Padre Conceição College Of Engineering

Database Management System Mini Project

for

MOVIE RESERVATION SYSTEM

Prepared By

ANGELO JANA GOVES - 19IT04

<TE-IT PCCE>

<22.02.2022>

TABLE OF CONTENTS

1. INTRODUCTION

1.1   Abstract

In this project we are created one application which is easy to access user friendly. For this application we used the backend as Oracle Database to store the data which is used in the application and for the user interface, we have used the C# and Visual Studio 2015 Application.

1.2   Overview

Movie Ticketing System Database Design is basically aimed to provide complete information of the movie and schedule to the customer, according to which he/she can easily get a ticket instantly and can book a ticket on his/her favourite movies.

Admin can use Movie Ticketing System to insert and delete data such as movie descriptions, movie schedules which will update the related webpage and will be accessible by the customers. Admin can update the webpage changing according to the data in the database also admin can check the statistics information from the system. Operate your cinema with better efficiency by automating reservation and ticketing process improve profitability and manage your cinema better by having access to key data in a centralized and systematic view and increase customer satisfaction by giving your customers what they want when it comes to the seat preference.

Based on seat and ticket reservation system allowing booking in a few easy steps. This powerful movie ticketing system can be deployed on any website offering tickets for movies, theatre, and other scheduled performances.

1.3   References

- http://ignousupport.blogspot.com/p/movie-ticket-booking-system-project.html
- https://itsourcecode.com
- https://github.com/Sid-149/DBMS-Movie-Ticket-Booking-System
- https://www.professionalcipher.com/2017/04/dbms-mini-project-report.html

2. OVERALL DESCRIPTION

2.1 Database Structure

The database consists of six tables. The main tables are the admin, movie customer and ticket. The remaining tables 'show' and 'booking' is the relational table which links 'movie' & 'ticket' and 'ticket' & 'customer' tables with its foreign keys.

2.2 Functionality

The database allows to complete the following functions:

- Admin can enter movie details
- Admin can update or modify movie details
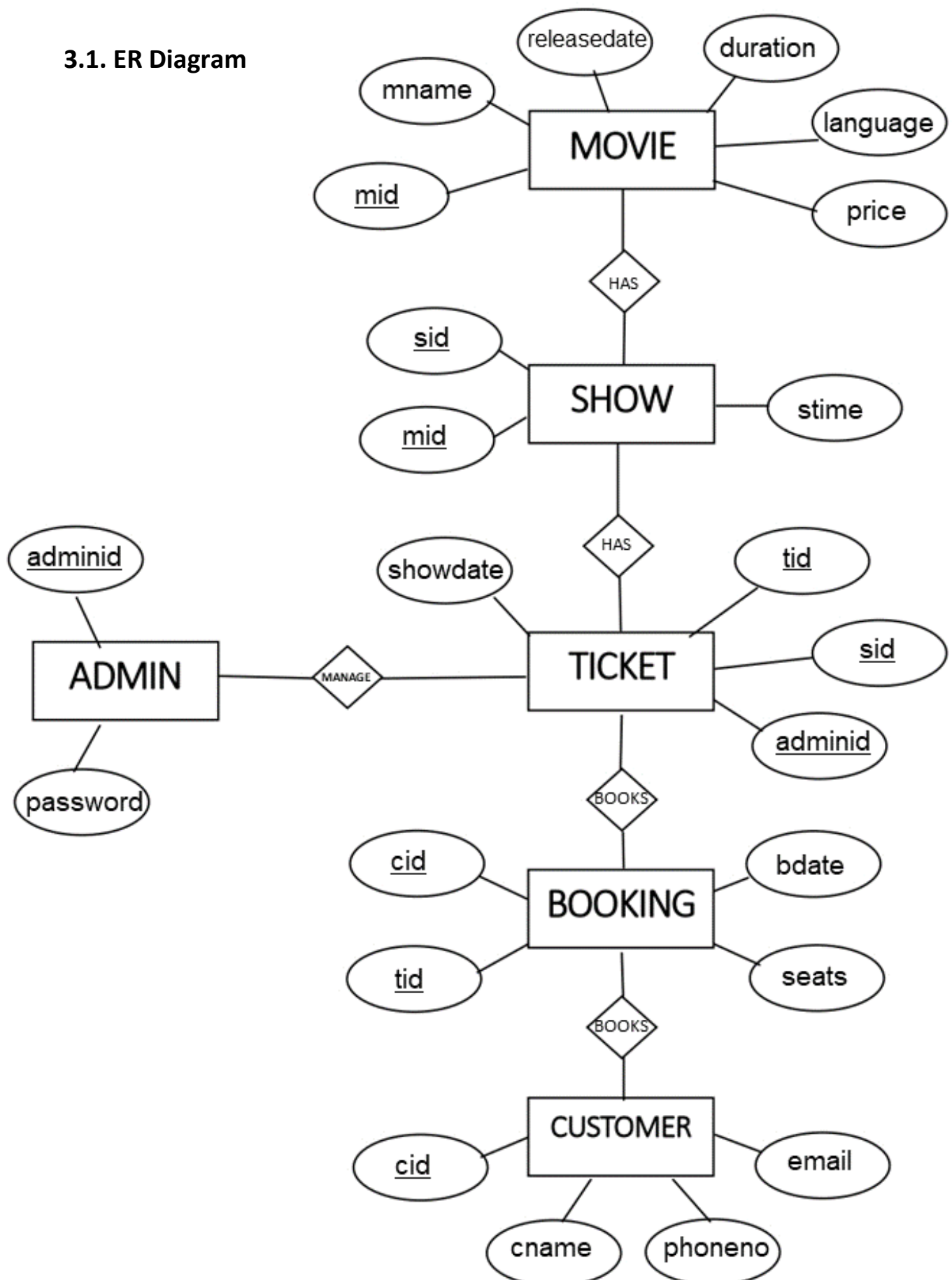- Customer can browse movies
- Customer can book tickets

