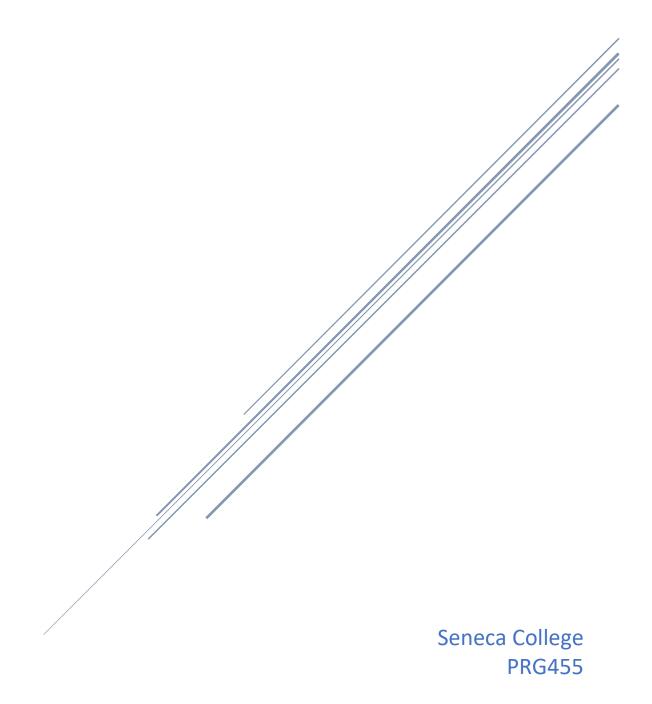
## FINAL LAB PROJECT

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## Table of Contents

INTRODUCTION/USER MANUAL	2
FORM 1 (frmMenu.cs) SCREENSHOTS	3
FORM 2 (frmCustomerInfo.cs) SCREENSHOTS	9
FORM 3 (frmReceipt.cs) SCREENSHOTS	14
FORM 1 CLASS (frmMenu.cs) SOURCE CODE	17
FORM 2 CLASS (frmCustomerInfo.cs) SOURCE CODE	19
FORM 3 CLASS (frmReceipt.cs) SOURCE CODE	24
CHILD FORM CLASSES (frmBasketball.cs, frmSoccer.cs, frmBaseball.cs, frmWWE.cs) SOURCE CODE (contain event details)	
DATABASE TABLES SCREEN SHOTS	

#### INTRODUCTION/USER MANUAL

My final lab project is a ticket reservation application. It includes 8 forms in total and 3 tables in Microsoft Access. This user manual will tell you what my application does successfully as well as what are somethings it cannot do.

The first form is the main form called *frmMenu* and it includes 4 sports events that you can purchase the tickets for, Basketball, Soccer, Baseball, and WWE event. You can click on any sport event button to see its details such as Event ID, Event Description, Location, Date, Time, and Price. The last button at the bottom named *About* gives you a brief description of the application. Once you have decided which event you want to choose you can either click on the button *PURCHASE* or you can click on the small button on the top right named *X* to close the event details page and go back to the home screen. You will notice that as you change to different events, the title on the top changes accordingly as well.

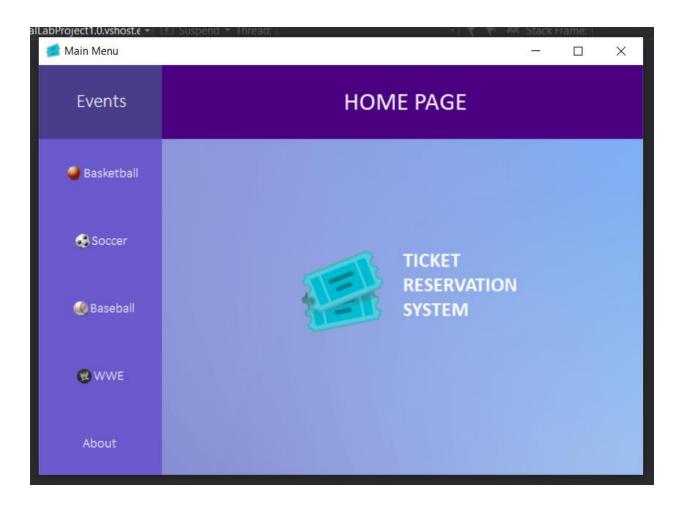
The second form is *frmCustomerInfo* and it is where you enter your personal information, event, seat number, and credit card info. The textboxes in the personal information panel only take inputs that they are supposed to, i.e. the first and last name textboxes only take letters as input, the phone number and credit card information textboxes only take digits as inputs, lastly the address textbox takes letters, digits, and white spaces as inputs. One defect includes in this form as well. When you enter phone number that is not 10 digits, credit card number that is not 16 digits, and the credit card security key that is not 3 digits, a message box will pop up warning you to check your information but after clicking *OK*, the form continues forward. Every time you press submit, the previous panel is disabled, and no changes can be made. At the end, you will see a button named *CLICK TO VIEW RECEIPT* on the bottom right. Click it to move to the final form.

