

Создаем БД, две таблички с полями:

| Drivers  |           |            |
|----------|-----------|------------|
|          | Имя поля  | Тип данных |
| 🔑        | SNN       | Числовой   |
|          | DrName    | Текстовый  |
|          | Age       | Числовой   |
|          | CarType   | Текстовый  |
|          | Hours     | Числовой   |
|          |           |            |
| Managers |           |            |
|          | Имя поля  | Тип данных |
| 🔑        | SNN       | Числовой   |
|          | ManName   | Текстовый  |
|          | Age       | Числовой   |
|          | ProjCount | Числовой   |
|          |           |            |
|          |           |            |
|          |           |            |

Проект – добавить новый источник данных и все по порядку.

Небольшие изменения:

Добавить кнопку «добавить», сделать поле Name доступным для записи.

```
<StackPanel Orientation="Horizontal">
    <TextBlock Width="150" Text="Имя" FontSize="24"/>
    <TextBox Width="150" Text="{Binding Name}" FontSize="24"/>
</StackPanel>
```

```
<Button Content="Добавить" Margin="0 20 0 0" Click="Button_Click_Add"/>
```

```
public string Name
{
    get { return name; }
    set { name = value; }
}
```

Всем полям обязательно дать имя.

```
<StackPanel Name="detailsPanel" Grid.Column="1" Orientation="Vertical">
    <StackPanel Orientation="Horizontal">
        <TextBlock Width="150" Text="Имя" FontSize="24"/>
        <TextBox Name="nameInfo" Width="150" Text="{Binding Name}" FontSize="24"/>
    </StackPanel>

    <StackPanel Margin="0 20 0 0" Orientation="Horizontal">
        <TextBlock Width="150" Text="Возраст" FontSize="24"/>
        <TextBox Name="ageInfo" Width="150" Text="{Binding Age}" FontSize="24"/>
    </StackPanel>

    <StackPanel Margin="0 20 0 0" Orientation="Horizontal">
        <TextBlock Width="150" Text="ИНН" FontSize="24"/>
        <TextBox Name="snnInfo" Width="150" Text="{Binding Snn}" FontSize="24"/>
    </StackPanel>
</StackPanel>
```

```

<StackPanel Name="driverInfo">
    <StackPanel Margin="0 20 0 0" Orientation="Horizontal">
        <TextBlock Width="150" Text="Машина" FontSize="24"/>
        <TextBox Name="carTypeInfo" Width="150" Text="{Binding CarType}" FontSize="24"/>
    </StackPanel>

    <StackPanel Margin="0 20 0 0" Orientation="Horizontal">
        <TextBlock Width="150" Text="Часы" FontSize="24"/>
        <TextBox Name="hoursInfo" Width="150" Text="{Binding Hours}" FontSize="24"/>
    </StackPanel>
</StackPanel>

<StackPanel Name="managerInfo" Margin="0 20 0 0" Orientation="Horizontal">
    <TextBlock Width="150" Text="Проектов" FontSize="24"/>
    <TextBox Name="projCountInfo" Width="150" Text="{Binding ProjectsCount}"
FontSize="24"/>
</StackPanel>

<Button Content="Удалить" Click="Button_Click"/>
<Button Content="Добавить" Margin="0 20 0 0" Click="Button_Click_Add"/>
</StackPanel>

```

---

Теперь можно заняться добавлением в базу.

```

private void Button_Click_Add(object sender, RoutedEventArgs e)
{
    if (projCountInfo.Text == "")
    {
        Driver dr = new Driver(nameInfo.Text, int.Parse(ageInfo.Text),
Int64.Parse(snnInfo.Text), carTypeInfo.Text, int.Parse(hoursInfo.Text));
        OleDbConnection con = new OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=" + Environment.CurrentDirectory + "\\WorkersDB.accdb");

        OleDbCommand insert = new OleDbCommand("INSERT INTO Drivers (`SNN`, `DrName`, `Age`,
`CarType`, `Hours`) VALUES (@snn, @drName, @age, @carType, @hours)", con);
        insert.Parameters.AddWithValue("@snn", dr.Snn);
        insert.Parameters.AddWithValue("@drName", dr.Name);
        insert.Parameters.AddWithValue("@age", dr.Age);
        insert.Parameters.AddWithValue("@carType", dr.CarType);
        insert.Parameters.AddWithValue("@hours", dr.Hours);

        con.Open();
        insert.ExecuteNonQuery();
        con.Close();
        MessageBox.Show("Добавили \n" + dr.Name);
    }
    else
    {
        Manager mn = new Manager(nameInfo.Text, int.Parse(ageInfo.Text),
Int64.Parse(snnInfo.Text), int.Parse(projCountInfo.Text));
    }
}

