

Primjeri uz predavanja
-događaji za kontrole
Form, Button, TextBox, CheckBox,
Radio Button

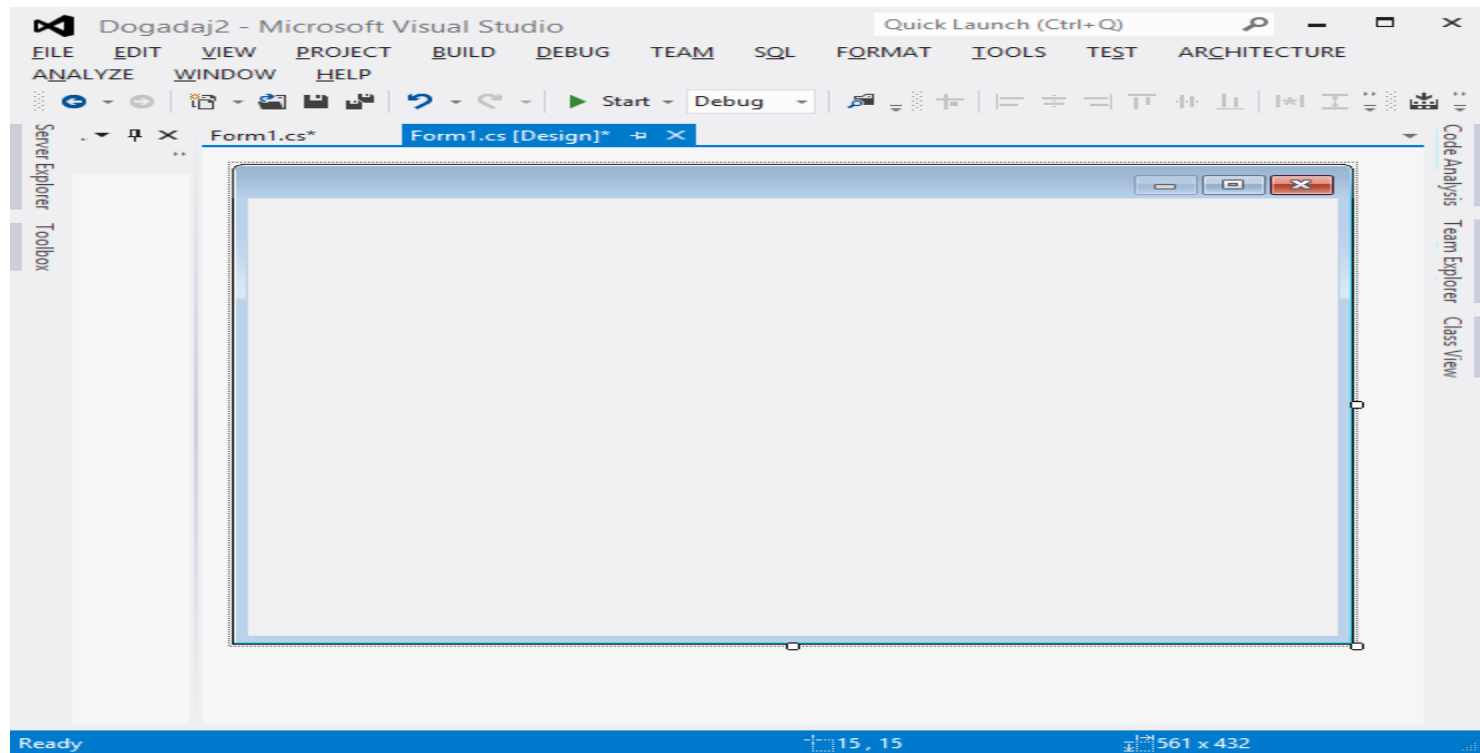
- Primjeri ilustriraju kontrole i događaje.
- Nisu uključeni zadaci koji povezuju problemsko rješenje, objektno orijentirani dizajn.

U tom slučaju ne piše se direktno programska logika u metodama za upravljanje događajima, već se u tim metodama najčešće pozivaju metode klasa koje implementiraju tražene funkcionalnosti.

Primjer 1

Kreirati formu kao na slici. Potrebno je da se aktivira: događaj prilikom loada forme koji će na naslovni (title) bar prozora napisati naziv dana kada se forma pokreće.

Forma u dizajn modu izgleda kao na slici ispod. Forma nema ikonu i dugme minimizacije treba biti onemogućeno.



Os

Properties

Form1 System.Windows.Forms.Form

AutoScrollMinSize 0, 0

AutoSize False

AutoSizeMode GrowOnly

Location 0, 0

MaximumSize 0, 0

MinimumSize 0, 0

Padding 0, 0, 0, 0

Size 561, 432

StartPosition WindowsDefaultLocation

WindowState Normal

Misc

Window Style

ControlBox True

HelpButton False

Icon (Icon)

IsMdiContainer False

MainMenuStrip (none)

MaximizeBox True

MinimizeBox **False**

Opacity 100%

ShowIcon **False**

ShowInTaskbar True

SizeGripStyle Auto

TopMost False

TransparencyKey

Accessibility

Postaviti na false - minimize – dugme na naslovnoj traci prozora će biti onemogućeno.

Neće se prikazati ikona na naslovnoj traci prozora

```
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 Dogadaj2
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();

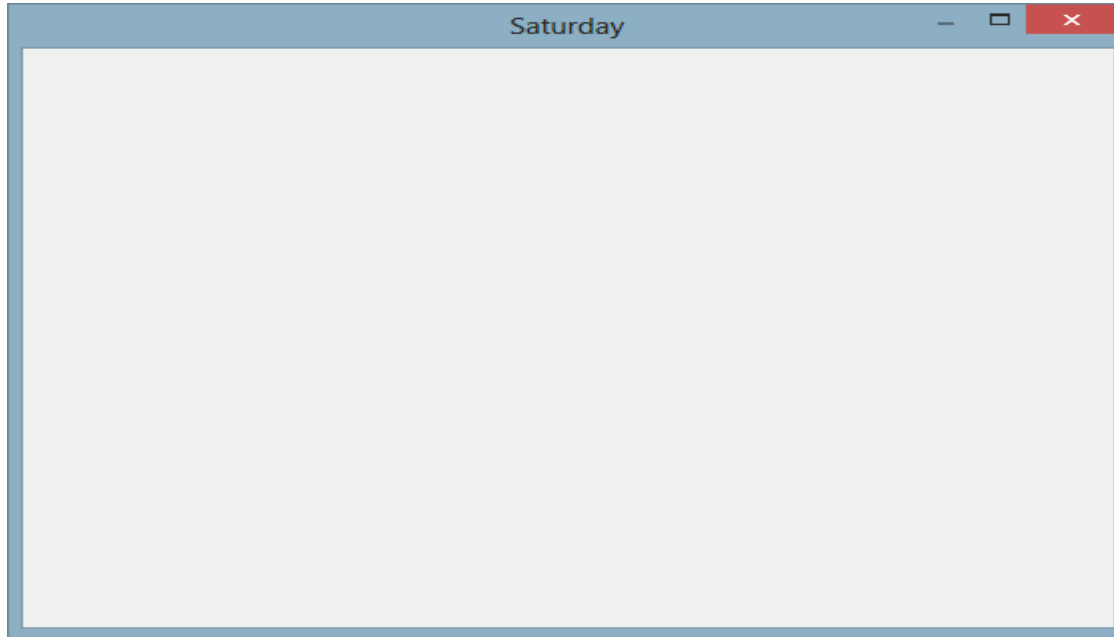
            private void Form1_Load(object sender, EventArgs e)
            {
                this.Text = DateTime.Now.DayOfWeek.ToString();
                this.Top = 60;
                this.Left = 60;
            }
        }
    }
}
```

Load događaj-default događaj za formu.