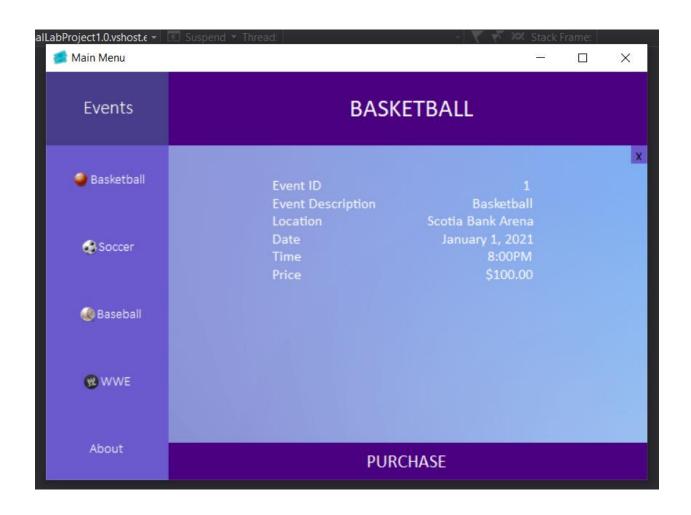
The last form shows you all the information that is required on a receipt. It is named *frmreceipt*. It shows the purchase date and time, event ID, event description, event location, event date, and event time. It also shows you all your personal information that you entered as well as your unique customer ID. Finally, is shows you the price of the ticket, the HST tax, and grand total cost of the ticket.

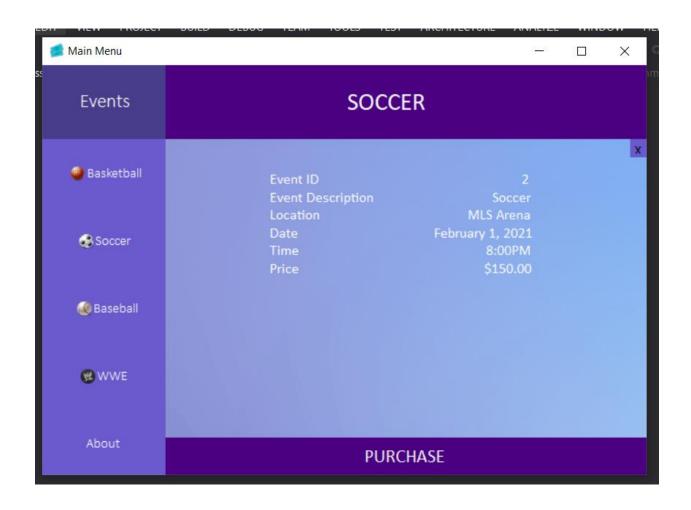
To exit the program, simply click on the button named **EXIT** and the application will close.

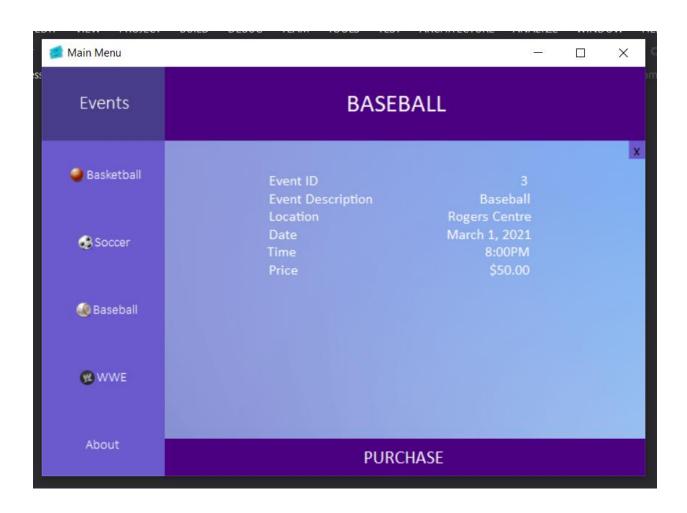
Note: You might notice in the database tables that the number of entries does not match in each tables. That is because I did a lot of testing for each table before updating the other. Therefore, the customer information table will have more inputs that the ticket data table.