```

---

А для того, чтобы все было гладко, надо бы поместить всю эту лажу в блок try-catch.

```

private void Button_Click_Add(object sender, RoutedEventArgs e)
{
    if (projCountInfo.Text == "")
    {
        try
        {
            Driver dr = new Driver(nameInfo.Text, int.Parse(ageInfo.Text),
Int64.Parse(snnInfo.Text), carTypeInfo.Text, int.Parse(hoursInfo.Text));
            OleDbConnection con = new
OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data Source=" + Environment.CurrentDirectory +
"\\WorkersDB.accdb");
            OleDbCommand insert = new OleDbCommand();

```

```

        insert = new OleDbCommand("INSERT INTO Drivers (`SNN`, `DrName`, `Age`,
`CarType`, `Hours`) VALUES (@snn, @drName, @age, @carType, @hours)", con);
        insert.Parameters.AddWithValue("@snn", dr.Snn);
        insert.Parameters.AddWithValue("@drName", dr.Name);
        insert.Parameters.AddWithValue("@age", dr.Age);
        insert.Parameters.AddWithValue("@carType", dr.CarType);
        insert.Parameters.AddWithValue("@hours", dr.Hours);
        con.Open();
        insert.ExecuteNonQuery();
        con.Close();
        MessageBox.Show("Добавили \n" + dr.Name);
    }
    catch (FormatException ex)
    {
        MessageBox.Show("Ошибка ввода \n" + ex.Message);
    }
}
else
{
    Manager mn = new Manager(nameInfo.Text, int.Parse(ageInfo.Text),
Int64.Parse(snnInfo.Text), int.Parse(projCountInfo.Text));
}
}

```

---

Запилим ту же хрень для менеджера

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```

else
{
    try
    {
        Manager mn = new Manager(nameInfo.Text, int.Parse(ageInfo.Text),
Int64.Parse(snnInfo.Text), int.Parse(projCountInfo.Text));
        OleDbConnection con = new
OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data Source=" + Environment.CurrentDirectory +
"\\WorkersDB.accdb");
        OleDbCommand insert = new OleDbCommand();
        insert = new OleDbCommand("INSERT INTO Managers (`SNN`, `ManName`, `Age`,
`ProjCount`) VALUES (@snn, @manName, @age, @projCount)", con);
        insert.Parameters.AddWithValue("@snn", mn.Snn);
        insert.Parameters.AddWithValue("@manName", mn.Name);
        insert.Parameters.AddWithValue("@age", mn.Age);
        insert.Parameters.AddWithValue("@carType", mn.ProjectsCount);
        con.Open();
        insert.ExecuteNonQuery();
        con.Close();
        MessageBox.Show("Добавили \n" + mn.Name);
    }
    catch (FormatException ex)
    {
        MessageBox.Show("Ошибка ввода \n" + ex.Message);
    }
}

```

---

Теперь запилим так, чтобы новые работники добавлялись в коллекцию, отображались в листбоксе, и затирались поля в стековых панелях.

---

```

private void Button_Click_Add(object sender, RoutedEventArgs e)
{
    if (projCountInfo.Text == "")
    {
        try
        {
            Driver dr = new Driver(nameInfo.Text, int.Parse(ageInfo.Text),
Int64.Parse(snnInfo.Text), carTypeInfo.Text, int.Parse(hoursInfo.Text));
            OleDbConnection con = new
OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data Source=" + Environment.CurrentDirectory +
"\\WorkersDB.accdb");

```