U dizajneru se dobije duplim klikom na površinu forme

Pokreće se pri prikazivanju forme.

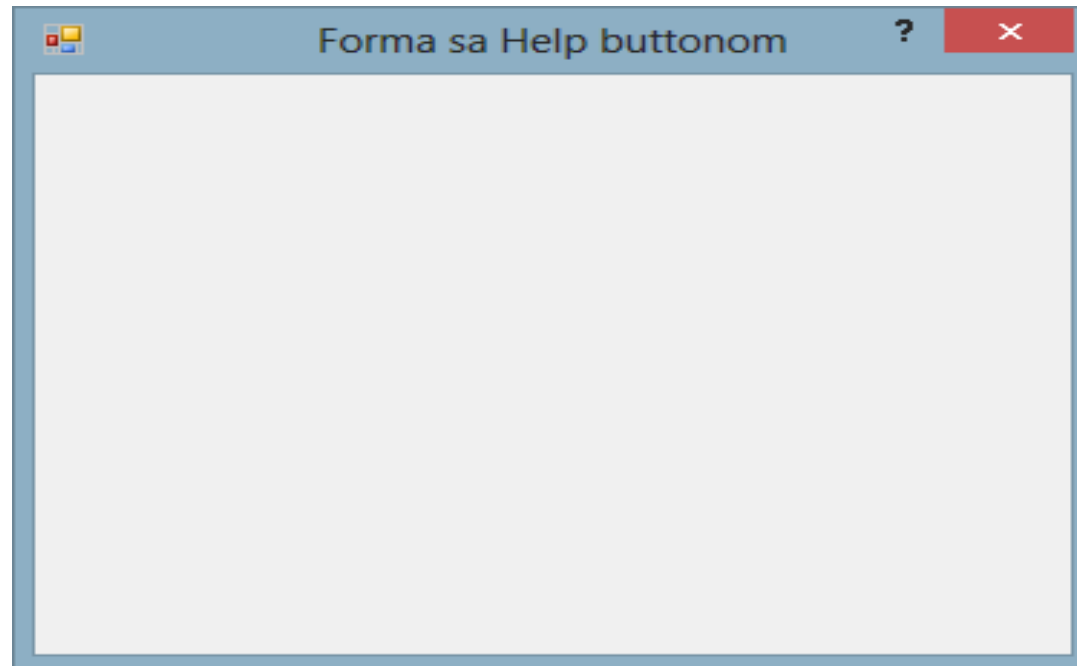
- Pokretanjem aplikacije dobija se:



Metoda za upravljanjem događajem uzrokovala je pisanje dana (Saturday) na naslovnoj liniji prozora).

Primjer 2:

- Kreirati formu kao na slici. Forma treba da ima help button. Potrebno je aktivirati događaj na pritisak help buttona. Dati samo obavijest da je aktiviran događaj.



Properties

Form1 System.Windows.Forms.Form

DoubleBuffered	False
Enabled	True
Font	Microsoft Sans Serif, 8
ForeColor	ControlText
FormBorderStyle	Sizable
HelpButton	True
Icon	(Icon)
ImeMode	NoControl
IsMdiContainer	False
KeyPreview	False
Language	(Default)
Localizable	False
Location	0, 0
Locked	False
MainMenuStrip	(none)
MaximizeBox	False
MaximumSize	0, 0
MinimizeBox	False
MinimumSize	0, 0
Opacity	100%
Padding	0, 0, 0, 0
RightToLeft	No
RightToLeftLayout	False
ShowIcon	True
ShowInTaskbar	True

Text
The text associated with the control.

Properties

Form1 System.Windows.Forms.Form

GiveFeedback	
HelpButtonClicked	Form1_HelpButtonClicked
HelpRequested	
ImeModeChanged	
InputLanguageChanged	
InputLanguageChanging	
KeyDown	
KeyPress	
KeyUp	
Layout	
Leave	
Load	
LocationChanged	
MaximizedBoundsChanged	
MaximumSizeChanged	
MdiChildActivate	
MinimumSizeChanged	
MouseCaptureChanged	
MouseDown	
MouseDoubleClick	
MouseEnter	
MouseHover	
MouseLeave	
MouseMove	

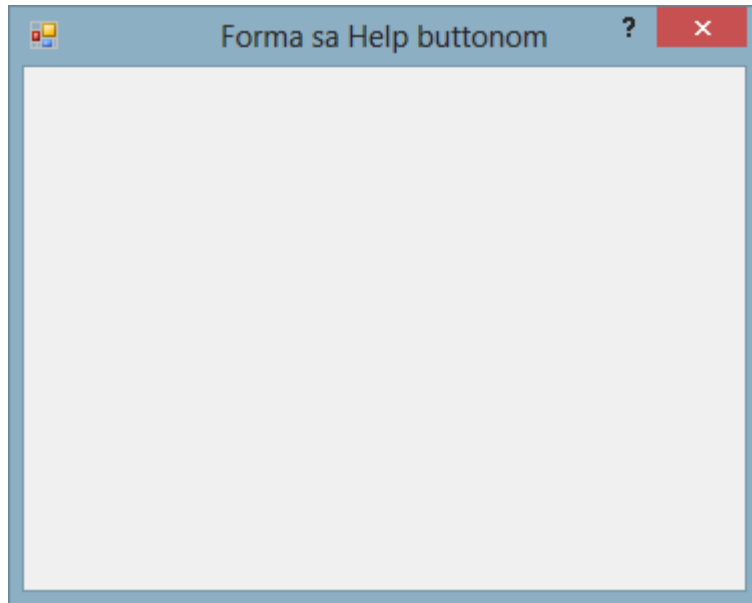
HelpButtonClicked
Event raised when the help button is clicked.

Povezuje se događaj sa Help buttonom Default naziv se dobija duplim klikom na polje uz događaj.