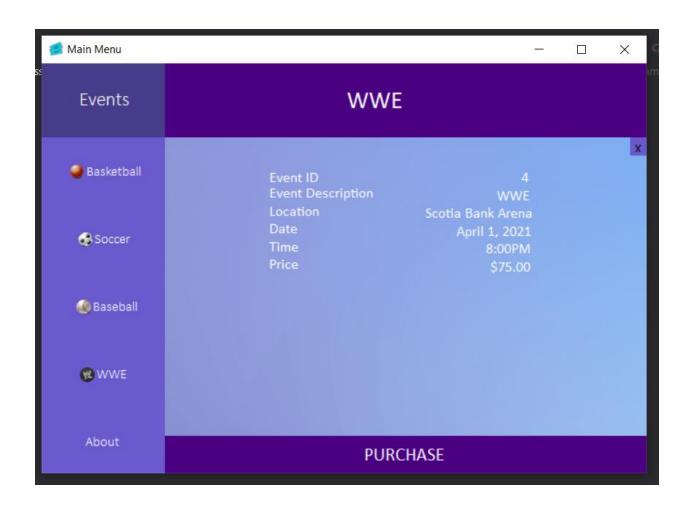
## FORM 1 (frmMenu.cs) SCREENSHOTS

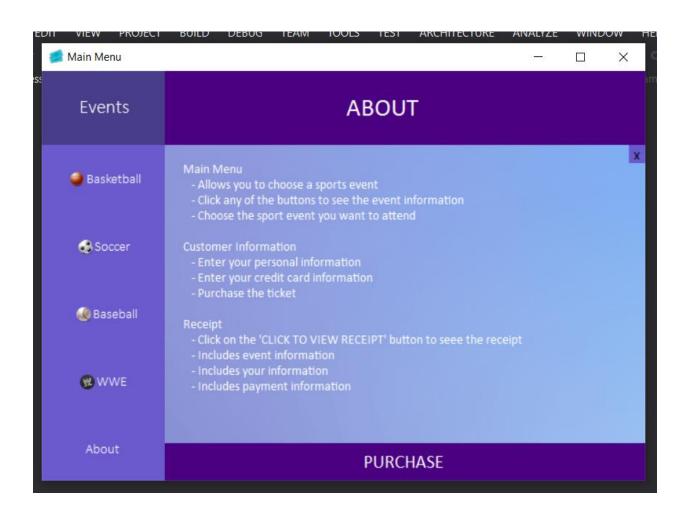




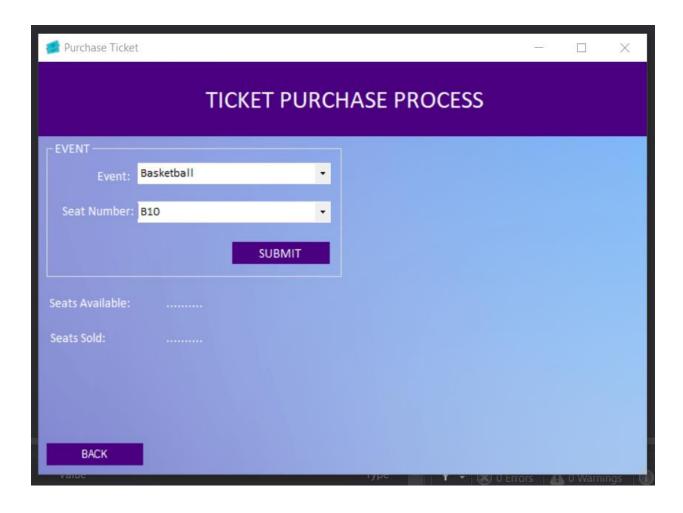


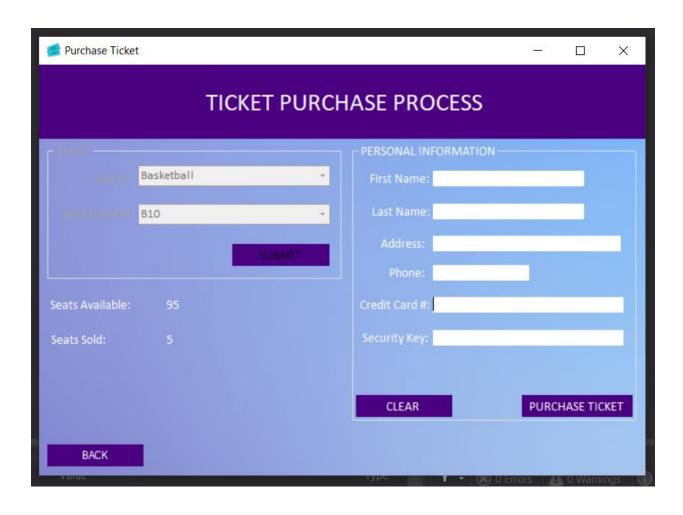


