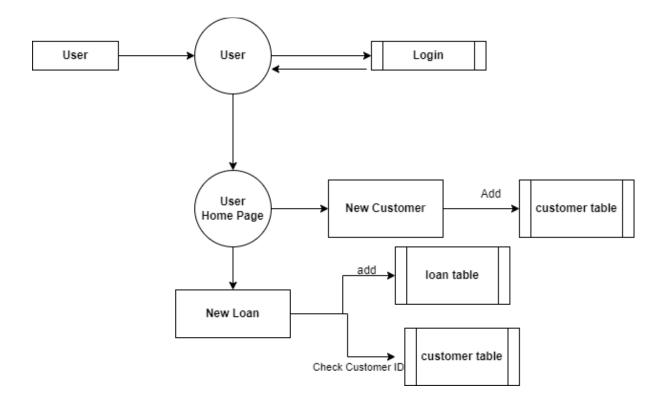


# **B. DATA FLOW DIAGRAM**

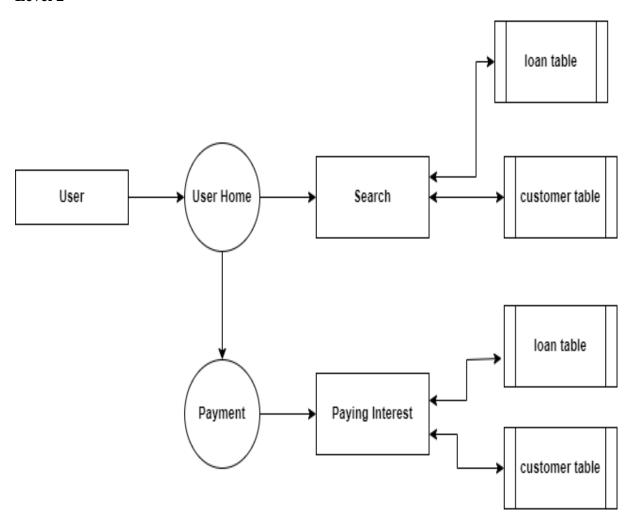
# Level 0



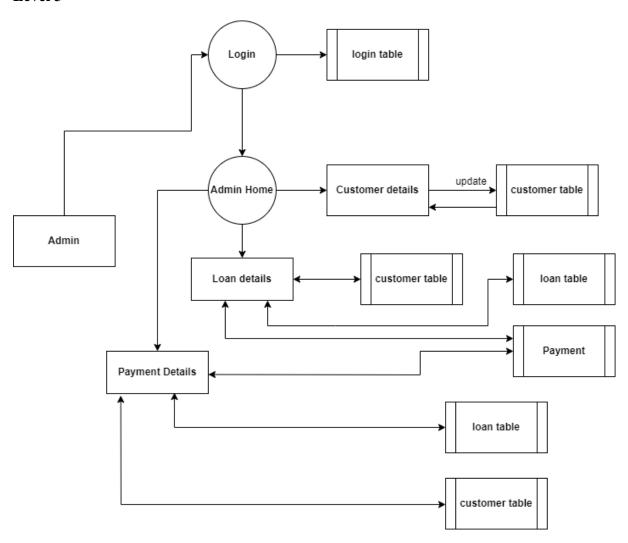
# Level 1



Level 2



Level 3



# C. TABLE STRUCTURE

 TABLE NAME:
 login\_table

FILED NAME	DATA TYPE	SIZE	CONSTRAINTS	DESCRIPTION
USER ID	Nvarchar	10	NOT NULL	User ID
PASSWORD	Nvarchar	10	NOT NULL	User Password
ADIMIN	Nvarchar	10	NOT NULL	Admin ID
A_PASSWORD	Nvarchar	10	NOT NULL	Admin Password