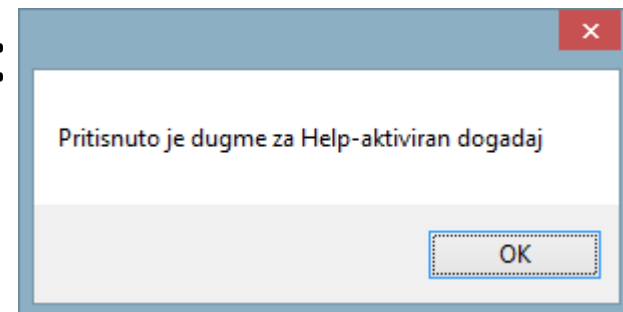
Metoda za upravljanjem događajem kada se klikne na Help ikonu:

```
private void Form1_HelpButtonClicked(object sender, CancelEventArgs e)
{
    MessageBox.Show("Pritisnuto je dugme za Help-aktiviran događaj");
    // dodati kod npr. kreirati drugu formu na kojoj je Help sadržaj
}
```

- Prilikom izvršavanja dobija se početna forma:

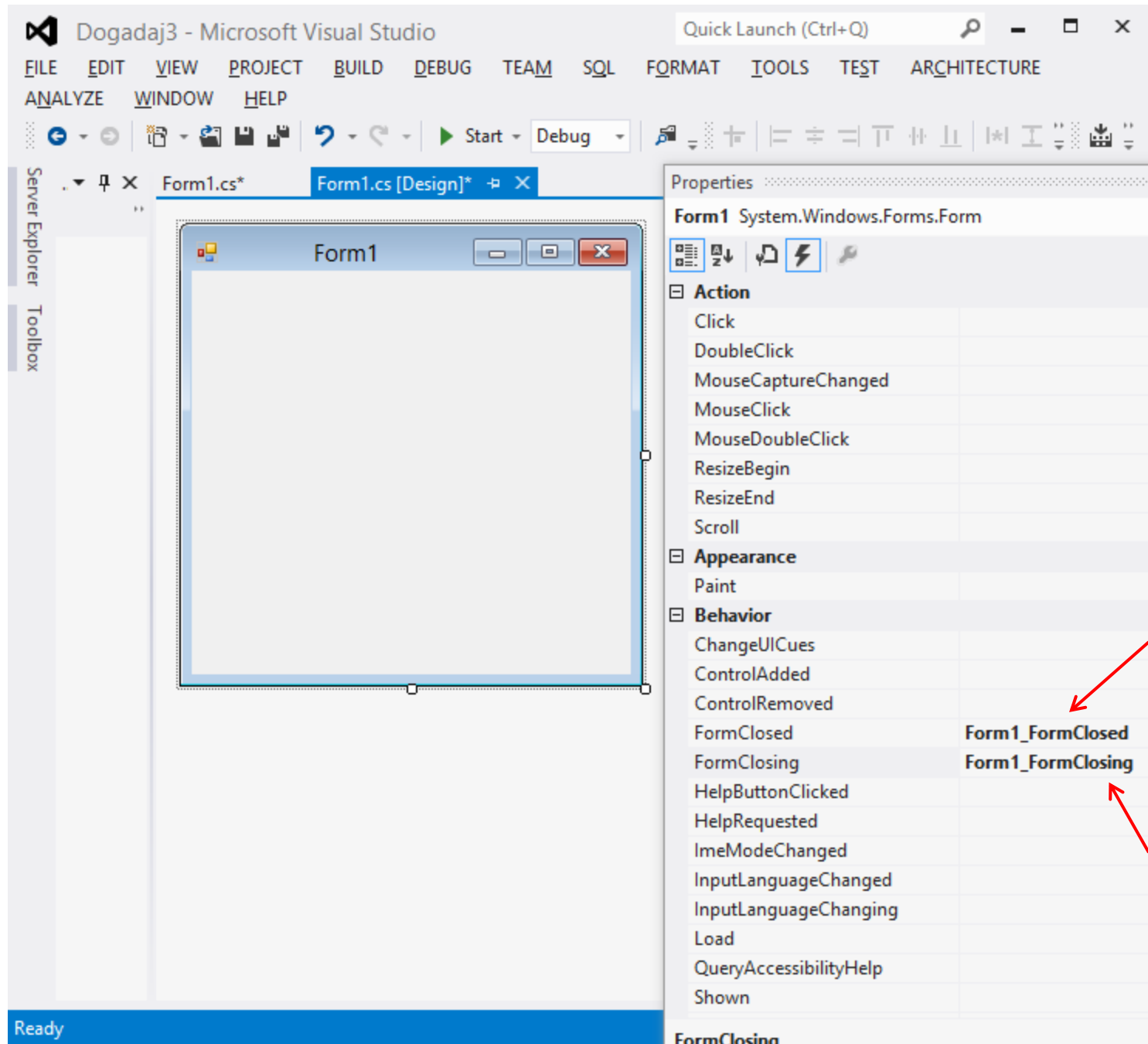


- Klikom na ? prikazuje se:



Primjer 3

- Kreirati formu proizvoljne veličine. Potrebno je programirati:
 - dogadjaj Closing**, dešava se kada korisnik klikne na dugme za zatvaranje. Potrebno je onemogućiti zatvaranje forme ako su minute kada se vrši zatvaranje neparne. Poruku „Ne može se zatvoriti forma ako su minute neparne” napisati na naslovnom baru.
 - dogadjaj Closed**, dešava se nakon izvršenog događaja Closing, tako da se napiše poruke Forma je zatvorena.

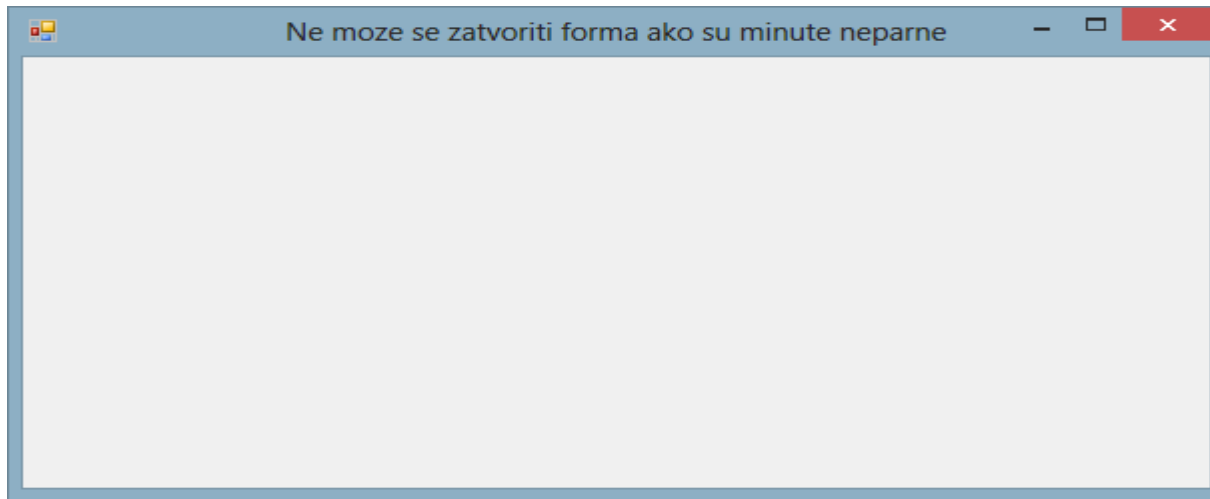


Metode za upravljanje događajima Closing i Closed.