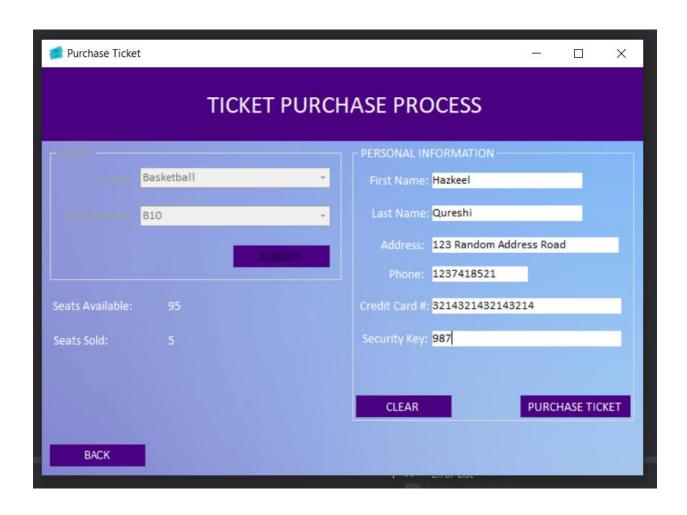


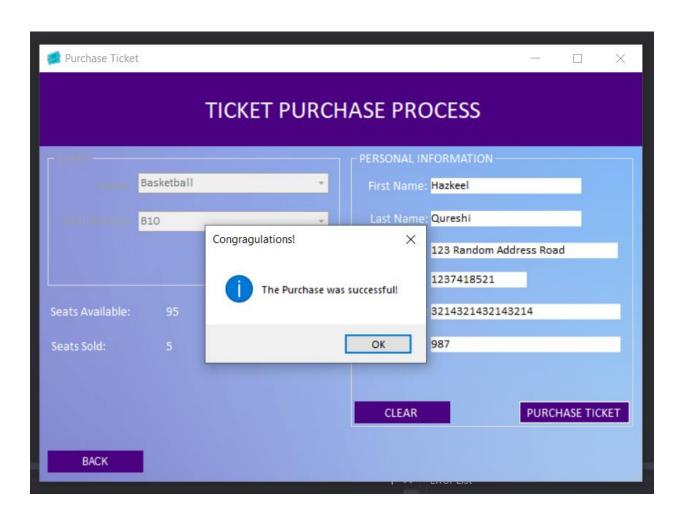


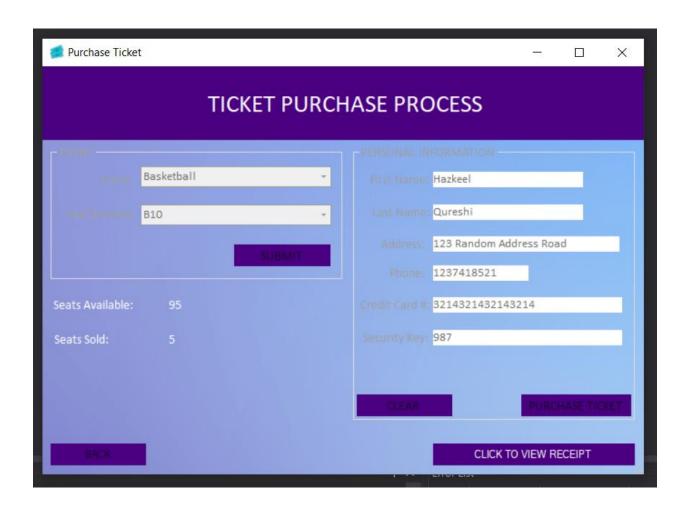
## FORM 2 (frmCustomerInfo.cs) SCREENSHOTS