2.3 Future of the Database

The database is currently just a prototype. I have not yet built any front-end GUI for this database system. To make this database system user-friendly for general people I need to build a GUI so that they can use this system easily.

Web application is nowadays the most popular form to build a database system. So, in future I want to make a web application for this database system and host it on an online server so that people from anywhere around the world can have access to this system using internet. Before doing so, I need to upgrade this system, make it more robust. Finally, I will host my application built for the system online and make it open for the users.

3. PROJECT DETAIILS

3.1. ER Diagram

3.2. Database Normalisation

- FIRST NORMAL FORM

  The relation is in 1NF if each cell of the table contains atomic values and/or it has no repeating groups.

  All tables have no repeating groups so they are in 1NF.

  1.ADMIN

adminid	password

  2.MOVIE

mid	mname	releasedate	duration	language	price

  3.SHOW

sid	mid	stime

  4.TICKET

tid	sid	adminid	showdate

  5.CUSTOMER

cid	cname	phoneno	email

  6.BOOKING

cid	tid	bdate	seats

- SECOND NORMAL FORM

  A relation is said to be in second normal form if it is already in first normal form and it has no partial dependency.

  1.ADMIN

adminid	password

  2.MOVIE

mid	mname	releasedate	duration	language	price

  3.SHOW

sid	mid	stime

4.TICKET

tid	sid	adminid	showdate

5.CUSTOMER

cid	cname	phoneno	email

6.BOOKING

cid	tid	bdate	seats

The above tables are in 2NF as there do not exist any partial dependencies.

- **THIRD NORMAL FORM**

  A relation is said to be in third normal form if it is already in 1st and 2nd NF and has no transitive dependency for non-prime attributes.

  NOTE: Transitive dependency can exist for prime attributes.

1.ADMIN

adminid	password

2.MOVIE

mid	mname	releasedate	duration	language	price

3.SHOW

sid	mid	stime

4.TICKET

tid	sid	adminid	showdate

5.CUSTOMER

cid	cname	phoneno	email

6.BOOKING

cid	tid	bdate	seats

The above tables are in 3NF as there do not exist any transitive dependency for non-prime attributes.