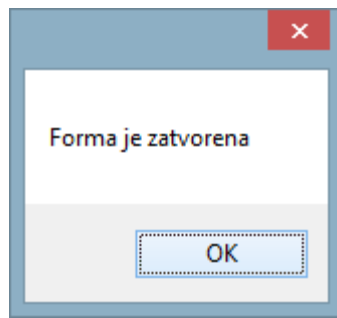
```
private void Form1_FormClosing(object sender, FormClosingEventArgs e)
{
    if ((DateTime.Now.Minute % 2) == 1)
    {
        this.Text = "Ne moze se zatvoriti forma ako su minute neparne";
        e.Cancel = true;
    }
}

private void Form1_FormClosed(object sender, FormClosedEventArgs e)
{
    MessageBox.Show("Forma je zatvorena");
}
```

- Prilikom izvršavanja aplikacije i pokušaja da se forma zatvori u 9:03 dobija se forma izgleda:

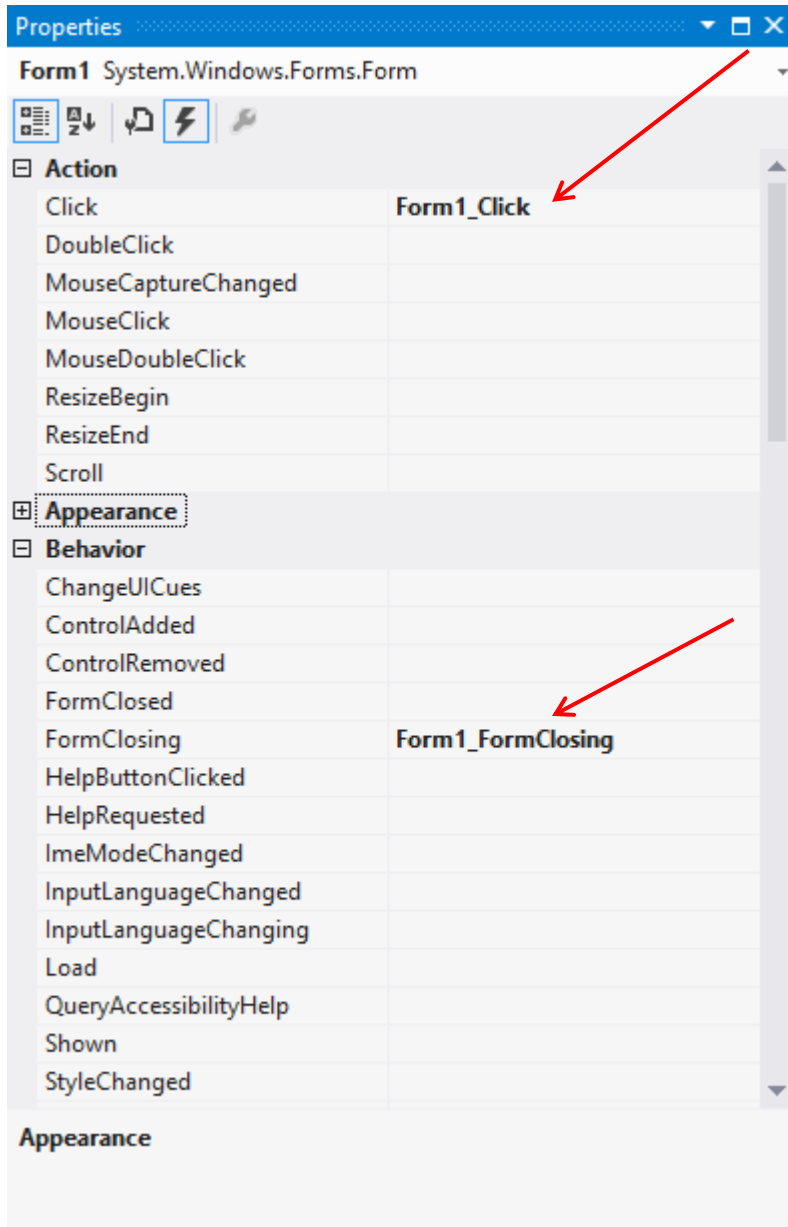


- Prilikom pokušaja da se forma zatvori u 9:04 forma se zatvara i dobija se poruka:



Primjer 4

- Kreirati formu. Potrebno je da se prilikom zatvaranja forme korisnika pita da li je siguran da želi zatvoriti formu. Ukoliko je siguran izvršiti zatvaranje forme, a u ukoliko nije vratiti fokus na formu.
- Prilikom klika na formu aktivirati događaj koji će napisati poruku.



Metoda za upravljanje Closing događajem

```
private void Form1_FormClosing(object sender, FormClosingEventArgs e)
{
    if (MessageBox.Show("Da li želite da zatvorite
formu/aplikaciju?", "Zatvaranje moje aplikacije",
    MessageBoxButtons.YesNo) == DialogResult.No)
    {

        // Prekida se closing event
        e.Cancel = true;

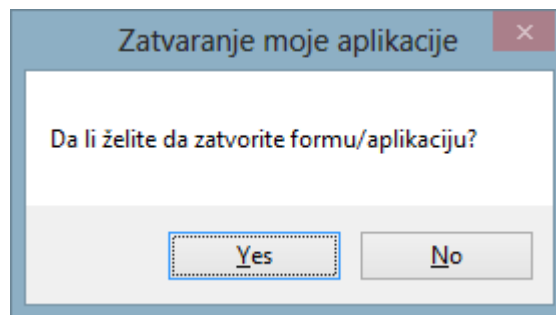
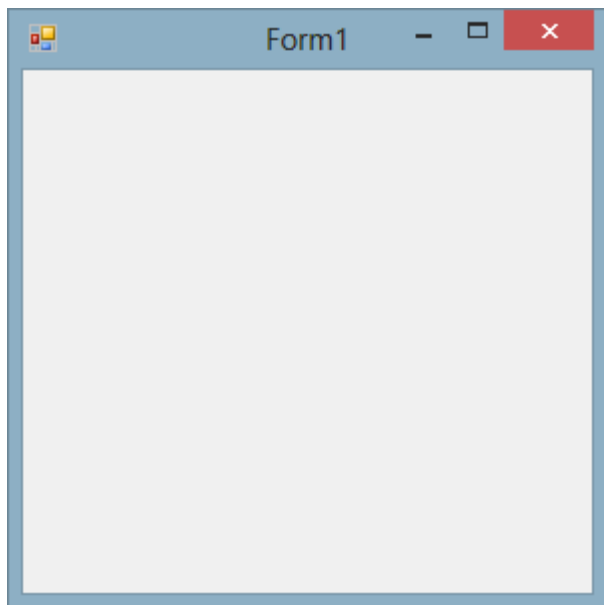
    }
}
```

Metoda za upravljanje klik događajem na formu

```
private void Form1_Click(object sender, EventArgs e)
{
    MessageBox.Show("Desio se click event na formi");
    //ubaciti kod ...
}
```

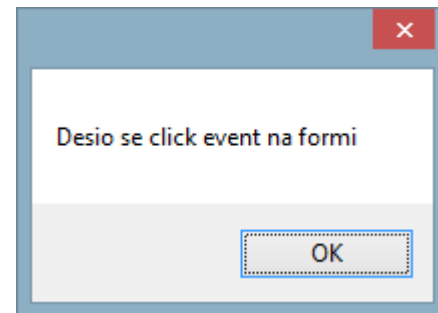
- Izvršavanjem se pojavljuje Izvršavanjem se pojavljuje forma:

Nakon klika na x-dugme za zatvaranje forme dobija se:



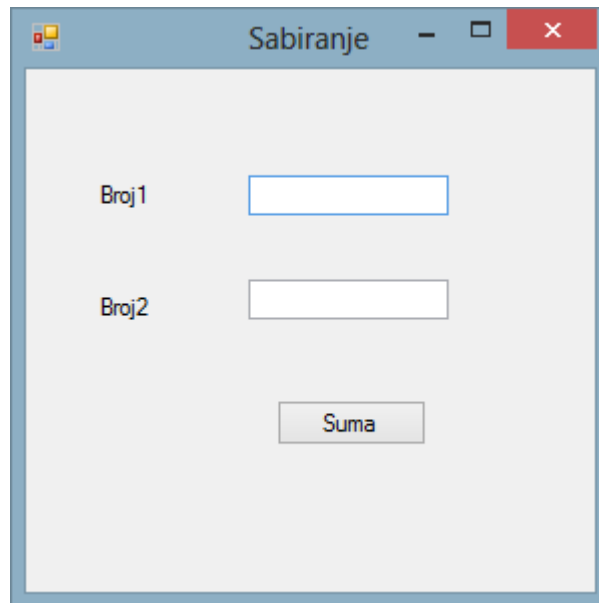
Ukoliko korisnik klikne na Yes forma se zatvara.
Sa klikom na No forma se ne zatvara.

Ukoliko se desi klik na formu aktivira se događaj Click
i ispisuje se poruka:

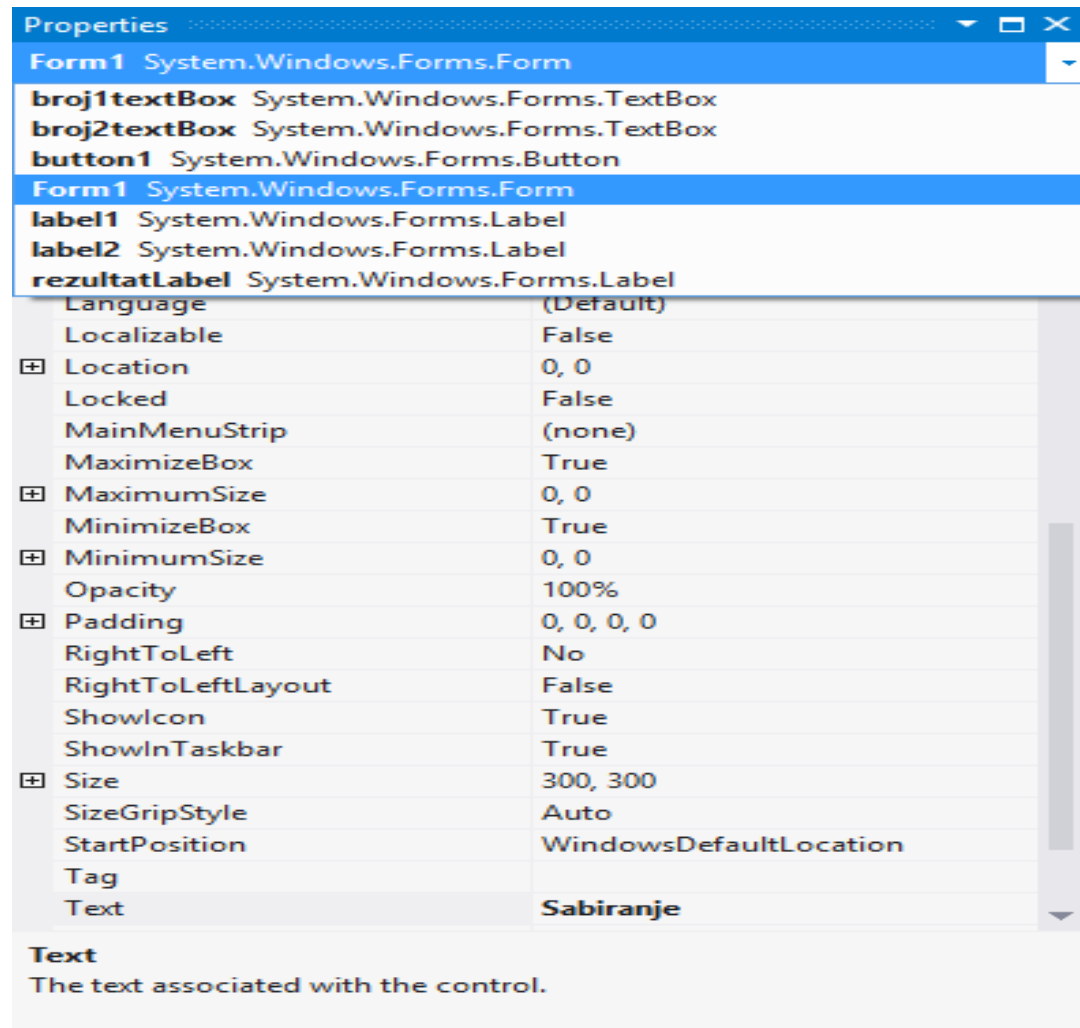


Primjer 5

- Napisati windows aplikaciju koja će omogućiti unos dva polja, računanje i prikaz sume tih brojeva na labelu forme. Računanje i prikaz sume se dešava nakon klika na button na formi.



- Dizajnirati formu, kreirati sve kontrole i postaviti njihove osobine.
- Potrebne su kontrole:

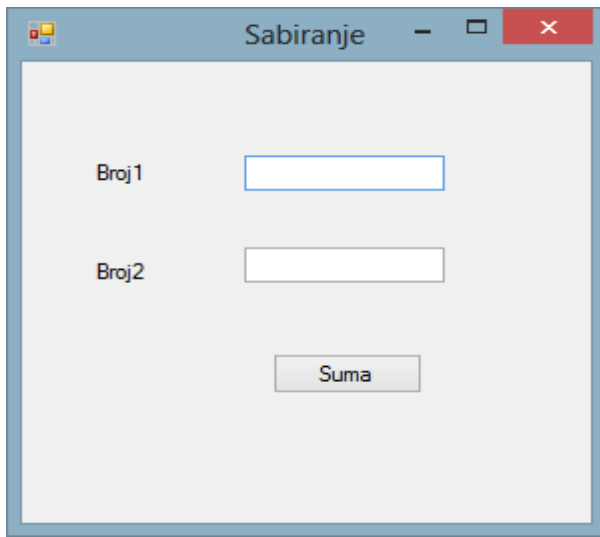


- Programirati događaj Click za kontrolu button1 (označen na formi sa tekстом Suma).