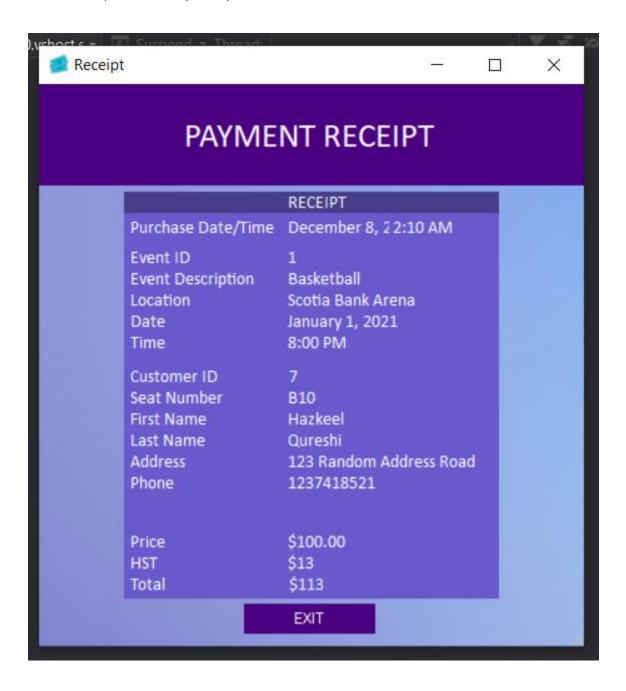


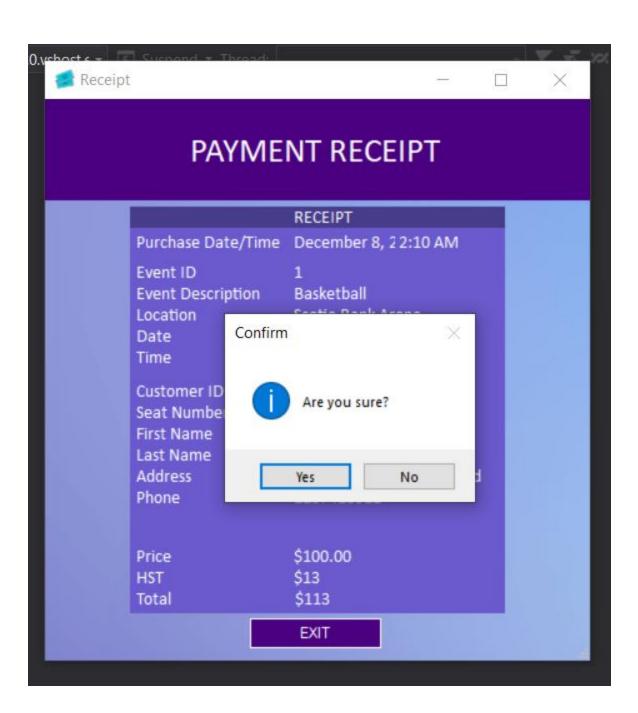


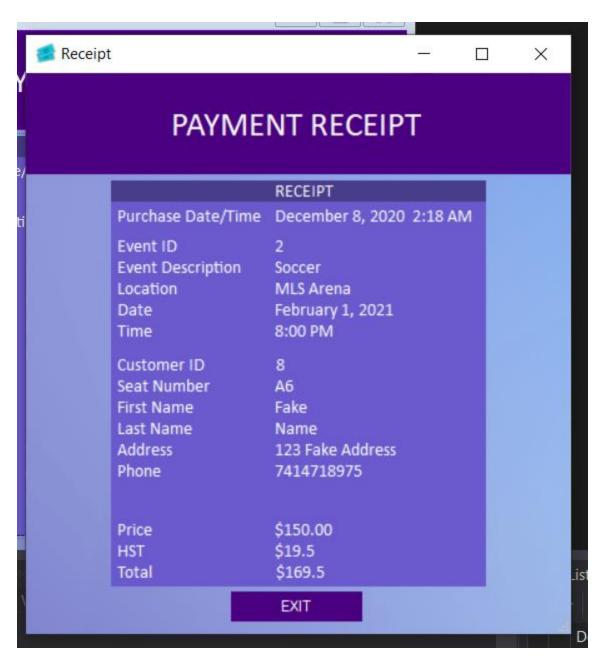




#### FORM 3 (frmReceipt.cs) SCREENSHOTS







This screenshot shows the **Purchase Date/Time** clearly than the previous one. I put in more sample inputs.

#### FORM 1 CLASS (frmMenu.cs) SOURCE CODE

```
public partial class frmMenu : Form
   {
        private Form activeForm;
        public frmMenu()
            InitializeComponent();
        }
        private void openForm(Form frm)
            if(activeForm != null)
            {
                activeForm.Close();
            activeForm = frm;
            frm.TopLevel = false;
            frm.FormBorderStyle = FormBorderStyle.None;
            frm.Dock = DockStyle.Fill;
            this.pnlEventInfo.Controls.Add(frm);
            this.pnlEventInfo.Tag = frm;
            frm.BringToFront();
            frm.Show();
        }
       private void btnBasketball_Click(object sender, EventArgs e)
            openForm(new frmBasketball());
            btnPurchase.Visible = true;
            lblTitle.Text = "BASKETBALL";
        private void btnSoccer_Click(object sender, EventArgs e)
            openForm(new frmSoccer());
            btnPurchase.Visible = true;
            lblTitle.Text = "SOCCER";
        }
        private void btnBaseball_Click(object sender, EventArgs e)
            openForm(new frmBaseball());
            btnPurchase.Visible = true;
            lblTitle.Text = "BASEBALL";
        }
       private void btnWWE_Click(object sender, EventArgs e)
            openForm(new frmWWE());
            btnPurchase.Visible = true;
            lblTitle.Text = "WWE";
        private void btnAbout_Click(object sender, EventArgs e)
```

```
{
    openForm(new frmAbout());
    lblTitle.Text = "ABOUT";
}

private void btnPurchase_Click(object sender, EventArgs e)
{
    frmCustomerInfo frmCustomerInfo = new frmCustomerInfo();
    this.Hide();
    frmCustomerInfo.ShowDialog();
}
```