```

        OleDbCommand insert = new OleDbCommand();
        insert = new OleDbCommand("INSERT INTO Drivers (`SNN`, `DrName`, `Age`,
`CarType`, `Hours`) VALUES (@snn, @drName, @age, @carType, @hours)", con);
        insert.Parameters.AddWithValue("@snn", dr.Snn);
        insert.Parameters.AddWithValue("@drName", dr.Name);
        insert.Parameters.AddWithValue("@age", dr.Age);
        insert.Parameters.AddWithValue("@carType", dr.CarType);
        insert.Parameters.AddWithValue("@hours", dr.Hours);
        con.Open();
        insert.ExecuteNonQuery();
        con.Close();
        Workers.Add(dr);
        MessageBox.Show("Добавили \n" + dr.Name);
        ClearInfoTable();
    }
    catch (FormatException ex)
    {
        MessageBox.Show("Ошибка ввода \n" + ex.Message);
    }
}
else
{
    try
    {
        Manager mn = new Manager(nameInfo.Text, int.Parse(ageInfo.Text),
Int64.Parse(snnInfo.Text), int.Parse(projCountInfo.Text));
        OleDbConnection con = new
OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data Source=" + Environment.CurrentDirectory +
"\WorkersDB.accdb");
        OleDbCommand insert = new OleDbCommand();
        insert = new OleDbCommand("INSERT INTO Managers (`SNN`, `ManName`, `Age`,
`ProjCount`) VALUES (@snn, @manName, @age, @projCount)", con);
        insert.Parameters.AddWithValue("@snn", mn.Snn);
        insert.Parameters.AddWithValue("@manName", mn.Name);
        insert.Parameters.AddWithValue("@age", mn.Age);
        insert.Parameters.AddWithValue("@carType", mn.ProjectsCount);
        con.Open();
        insert.ExecuteNonQuery();
        con.Close();
        Workers.Add(mn);
        MessageBox.Show("Добавили \n" + mn.Name);
        ClearInfoTable();
    }
    catch (FormatException ex)
    {
        MessageBox.Show("Ошибка ввода \n" + ex.Message);
    }
}
}

private void ClearInfoTable()
{
    nameInfo.Text = "";
    ageInfo.Text = "";
    snnInfo.Text = "";
    projCountInfo.Text = "";
    carTypeInfo.Text = "";
    hoursInfo.Text = "";
}

```

---

Теперь сделаем так, чтобы листбокс заполнялся не из заданной коллекции, а из БД.

```
public MainWindow()
{
    InitializeComponent();
    Workers = new ObservableCollection<Worker>();
    Workers.Add(new Manager("Светлана", 25, 78461532, 9));
    Workers.Add(new Driver("Вася", 32, 488653, "Audi", 340));
    Workers.Add(new Manager("Елена", 27, 448666, 19));
    Workers.Add(new Driver("Петя", 45, 789542, "BMW", 256));
    Workers.Add(new Manager("Екатерина", 23, 78985622, 15));
    Workers.Add(new Driver("Саша", 45, 789542, "BMW", 256));

    OleDbConnection con = new OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=" + Environment.CurrentDirectory + "\\WorkersDB.accdb");

    con.Open();
    OleDbCommand select = new OleDbCommand();
    //select.Connection = con;
    select = new OleDbCommand("SELECT SNN, ManName, Age, ProjCount FROM Managers", con);
    //select = new OleDbCommand("SELECT * FROM Managers", con);
    OleDbDataReader reader = select.ExecuteReader();
    while (reader.Read())
    {
        Workers.Add(new Manager(reader[1].ToString(), Convert.ToInt32(reader[2]),
Convert.ToInt64(reader[0]), Convert.ToInt32(reader[3])));
    }
    //select = new OleDbCommand("SELECT SNN, DrName, Age, CarType, Hours FROM Drivers");
    select = new OleDbCommand("SELECT * FROM Drivers", con);
    reader = select.ExecuteReader();
    while (reader.Read())
    {
        Workers.Add(new Driver(reader[1].ToString(), Convert.ToInt32(reader[2]),
Convert.ToInt64(reader[0]), reader[3].ToString(), Convert.ToInt32(reader[4])));
    }

    con.Close();

    DataContext = this;
}
```

---

И запилим адекватное удаление из БД

---

```
private void Button_Click(object sender, RoutedEventArgs e)
{
    Worker delWorker = (workersList.SelectedItem as Worker);
    if (delWorker != null)
    {
        Workers.Remove(delWorker);
        workersList.SelectedIndex = 0;

        OleDbConnection con = new OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=" + Environment.CurrentDirectory + "\\WorkersDB.accdb");

        con.Open();
        OleDbCommand delete = new OleDbCommand();

        if (delWorker is Driver)
        {
            delete = new OleDbCommand("DELETE FROM Drivers WHERE SNN =@snn", con);
            delete.Parameters.AddWithValue("@snn", delWorker.Snn);
        }
        if (delWorker is Manager)
        {
            delete = new OleDbCommand("DELETE FROM Managers WHERE SNN =@snn", con);
            delete.Parameters.AddWithValue("@snn", delWorker.Snn);
        }
    }
}
```

```
        delete.ExecuteNonQuery();  
        con.Close();  
        MessageBox.Show("Удален + \n" + delWorker.Name);  
    }  
}
```

---