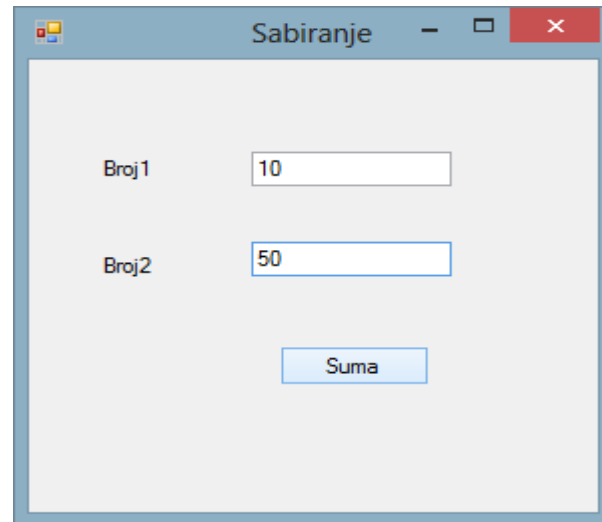
```
private void button1_Click(object sender, EventArgs e)
{
    int broj1 = Int32.Parse(broj1textBox.Text);
    int broj2 = Int32.Parse(broj2textBox.Text);

    rezultatLabel1.Text = "Suma je " + (broj1 + broj2);
}
```

Scenarij izvršavanja:

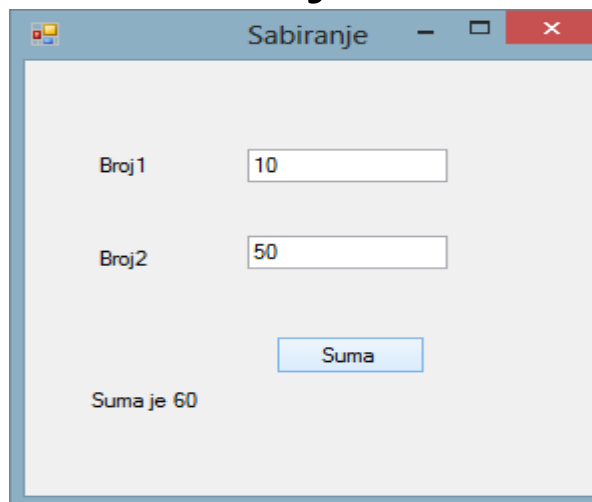


The application window titled "Sabiranje" contains two input fields labeled "Broj1" and "Broj2", both of which are empty. Below these fields is a button labeled "Suma".



The application window titled "Sabiranje" now has the input fields "Broj1" and "Broj2" containing the values "10" and "50" respectively. The "Suma" button remains below them.

Nakon klika na button dobija se forma:

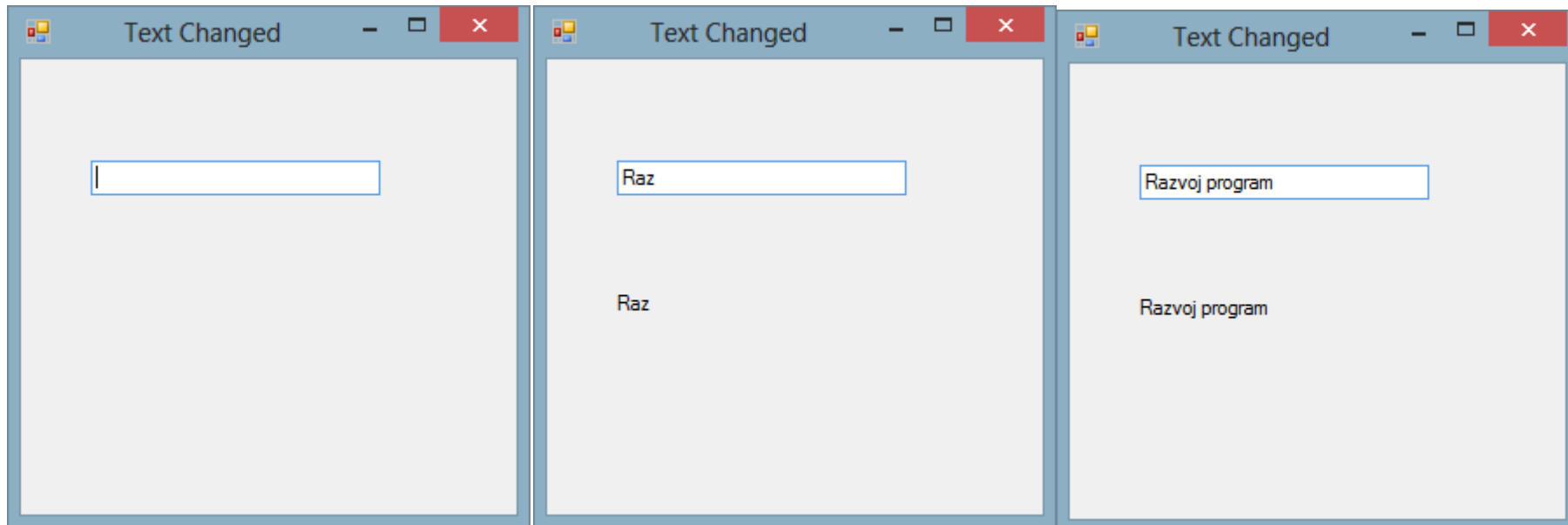


The application window titled "Sabiranje" shows the input fields "Broj1" and "Broj2" with values "10" and "50". The "Suma" button is still present. Additionally, the text "Suma je 60" is displayed at the bottom of the window.