3.3. Database Tables

1. ADMIN

Column Name	Data Type	Nullable	Default	Primary Key
ADMINID	NUMBER(15,0)	No	-	1
PASSWORD	VARCHAR2(15)	No	-	-
				1 - 2

2. MOVIE

Column Name	Data Type	Nullable	Default	Primary Key
MID	NUMBER	No	-	1
MNAME	VARCHAR2(50)	No	-	-
RELEASEDATE	DATE	No	-	-
DURATION	VARCHAR2(15)	No	-	-
LANGUAGE	VARCHAR2(15)	No	-	-
PRICE	NUMBER(3,0)	No	-	-
				1 - 6

3. SHOW

Column Name	Data Type	Nullable	Default	Primary Key
SID	NUMBER	No	-	1
MID	NUMBER	No	-	-
STIME	VARCHAR2(15)	Yes	-	-
				1 - 3

4. TICKET

Column Name	Data Type	Nullable	Default	Primary Key
TID	NUMBER	No	-	1
SID	NUMBER	No	-	-
ADMINID	NUMBER	No	-	-
SHOWDATE	DATE	No	-	-
				1 - 4

5. CUSTOMER

Column Name	Data Type	Nullable	Default	Primary Key
CID	NUMBER	No	-	1
CNAME	VARCHAR2(20)	No	-	-
PHONENO	NUMBER(10,0)	No	-	-
EMAIL	VARCHAR2(25)	Yes	-	-
				1 - 4

6. BOOKING

Column Name	Data Type	Nullable	Default	Primary Key
CID	NUMBER	No	-	-
TID	NUMBER	No	-	-
BDATE	DATE	No	-	-
SEATS	NUMBER(1,0)	No	-	-
				1 - 4