#### FORM 2 CLASS (frmCustomerInfo.cs) SOURCE CODE

```
public partial class frmCustomerInfo : Form
    {
        OleDbConnection connection = new OleDbConnection();
        //PERSONAL INFO
        string firstname;
        string lastname;
        string address;
        string phone;
        //EVENT AND SEAT
        int eventType = 0;
        string seatNumber;
        //CREDIT CARD INFO
        string creditCard;
        string securityKey;
        //SEATS AVAILABLE AND SEATS SOLD VALUE HOLDERS
        string seatsAvailable;
        string seatsSold;
        public frmCustomerInfo()
            InitializeComponent();
            connection.ConnectionString = @"Provider=Microsoft.ACE.OLEDB.12.0;
Source=C:\Users\hazke\OneDrive\Desktop\Qureshi_Hazkeel_FinalProject\EventsDatabase.accdb;
                                            Persist Security Info=False;";
        }
        private void btnPreviousForm_Click(object sender, EventArgs e)
            frmMenu frmMenu = new frmMenu();
            this.Hide();
            frmMenu.ShowDialog();
        }
        private void txtFirstname_KeyPress(object sender, KeyPressEventArgs e)
            if (!char.IsControl(e.KeyChar) && !char.IsLetter(e.KeyChar))
                e.Handled = true;
        }
        private void txtLastname_KeyPress(object sender, KeyPressEventArgs e)
            if (!char.IsControl(e.KeyChar) && !char.IsLetter(e.KeyChar))
                e.Handled = true;
        private void txtAddress_KeyPress(object sender, KeyPressEventArgs e)
```

```
if (!char.IsControl(e.KeyChar) && !char.IsLetterOrDigit(e.KeyChar) &&
!char.IsWhiteSpace(e.KeyChar))
                e.Handled = true;
        }
        private void txtPhone_KeyPress(object sender, KeyPressEventArgs e)
            if (!char.IsControl(e.KeyChar) && !char.IsDigit(e.KeyChar))
                e.Handled = true;
        }
        private void txtCreditCard KeyPress(object sender, KeyPressEventArgs e)
            if (!char.IsControl(e.KeyChar) && !char.IsDigit(e.KeyChar))
                e.Handled = true;
        }
        private void txtSecurityKey_KeyPress(object sender, KeyPressEventArgs e)
            if (!char.IsControl(e.KeyChar) && !char.IsDigit(e.KeyChar))
                e.Handled = true;
        }
        //CALCULATE SEATS AVAILABLE AND SEATS SOLD, THEN SHOW THE VALUES
        private void btnEventSeat_Click(object sender, EventArgs e)
            seatNumber = cboxSeatNumber.Text;
            if (cboxEvent.SelectedIndex == 0)
            {
                eventType = 1;
            else if (cboxEvent.SelectedIndex == 1)
            {
                eventType = 2;
            else if (cboxEvent.SelectedIndex == 2)
                eventType = 3;
            else if (cboxEvent.SelectedIndex == 3)
            {
                eventType = 4;
            }
            try
            {
                connection.Open();
                OleDbCommand command = new OleDbCommand();
                command.Connection = connection;
                command.CommandText = "SELECT * FROM EventRecords WHERE EventID=" +
eventType;
                OleDbDataReader reader = command.ExecuteReader();
                while (reader.Read())
                    lblShowSeatsAvailable.Text = reader["SeatsAvailable"].ToString();
```

```
lblShowSeatsSold.Text = reader["SeatsSold"].ToString();
                    int a = Convert.ToInt32(lblShowSeatsAvailable.Text);
                    int b = Convert.ToInt32(lblShowSeatsSold.Text);
                    int i = a - 1;
                    int j = b + 1;
                    seatsAvailable = Convert.ToString(i);
                    seatsSold = Convert.ToString(j);
                }
                connection.Close();