**TABILE NAME:** custamer\_table

FILED NAME	DATA TYPE	SIZE	CONSTRAINTS	DESCRIPTION
CustomerId	Nvarchar	10	Primary Key	Customer ID
CustomerName	Nvarchar	50	NOT NULL	Customer Name
[D.O.B]	Date	Date	NOT NULL	Date of Birth
Gender	Nvarchar	10	NOT NULL	Gender
IDProof	Nvarchar	50	NOT NULL	ID Proof
IDNumber	Nvarchar	12	NOT NULL	ID Number
Address	Nvarchar	MAX	NOT NULL	Address
City	Nvarchar	50	NOT NULL	City
State	Nvarchar	MAX	NOT NULL	State
Country	Nvarchar	50	NOT NULL	Country
Pincode	Numeric	10,0	NOT NULL	Pin code
MobileNumber	Nvarchar	13	NOT NULL	Mobile Number

TABLE NAME: loan\_table

FILED NAME	DATA TYPE	SIZE	CONSTRAINTS	DESCRIPTION
CustomerId	nvarchar	10	Foreign key	Customer ID
LoanId	nvarchar	10	Primary Key	Loan ID
Date_Of_Loan_Apply	Date	Date	NOT NULL	Date Of Loan Apply
IdProof	nvarchar	30	NOT NULL	ID Proof
IdNumber	nvarchar	12	NOT NULL	ID Number
Particulars	nvarchar	MAX	NOT NULL	Particulars
Qty	Int	4	NOT NULL	Qty
Cart	Int	4	NOT NULL	Cart
Gram	decimal	10,2	NOT NULL	Gram
Today_Gold_Amount	decimal	18,2	NOT NULL	Today Gold Amount
Sanction_Amount	decimal	18,2	NOT NULL	Sanction Amount
Rate_Of_Interest	Char	10	NOT NULL	Rate Of Interest
Loan_Interest_Amount	decimal	18,2	NOT NULL	Interest Amount
Disbursed_Amount	decimal	18,2	NOT NULL	Disbursed Amount
Pending_Complete	nvarchar	20	NOT NULL	Pending Complete

# **TABLE NAME:** pay\_date

FILED NAME	DATA TYPE	SIZE	CONSTRAINTS	DESCRIPTION
LoanId	Nvarchar	10	Foreign Key	Loan Id
Date	Date	Date	NOT NULL	Payment Date
LoanClose	Nvarchar	20	NO TNULL	Loan Close

## D. SAMPLE CODING

## **User Page**

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System. Windows. Forms;
using System.Data.SqlClient;
namespace Gold_Loan
  public partial class Login: Form
    SqlConnection con = new SqlConnection("Data Source=DESKTOP-BI5FLBU;Initial
Catalog=mini_project;Integrated Security=True");
    public Login()
      InitializeComponent();
    //User login form Button
    private void button1_Click(object sender, EventArgs e)
         SqlDataAdapter da = new SqlDataAdapter("select * from ADIMIN where [USER
ID]="" + textBox1.Text + "'and PASSWORD="" + textBox2.Text + """, con);
         DataTable dt = new DataTable();
         da.Fill(dt);
         if (dt.Rows.Count>0)
           MessageBox.Show("login Successfully", "Message", MessageBoxButtons.OK,
MessageBoxIcon.Information);
           Home hm = new Home();
           Login ln = new Login();
           hm.ShowDialog();
           this.Hide();
           textBox1.Clear();
           textBox2.Clear();
         else if (textBox1.Text == "" && textBox2.Text == "")
           MessageBox.Show("Enter the filed", "WARNING", MessageBoxButtons.OK,
MessageBoxIcon.Information);
         else
```