3.4. Source Code and Output

```csharp
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;
using Oracle.DataAccess.Client;

namespace MiniProject
{
    public partial class main : Form
    {
        public main()
        {
            InitializeComponent();
        }
        private void button1_Click(object sender, EventArgs e)
        {
            this.Hide();
            var openBookshow = new bookshow();
            openBookshow.Show();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            this.Hide();
            var openadminlogin = new adminlogin();
            openadminlogin.Show();
        }

        private void button3_Click(object sender, EventArgs e)
        {
            Application.Exit();
        }

        private void button4_Click(object sender, EventArgs e)
        {
            this.Hide();
            var openadminlogin = new adminlogin();
            openadminlogin.Show();
        }
    }
}
```
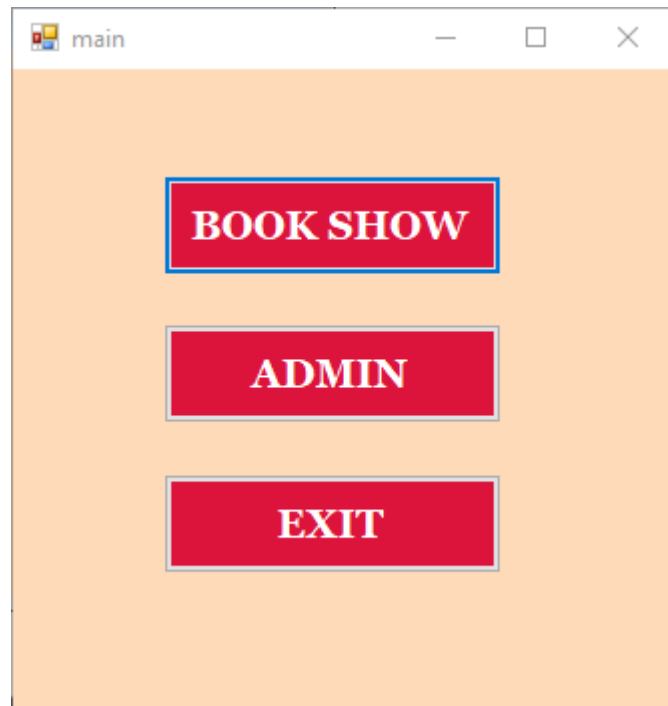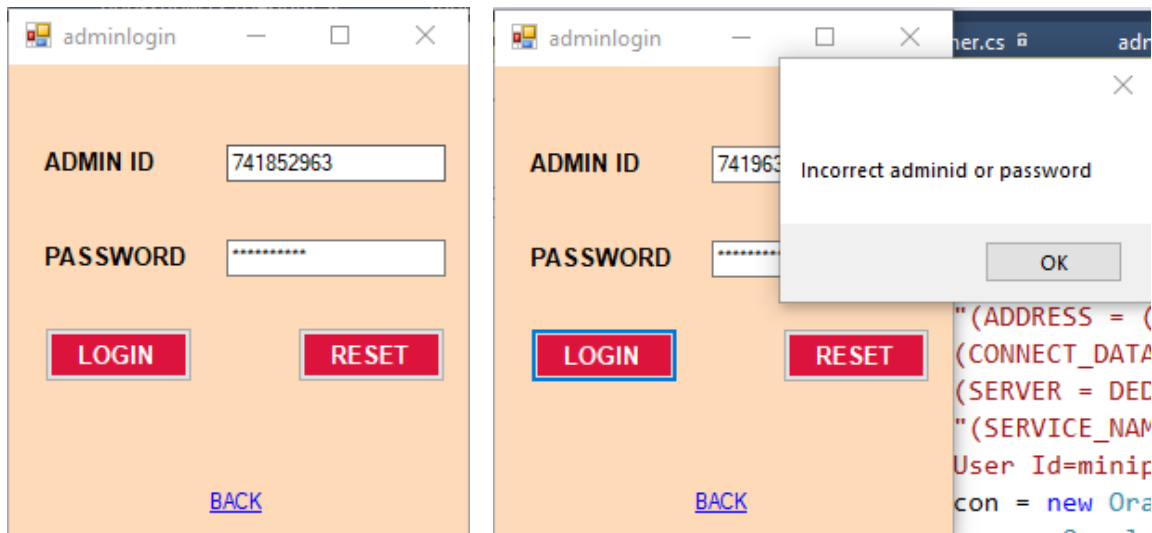
```csharp
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using Oracle.DataAccess.Client;

namespace MiniProject
{
    public partial class adminlogin : Form
    {
        public adminlogin()
        {
            InitializeComponent();
        }

        private void linkLabel1_LinkClicked(object sender, LinkLabelLinkClickedEventArgs e)
        {
            this.Hide();
            var openmain = new main();
            openmain.Show();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            this.Hide();
            var openadminlogin = new adminlogin();
            openadminlogin.Show();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            int adminid = int.Parse(textBox1.Text);
            string password = textBox2.Text;
            if (adminid != 741852963 || password != "miniproject")
            {
                MessageBox.Show("Incorrect adminid or password");
            }
```

```
            this.Hide();
            var openmovieupdate = new movieupdate();
            openmovieupdate.Show();
        }
    }
}
```

```
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;
using Oracle.DataAccess.Client;

namespace MiniProject
{
    public partial class movieupdate : Form
    {
        public movieupdate()
        {
            InitializeComponent();
        }

        private void linkLabel1_LinkClicked(object sender, LinkLabelLinkClickedEventArgs e)
        {
            this.Hide();
            var openmain = new main();
            openmain.Show();
        }
```

```csharp
private void button1_Click(object sender, EventArgs e)
{
    string oradb = "Data Source=(DESCRIPTION =" +
            "(ADDRESS = (PROTOCOL = TCP)(HOST = localhost)(PORT = 1521))" +
            "(CONNECT_DATA =" +
            "(SERVER = DEDICATED)" +
            "(SERVICE_NAME = XE)));" +
            "User Id=miniproject;Password=miniproject;";
    OracleConnection con = new OracleConnection(oradb);
    OracleCommand cmd = new OracleCommand();

    int mid = int.Parse(textBox1.Text);
    string mname = textBox2.Text;
    int releasedate = int.Parse(textBox3.Text);
    string duration = textBox4.Text;
    string language = textBox5.Text;
    int price = int.Parse(textBox6.Text);

    int sid = int.Parse(textBox7.Text);
    string stime = textBox8.Text;

    if (textBox1.Text == "" || textBox2.Text == "" || textBox3.Text == "" || textBox4.Text == "" ||
textBox5.Text == "" || textBox6.Text == "" || textBox7.Text == "" || textBox8.Text == "")
    {
        MessageBox.Show("Please Enter all the Data");
    }
    else
    {
        cmd.CommandText = "INSERT INTO MOVIE VALUES (" + mid + ",'" + mname + "'," +
releasedate + ",'" + duration + "','" + language + "'," + price + ")";
        cmd.CommandText = "INSERT INTO MOVIE VALUES (" + sid + "," + mid + ",'" + stime +
"')";
        MessageBox.Show(cmd.CommandText);
        cmd.Connection = con;
        con.Open();
        OracleDataReader dr = cmd.ExecuteReader();
        if (dr.Read())
        {
            MessageBox.Show("Cannot insert into Table");
        }
        else
        {
            MessageBox.Show(" inserted successfully");
        }
    }

}

private void button2_Click(object sender, EventArgs e)
{
    this.Hide();
    var openmovieupdate = new movieupdate();
    openmovieupdate.Show();
}

private void linkLabel2_LinkClicked(object sender, LinkLabelLinkClickedEventArgs e)
{
    Application.Exit();
}
}
```