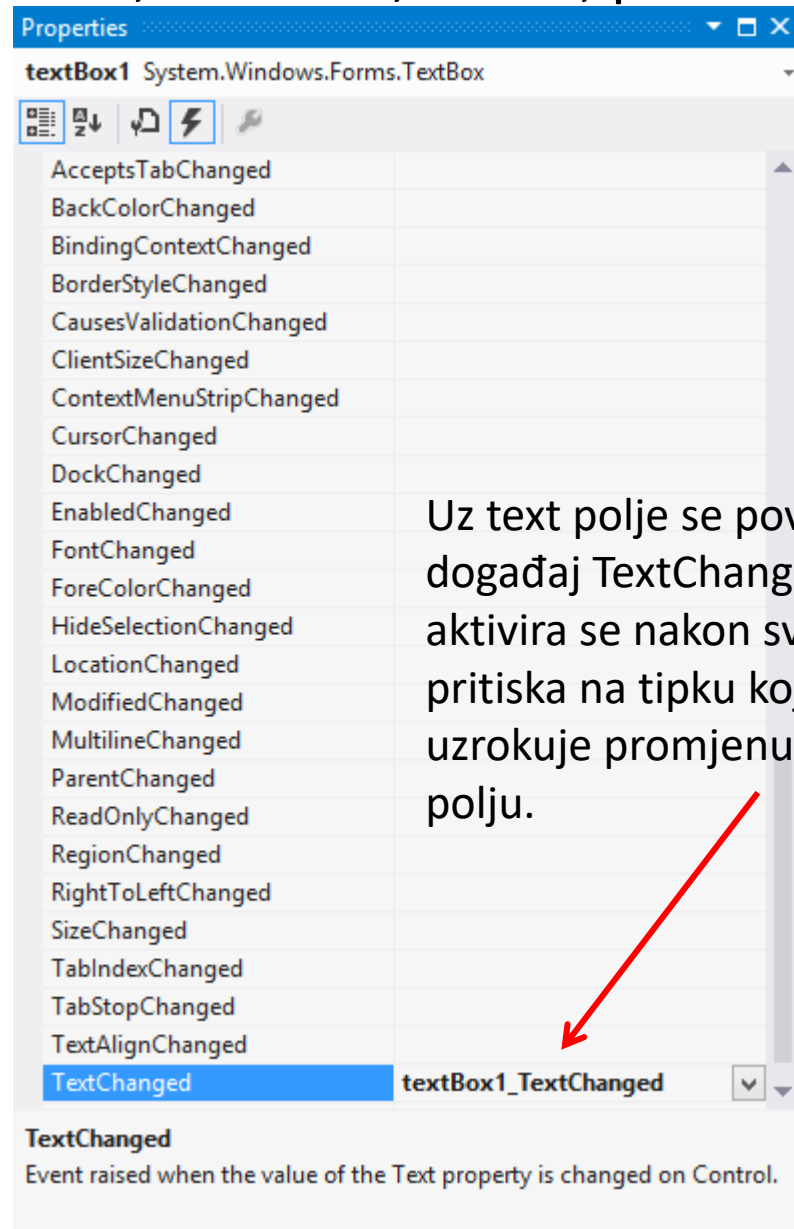
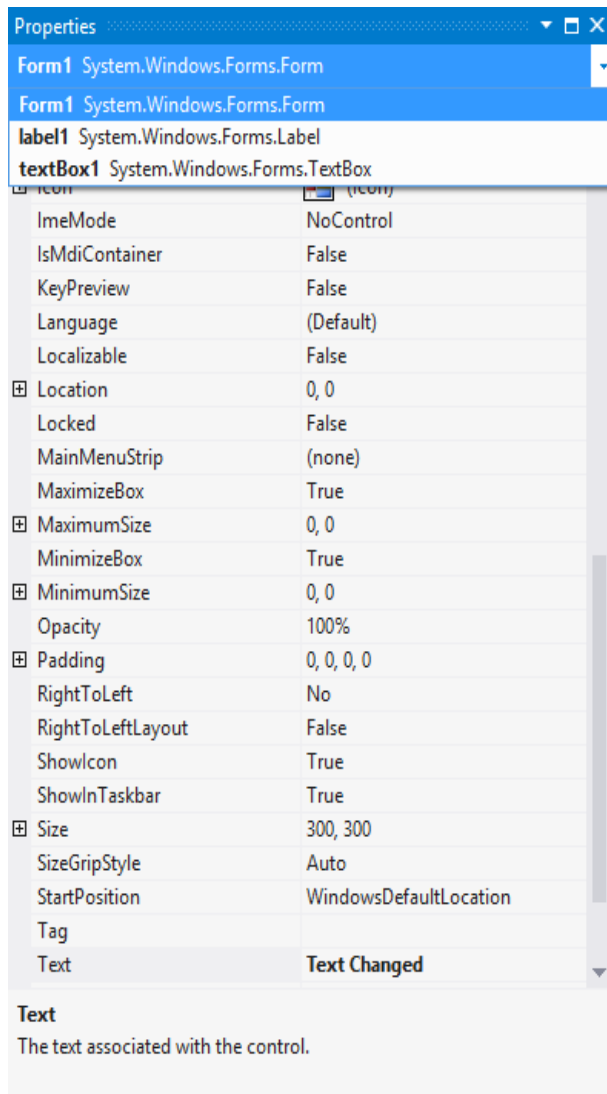
Primjer 6

- Kreirati formu na kojoj je tekst polje.

Potrebno je da se prilikom svake promjene na tekstu polju (npr. korisnik ukuca slovo) promjena reflektuje i na labeli koja se također nalazi formi.



Kreirati potrebne kontrole: Form, textBox1, label1, postaviti odgovarajuće osobine.



Uz text polje se povezuje događaj **TextChanged**-aktivira se nakon svakog pritiska na tipku koja uzrokuje promjenu na tekst polju.

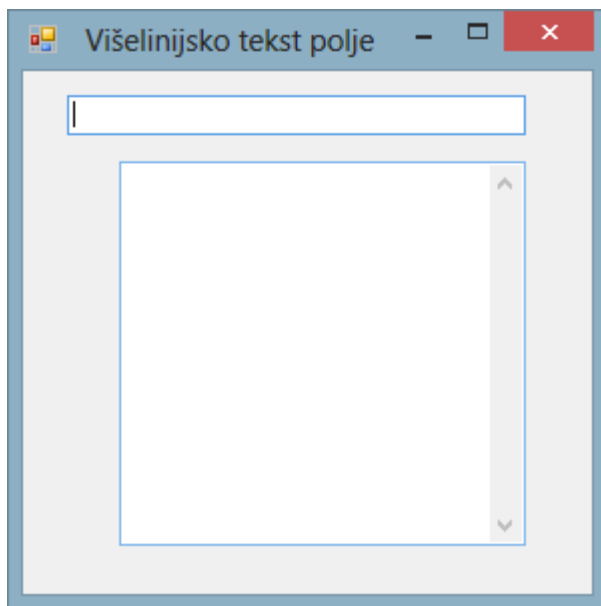
Metoda za upravljanje događajem TextChanged

```
private void textBox1_TextChanged(object sender, EventArgs e)
{
    label1.Text = textBox1.Text;
}
```

!Scenarij izvršavanja prikazan uz tekst zadatka.

Primjer 7

- Kreirati formu sa dva tekst polja. Jedno tekst polje je višelinijsko i služi za unos teksta. Prilikom ulaska na višelinijsko tekst polje (polje je tada u fokusu) potrebno je da se aktivira događaj koji će na jednolinijsko polje napisati poruku: UNESITE TEKSTU VIŠELINIJSKO POLJE.



Kreirati kontrole i postaviti njihove osobine:

The screenshot displays the Visual Studio IDE with the Properties window open for three controls: Form1, TextBox1, and TextBox2. The Properties window for Form1 is on the left, showing various properties like Location, Size, and Text. The Properties window for TextBox1 is in the middle, and the Properties window for TextBox2 is on the right. Red arrows point to the **Multiline** property of TextBox1 and the **TabIndex** property of TextBox2.