```
MessageBox.Show("User Id or Password is Invalid", "WARNING",
MessageBoxButtons.OK, MessageBoxIcon.Information);
     }
    //connection code
    private void Form1_Load(object sender, EventArgs e)
       if (con.State == ConnectionState.Open)
         con.Close();
       con.Open();
       button3. Visible = false;
       button1. Visible = false;
     }
    private void label4_Click(object sender, EventArgs e)
    }
    private void textBox2_TextChanged(object sender, EventArgs e)
    //Exit Application
    private void button2_Click(object sender, EventArgs e)
       Application.Exit();
    //Admin
    private void button5_Click(object sender, EventArgs e)
       button3. Visible = true;
       button1. Visible = false;
    //Login
    private void button4_Click(object sender, EventArgs e)
       button3. Visible = false;
       button1. Visible = true;
    //Admin login form button
    private void button3_Click(object sender, EventArgs e)
       SqlDataAdapter da = new SqlDataAdapter("select * from ADIMIN where
ADIMIN="" + textBox1.Text + "'and A_PASSWORD="" + textBox2.Text + "'", con);
       DataTable dt = new DataTable();
```

```
da.Fill(dt);
      if (dt.Rows.Count > 0)
         MessageBox.Show("login Successfully", "Message", MessageBoxButtons.OK,
MessageBoxIcon.Information);
         AdmainHome a = new AdmainHome();
         Login ln = new Login();
         this.Hide();
         a.ShowDialog();
         textBox1.Clear();
         textBox2.Clear();
      else if (textBox1.Text == "" && textBox2.Text == "")
         MessageBox.Show("Enter the filed", "WARNING", MessageBoxButtons.OK,
MessageBoxIcon.Warning);
      else
         MessageBox.Show("User Id or Password is Invalid", "WARNING",
MessageBoxButtons.OK,MessageBoxIcon.Warning);
    }
    private void textBox1_TextChanged(object sender, EventArgs e)
    }
    }
Admin page
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
```

using System.Drawing; using System.Linq; using System.Text;

namespace Gold\_Loan

using System.Windows.Forms; using System.Data.SqlClient;

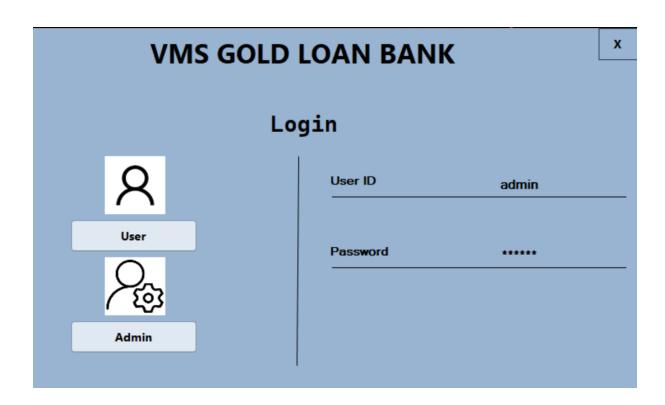
public partial class paymentdetails: Form

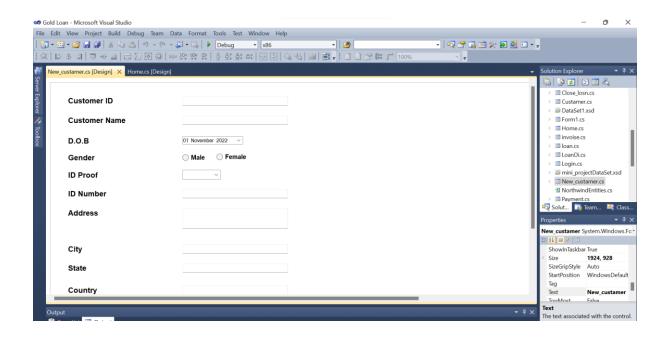
```
{
    SqlConnection con = new SqlConnection(@"Data Source=DESKTOP-BI5FLBU;Initial
Catalog=mini_project;Integrated Security=True");
    public paymentdetails()
       InitializeComponent();