}

MID	MNAME	RELEASEDATE	DURATION	LANGUAGE	PRICE
121	Spiderman-Man:...	16 December 2021	2h 28m	English	300
122	Sooryavanshi	5 November 2021	2h	Hindi	250
123	The Matrix Resu...	22 December 2021	2h 28m	English	350

ORACLE://localho...OJECT/MOVIE[Data]

ORACLE://localho...OJECT/SHOW[Data]*

SID	MID	STIME
10210	121	10:00 am
10219	122	01:00 pm
10235	123	05:00 pm

```csharp
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;
using Oracle.DataAccess.Client;

namespace MiniProject
{
    public partial class bookshow : Form
    {
        public bookshow()
        {
            InitializeComponent();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            this.Hide();
            var openmovie1 = new movie1();
            openmovie1.Show();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            this.Hide();
            var openmovie2 = new movie2();
            openmovie2.Show();
        }

        private void button3_Click(object sender, EventArgs e)
        {
            this.Hide();
            var openmovie3 = new movie3();
            openmovie3.Show();
        }
    }
}
```
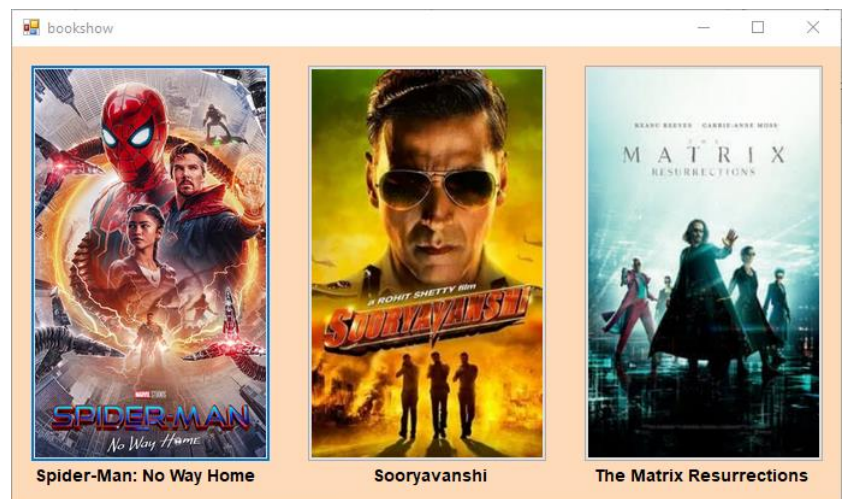