                if(seatsAvailable == "0")
                    MessageBox.Show("All the seats are booked", "All Booked",
MessageBoxButtons.OK);
                    frmCustomerInfo frm1 = new frmCustomerInfo();
                    this.Close();
                    frm1.ShowDialog();
                }
            catch (Exception exception)
                MessageBox.Show("Error \n" + exception, "Error", MessageBoxButtons.OK);
            grpYourInfo.Visible = true;
            grpEvent.Enabled = false;
        }
        //INSERT CUSTOMER INFO
        private void btnPurchaseTickets Click(object sender, EventArgs e)
            firstname = txtFirstname.Text;
            lastname = txtLastname.Text;
            address = txtAddress.Text;
            phone = txtPhone.Text;
            creditCard = txtCreditCard.Text;
            securityKey = txtSecurityKey.Text;
                if (firstname == "" || lastname == "" || address == "" || phone == "" ||
creditCard == "" || securityKey == "")
                    MessageBox.Show("Fill out each field!", "Warning",
MessageBoxButtons.OKCancel, MessageBoxIcon.Warning);
                else if (phone.Length != 10 || creditCard.Length != 16 ||
securityKey.Length != 3)
                    MessageBox.Show("Check your phone number, credit card number, or
security key.", "Warning", MessageBoxButtons.OKCancel, MessageBoxIcon.Warning);
                }
                else
                    try
                        connection.Open();
```

```
OleDbCommand command = new OleDbCommand();
                        command.Connection = connection;
                        command.CommandText = "INSERT INTO
CustomerInfo(FirstName,LastName,Address,Telephone,CreditCard,SecurityKey)VALUES('" +
firstname + "','" + lastname + "','" + address + "','" + phone + "','" + creditCard +
"','" + securityKey + "')";
                        command.ExecuteNonQuery();
                        connection.Close();
                    catch (Exception exception)
                        MessageBox.Show("Error \n" + exception, "Error",
MessageBoxButtons.OK);
                }
            MessageBox.Show("The Purchase was successful!", "Congragulations!",
MessageBoxButtons.OK, MessageBoxIcon.Asterisk);
            btnPreviousForm.Enabled = false;
            btnViewReceipt.Visible = true;
            grpYourInfo.Enabled = false;
        }
        //UPDATE THE NUMBER OF SEATS AVAILABLE AND SEATS SOLD IN THE EVENT RECORDS TABLE
        private void btnViewReceipt_Click(object sender, EventArgs e)
            try
            {
                connection.Open();
                OleDbCommand command = new OleDbCommand();
                command.Connection = connection;
                command.CommandText = "UPDATE EventRecords SET SeatsAvailable='" +
seatsAvailable + "',SeatsSold='" + seatsSold + "'WHERE EventID=" + eventType;
                command.ExecuteNonQuery();
                connection.Close();
            }
            catch (Exception exception)
            {
                MessageBox.Show("Error \n" + exception, "Error", MessageBoxButtons.OK);
            frmReceipt frmReceipt = new frmReceipt(eventType, seatNumber, firstname,
lastname, address, phone);
            this.Hide();
            frmReceipt.ShowDialog();
        }
       private void btnClear Click(object sender, EventArgs e)
            DialogResult result = MessageBox.Show("Are you sure?", "Clear",
MessageBoxButtons.YesNo, MessageBoxIcon.Warning);
```

```
if (result == DialogResult.Yes)
{
          txtFirstname.Clear();
          txtLastname.Clear();
          txtAddress.Clear();
          txtPhone.Clear();
          txtCreditCard.Clear();
          txtSecurityKey.Clear();
    }
}
```