    public void display()
       SqlCommand cmd = new SqlCommand("SELECT
[cl].[CustomerId],[lt].[LoanId],[cl].[CustomerName],[cl].[Gender],[cl].[City],[lt].[Particulars]
[lt].[Qty],[lt].[Cart],[lt].[Gram],[lt].[Rate_Of_Interest],[lt].[Disbursed_Amount],[py].[Date],[
lt].[Pending_Complete]FROM custamer_table as cl join loan_table as lt ON
[cl].[CustomerId]= [lt].[CustomerId] join pay date as py ON [py].[LoanId]=[lt].[LoanId]
WHERE [py].[Date]between " + dateTimePicker1.Text + " and " + dateTimePicker2.Text +
"", con);
       DataTable td = new DataTable();
       SqlDataAdapter da = new SqlDataAdapter(cmd);
       //DataSet dt = new DataSet();
       da.Fill(td);
       dataGridView1.DataSource = td;
    private void paymentdetails_Load(object sender, EventArgs e)
    private void button1_Click(object sender, EventArgs e)
       display();
    private void button2_Click(object sender, EventArgs e)
       reortingLoan rln = new reortingLoan();
       rln.ShowDialog();
}
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Ling;
using System.Text;
using System. Windows. Forms;
using System.Data.SqlClient;
```

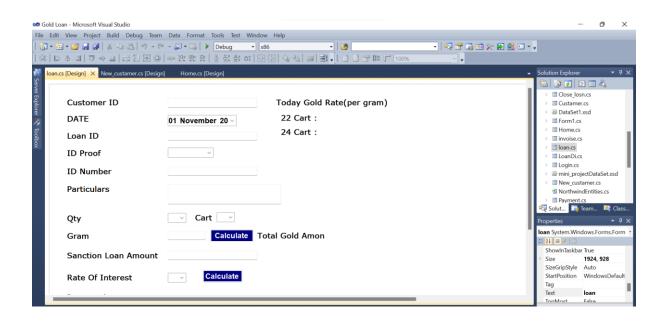
```
namespace Gold_Loan
  public partial class Close_losn: Form
    SqlConnection con = new SqlConnection(@"Data Source=DESKTOP-BI5FLBU;Initial
Catalog=mini_project;Integrated Security=True");
    public Close_losn()
       InitializeComponent();
    private void tableLayoutPanel1_Paint(object sender, PaintEventArgs e)
     }
    private void label23_Click(object sender, EventArgs e)
     }
    private void button1 Click(object sender, EventArgs e)
       SqlCommand cmd = new SqlCommand("SELECT
[cl].[CustomerId],[lt].[LoanId],[cl].[CustomerName],[lt].[Particulars],[lt].[Qty],[lt].[Cart],[lt].
[Gram],[lt].[Rate_Of_Interest],[lt].[Loan_Interest_Amount],[lt].[Disbursed_Amount]FROM
custamer_table as cl join loan_table as lt ON [cl].[CustomerId]= [lt].[CustomerId] WHERE
[lt].[LoanID]="" + textBox1.Text + """, con);
       DataTable td = new DataTable();
       SqlDataAdapter da = new SqlDataAdapter(cmd);
       //DataSet dt = new DataSet();
       da.Fill(td);
       SqlDataAdapter ad = new SqlDataAdapter("select * from loan_table where
[LoanId]="" + textBox1.Text + "" and [Pending_Complete]='Complete", con);
       DataTable dt = new DataTable();
       ad.Fill(dt);
       if (dt.Rows.Count > 0)