bookshow — Spider-Man: No Way Home | Sooryavanshi | The Matrix Resurrections

```csharp
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;
using Oracle.DataAccess.Client;

namespace MiniProject
{
    public partial class movie1 : Form
    {
        public movie1()
        {
            InitializeComponent();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            this.Hide();
            var openbookticket = new bookticket();
            openbookticket.Show();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            System.Diagnostics.Process.Start("https://youtu.be/ZYzbalQ6Lg8");
        }
    }
}
```
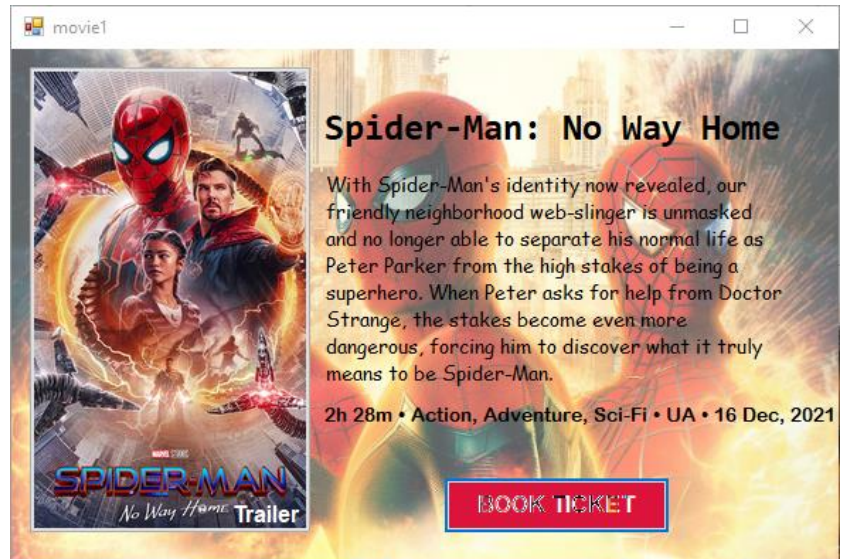
```csharp
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using Oracle.DataAccess.Client;

namespace MiniProject
{
    public partial class movie2 : Form
    {
        public movie2()
        {
            InitializeComponent();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            this.Hide();
            var openbookticket = new bookticket();
```

```
        openbookticket.Show();
    }

    private void button1_Click(object sender, EventArgs e)
    {
        System.Diagnostics.Process.Start("https://youtu.be/u5r77-OQwa8");
    }
}
}
```

```
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;
using Oracle.DataAccess.Client;

namespace MiniProject
{
    public partial class movie3 : Form
    {
        public movie3()
        {
            InitializeComponent();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            this.Hide();
            var openbookticket = new bookticket();
            openbookticket.Show();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            System.Diagnostics.Process.Start("https://youtu.be/9ix7TUGVYIo");
        }
    }
}
```

```csharp
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;
using Oracle.DataAccess.Client;

namespace MiniProject
{

    public partial class bookticket : Form
    {
        int cid = 1;
        DateTime bdate = DateTime.Today;
        int tid = 3;
        public bookticket()
        {
            InitializeComponent();
        }
        private void button1_Click(object sender, EventArgs e)
        {
            string oradb = "Data Source=(DESCRIPTION =" +
                    "(ADDRESS = (PROTOCOL = TCP)(HOST = localhost)(PORT = 1521))" +
                    "(CONNECT_DATA =" +
                    "(SERVER = DEDICATED)" +
                    "(SERVICE_NAME = XE)));" +
                    "User Id=miniproject;Password=miniproject;";
            OracleConnection con = new OracleConnection(oradb);
            OracleCommand cmd = new OracleCommand();

            int seats = int.Parse(listBox4.Text);

            if (listBox2.Text == "" || listBox3.Text == "" || listBox4.Text == "")
            {
                MessageBox.Show("Please Select all the Data");
            }
            else
            {
                cmd.CommandText = "INSERT INTO BOOKING VALUES (" + cid + "," + tid + ",'" + bdate +
"'," + seats + ")";
                MessageBox.Show(cmd.CommandText);
                cmd.Connection = con;
                con.Open();
                OracleDataReader dr = cmd.ExecuteReader();
                if (dr.Read())
                {
                    MessageBox.Show("Cannot insert into Table");
                }
                else
                {
                    MessageBox.Show(" inserted successfully");
                }
            }
            this.Hide();
            var opencustomerdetailes = new customerdetailes();
            opencustomerdetailes.Show();
```

```
        }
        private void button2_Click(object sender, EventArgs e)
        {
            this.Hide();
            var openbookticket = new bookticket();
            openbookticket.Show();
        }
    }
}
```