#### FORM 3 CLASS (frmReceipt.cs) SOURCE CODE

```
public partial class frmReceipt : Form
    {
        OleDbConnection connection = new OleDbConnection();
        int eventType;
        string seatNumber;
        string firstname;
        string lastname;
        string address;
        string phone;
        double hst = 0.13;
        string customerID;
        public frmReceipt(int e, string s, string f, string l, string a, string p)
            InitializeComponent();
            connection.ConnectionString = @"Provider=Microsoft.ACE.OLEDB.12.0;
Source=C:\Users\hazke\OneDrive\Desktop\Qureshi Hazkeel FinalProject\EventsDatabase.accdb;
                                             Persist Security Info=False;";
            eventType = e;
            seatNumber = s;
            firstname = f;
            lastname = 1;
            address = a;
            phone = p;
        }
        private void frmReceipt_Load(object sender, EventArgs e)
            DateTime date = DateTime.Now;
            string currentDate = date.ToLongDateString();
            lblDisplayCurrentDate.Text = currentDate;
            DateTime time = DateTime.Now;
            string currentTime = time.ToShortTimeString();
            lblDisplayCurrentTime.Text = currentTime;
            if(eventType == 1)
                lblDisplayEventID.Text = Convert.ToString(eventType);
                lblDisplayEventDescription.Text = "Basketball";
                lblDisplayLocation.Text = "Scotia Bank Arena";
                lblDisplayDate.Text = "January 1, 2021";
                lblDisplayTime.Text = "8:00 PM";
                lblDisplayPrice.Text = "$100.00";
                lblDisplayHST.Text = Convert.ToString("$" + (100 * hst));
                lblDisplayTotal.Text = Convert.ToString("$" + (100 + (100 * hst)));
            else if(eventType == 2)
                lblDisplayEventID.Text = Convert.ToString(eventType);
                lblDisplayEventDescription.Text = "Soccer";
```

```
lblDisplayLocation.Text = "MLS Arena";
                lblDisplayDate.Text = "February 1, 2021";
                lblDisplayTime.Text = "8:00 PM"
                lblDisplayPrice.Text = "$150.00";
                lblDisplayHST.Text = Convert.ToString("$" + (150 * hst));
                lblDisplayTotal.Text = Convert.ToString("$" + (150 + (150 * hst)));
            }
            else if (eventType == 3)
                lblDisplayEventID.Text = Convert.ToString(eventType);
                lblDisplayEventDescription.Text = "Baseball";
                lblDisplayLocation.Text = "Rogers Centre";
                lblDisplayDate.Text = "March 1, 2021";
                lblDisplayTime.Text = "8:00 PM";
                lblDisplayPrice.Text = "$50.00";
                lblDisplayHST.Text = Convert.ToString("$" + (50 * hst));
                lblDisplayTotal.Text = Convert.ToString("$" + (50 + (50 * hst)));
            else if (eventType == 4)
                lblDisplayEventID.Text = Convert.ToString(eventType);
                lblDisplayEventDescription.Text = "WWE";
                lblDisplayLocation.Text = "Scotia Bank Arena";
                lblDisplayDate.Text = "April 1, 2021";
                lblDisplayTime.Text = "8:00 PM";
                lblDisplayPrice.Text = "$75.00";
                lblDisplayHST.Text = Convert.ToString("$" + (75 * hst));
                lblDisplayTotal.Text = Convert.ToString("$" + (75 + (75 * hst)));
            }
            lblDisplaySeatNumber.Text = seatNumber;
            lblDisplayFirstname.Text = firstname;
            lblDisplayLastname.Text = lastname;
            lblDisplayAddress.Text = address;
            lblDisplayPhone.Text = phone;
            try
            {
                connection.Open();
                OleDbCommand command = new OleDbCommand();
                command.Connection = connection;
                command.CommandText = "SELECT * FROM CustomerInfo WHERE Telephone='" +
phone + "'";
                OleDbDataReader reader = command.ExecuteReader();
                while (reader.Read())
                {
                    customerID = reader["CustomerID"].ToString();
                    lblDisplayCustomerID.Text = customerID;
                }
                connection.Close();
            }
            catch (Exception exception)
            {
                MessageBox.Show("Error \n" + exception, "Error", MessageBoxButtons.OK);
            }
```

```
try
              {
                  connection.Open();
                  OleDbCommand command = new OleDbCommand();
                  command.Connection = connection;
                  command.CommandText = "INSERT INTO
TicketData(EventID,CustomerID,SeatNumber,PayDate,PayTime)VALUES(" + eventType + ",'"+
customerID +"','" + seatNumber + "','" + currentDate + "','" + currentTime + "')";
                  command.ExecuteNonQuery();
                  connection.Close();
             catch (Exception exception)
                  MessageBox.Show("Error \n" + exception, "Error", MessageBoxButtons.OK);
              }
         }
         private void btnExit_Click(object sender, EventArgs e)
             DialogResult result = MessageBox.Show("Are you sure?", "Confirm",
MessageBoxButtons.YesNo, MessageBoxIcon.Information);
              if(result == DialogResult.Yes)
                  Application.Exit();
         }
    }
}
```

# CHILD FORM CLASSES (frmBasketball.cs, frmSoccer.cs, frmBaseball.cs, frmWWE.cs) SOURCE CODE (contain event details)

```
public partial class frmBasketball : Form
       public frmBasketball()
            InitializeComponent();
        private void btnClose_Click(object sender, EventArgs e)
            this.Close();
   }
public partial class frmSoccer : Form
       public frmSoccer()
            InitializeComponent();
        private void btnClose_Click(object sender, EventArgs e)
            this.Close();
   }
public partial class frmBaseball : Form
        public frmBaseball()
            InitializeComponent();
       private void btnClose_Click(object sender, EventArgs e)
            this.Close();
   }
```

```
public partial class frmWWE : Form
{
    public frmWWE()
    {
        InitializeComponent();
    }
    private void btnClose_Click(object sender, EventArgs e)
    {
        this.Close();
    }
}
```

#### DATABASE TABLES SCREEN SHOTS