         MessageBox.Show("This Loan ID is Closed", "Information",
MessageBoxButtons.OK, MessageBoxIcon.Information);
       //SqlCommand insert = new SqlCommand("INSERT INTO pay VALUES("" +
label17.Text + "'," + dateTimePicker1.Text + "')", con);
       else if (td.Rows.Count > 0)
         panel1.Visible = true;
         label2. Visible = true;
         foreach (DataRow row in td.Rows)
           label17.Text = (row["LoanId"].ToString());
```

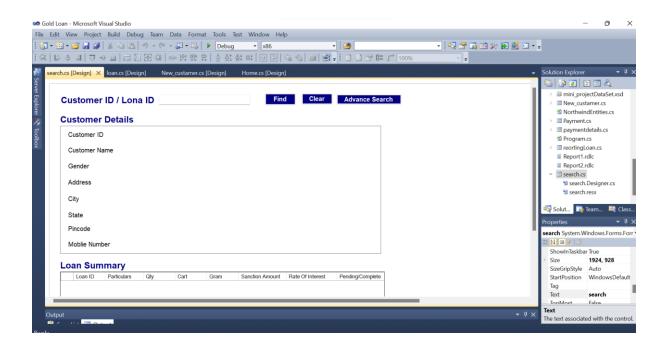
```
label18.Text = (row["CustomerId"].ToString());
           label19.Text = (row["CustomerName"].ToString());
           label12.Text = (row["Particulars"].ToString());
           label13.Text = (row["Qty"].ToString());
           label14.Text = (row["Gram"].ToString());
           label15.Text = (row["Rate Of Interest"].ToString());
           label16.Text = (row["Loan_Interest_Amount"].ToString());
           label21.Text = (row["Disbursed_Amount"].ToString());
         decimal a = Convert.ToDecimal(label16.Text);
         decimal b = Convert.ToDecimal(label21.Text);
         decimal c = a + b;
         label23.Text = "Rs "+c.ToString()+" /-";
         label25.Text=label23.Text;
       else
         MessageBox.Show("Invaild Entery", "ERROR", MessageBoxButtons.OK,
MessageBoxIcon.Information);
    }
    private void Close_losn_Load(object sender, EventArgs e)
       panel1. Visible = false;
       label2.Visible = false;
       if (con.State == ConnectionState.Open)
         con.Close();
       con.Open();
    private void button2_Click(object sender, EventArgs e)
    {
       SqlCommand update = new SqlCommand("UPDATE loan_table SET
[Pending_Complete]='Complete' WHERE [LoanId]=""+textBox1.Text+""",con);
       SqlCommand insert = new SqlCommand("INSERT INTO pay_date VALUES("" +
label17.Text + "',"" + dateTimePicker1.Text + "','Lone Closed')", con);
       insert.ExecuteNonQuery();
       update.ExecuteNonQuery();
       MessageBox.Show("Loan Amount: \n"+label21.Text+"\nLoan Interest Amount:
\n"+label16.Text+"\nTotal Amount: \n"+label23.Text+"\nPayment Amount:
\n"+label25.Text+"\nLoan Closed Sucessfully", "Message", MessageBoxButtons.OK,
MessageBoxIcon.None);
       textBox1.Text = "";
       label2.Visible = false;
       panel1. Visible = false; } }
```

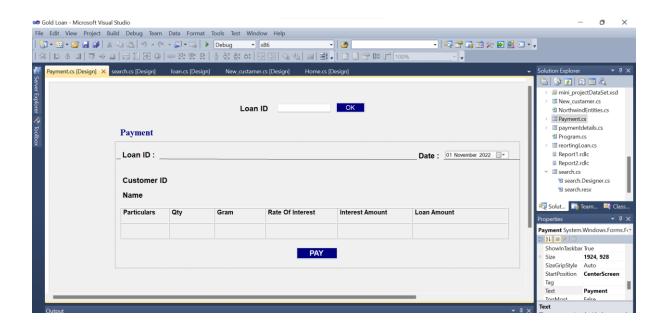
## E. SAMPLE INPUT

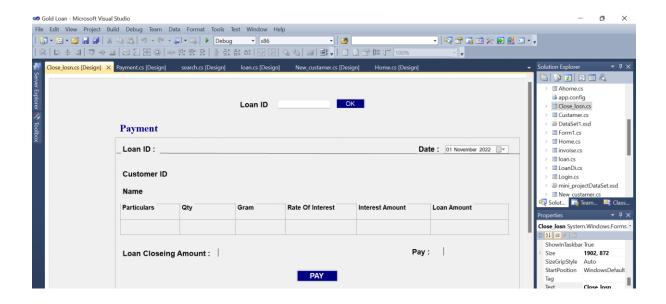












# F. SAMPLE OUTPUT