	TID	SID	ADMINID	SHOWDATE
▶	2526	10210	741852963	22-02-2022
	2569	10219	741852963	23-02-2022
*				

ORACLE://localhos...JECT/TICKET[Data]

	CID	TID	BDATE	SEATS
	1	2526	21-02-2022	3
	2	2569	21-02-2022	2

ORACLE://localho...ECT/BOOKING[Data]*

```
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;
using Oracle.DataAccess.Client;

namespace MiniProject
{
    public partial class customerdetailes : Form
    {
        public customerdetailes()
        {
            InitializeComponent();
        }

        private void linkLabel1_LinkClicked(object sender, LinkLabelLinkClickedEventArgs e)
        {
            this.Hide();
            var openmain = new main();
            openmain.Show();
        }

        private void button1_Click(object sender, EventArgs e)
        {
```

customerdetailes

NAME	Gwen
PHONE	8529630147
EMAIL	gwen@gmail.com

SUBMIT

INSERT INTO MOVIE VALUES ('Gwen',8529630147,'gwen@gmail.com')

OK

```csharp
        string oradb = "Data Source=(DESCRIPTION =" +
                "(ADDRESS = (PROTOCOL = TCP)(HOST = localhost)(PORT = 1521))" +
                "(CONNECT_DATA =" +
                "(SERVER = DEDICATED)" +
                "(SERVICE_NAME = XE)));" +
                "User Id=miniproject;Password=miniproject;";
        OracleConnection con = new OracleConnection(oradb);
        OracleCommand cmd = new OracleCommand();

        string name = textBox1.Text;
        int phone = int.Parse(textBox2.Text);
        string email = textBox3.Text;

        if (textBox1.Text == "" || textBox2.Text == "" || textBox3.Text == "")
        {
            MessageBox.Show("Please Enter all the Data");
        }
        else
        {
            cmd.CommandText = "INSERT INTO MOVIE VALUES ('" + name + "'," + phone + ",'" +
email + "')";
            MessageBox.Show(cmd.CommandText);
            cmd.Connection = con;
            con.Open();
            OracleDataReader dr = cmd.ExecuteReader();
            if (dr.Read())
            {
                MessageBox.Show("Cannot insert into Table");
            }
            else
            {
                MessageBox.Show(" Inserted Successfully");
            }
        }
    }

    private void linkLabel2_LinkClicked(object sender, LinkLabelLinkClickedEventArgs e)
    {
        Application.Exit();
    }
  }
}
```

ORACLE://localho...T/CUSTOMER[Data] 📌 ✕

	CID	CNAME	PHONENO	EMAIL
▶	1	Gwen	8529630147	gwen@gmail.com
	2	Ben	7956482591	ben@gmail.com
	3	Kevin	9815236588	kevin@gmail.com
＊				

3.5. Summary

The project was a learning experience for me and allowed me to improve upon my C# and Oracle DBMS skills. I developed a usable database for a movie reservation system to book tickets of movies, find available shows in the theatre and deliver it to the customers in an efficient way.

*** END ***