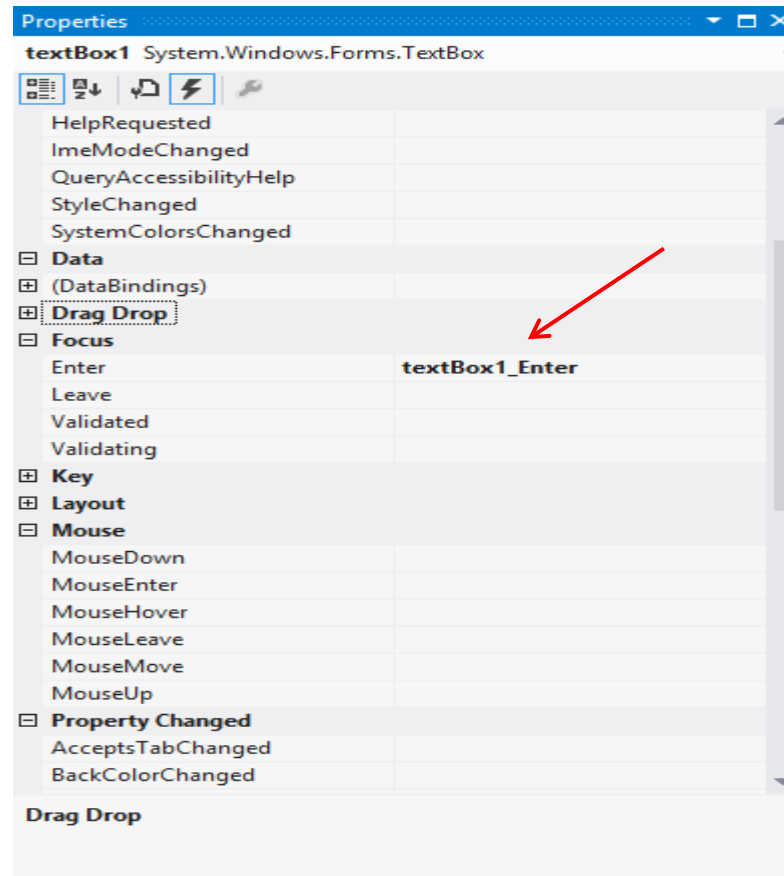
Control	Property	Value
Form1	System.Windows.Forms.Form	
Form1	System.Windows.Forms.Form	
textBox1	System.Windows.Forms.TextBox	
textBox2	System.Windows.Forms.TextBox	
textBox1	Enabled	True
textBox1	Font	Microsoft Sans Serif, 8.25pt
textBox1	ForeColor	Black
textBox1	GenerateMember	True
textBox1	HideSelection	True
textBox1	ImeMode	NoControl
textBox1	Lines	String[]
textBox1	Location	48, 45
textBox1	Locked	False
textBox1	Margin	3, 3, 3, 3
textBox1	MaximumSize	0, 0
textBox1	MaxLength	32767
textBox1	MinimumSize	0, 0
textBox1	Modifiers	Private
textBox1	Multiline	True
textBox1	PasswordChar	
textBox1	ReadOnly	False
textBox1	RightToLeft	No
textBox1	ScrollBars	Vertical
textBox1	ShortcutsEnabled	True
textBox1	Size	203, 192
textBox1	TabIndex	1
textBox1	TabStop	True
textBox1	Tag	
textBox1	Text	
textBox2	Enabled	True
textBox2	Font	Microsoft Sans Serif, 8.25pt
textBox2	ForeColor	Black
textBox2	GenerateMember	True
textBox2	HideSelection	True
textBox2	ImeMode	NoControl
textBox2	Lines	String[] Array
textBox2	Location	22, 12
textBox2	Locked	False
textBox2	Margin	3, 3, 3, 3
textBox2	MaximumSize	0, 0
textBox2	MaxLength	32767
textBox2	MinimumSize	0, 0
textBox2	Modifiers	Private
textBox2	Multiline	False
textBox2	PasswordChar	
textBox2	ReadOnly	False
textBox2	RightToLeft	No
textBox2	ScrollBars	None
textBox2	ShortcutsEnabled	True
textBox2	Size	229, 20
textBox2	TabIndex	0
textBox2	TabStop	True
textBox2	Tag	
textBox2	Text	

Multiline
Controls whether the text of the edit control is multiline.

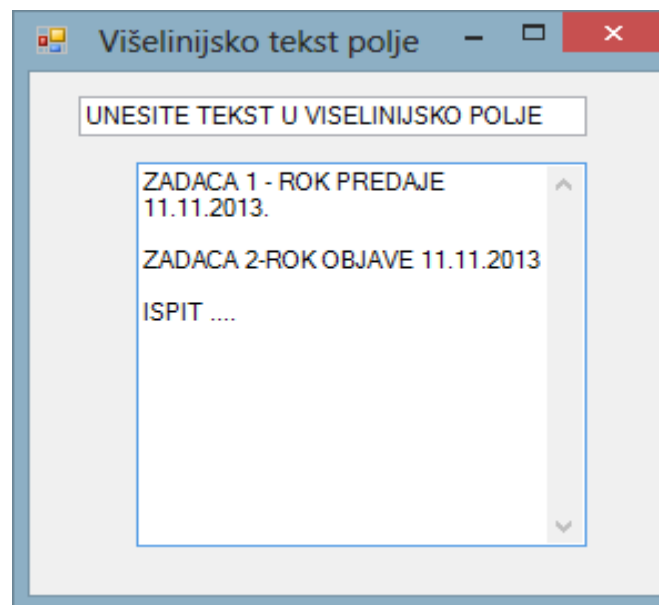
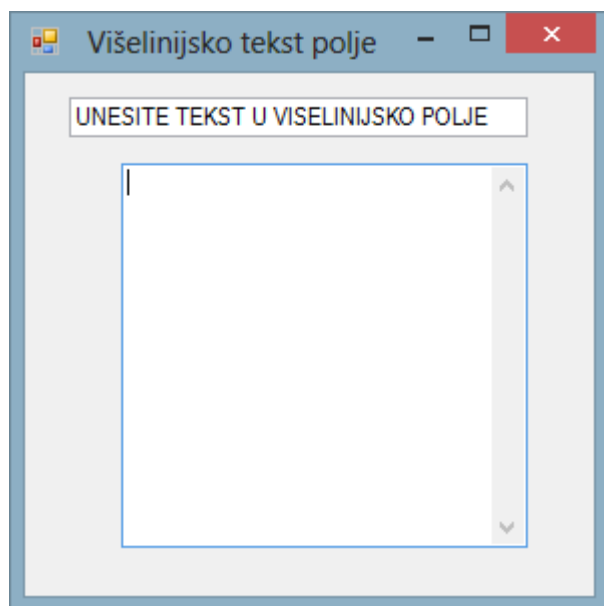
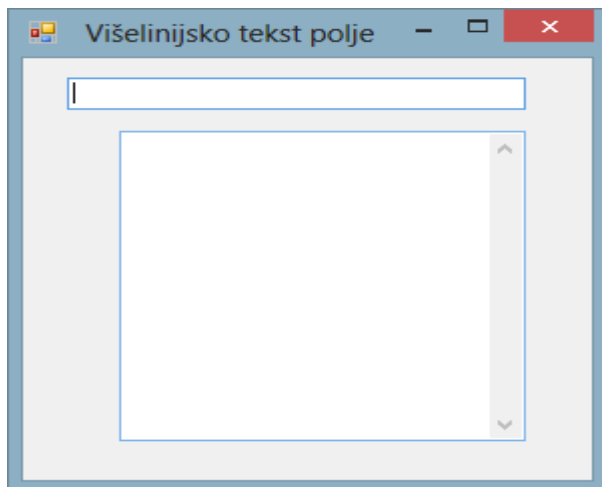
TabIndex
Determines the index in the TAB order that this control will occupy.

Metoda za upravljanje Enter događajem tekst polja

```
private void textBox1_Enter(object sender, EventArgs e)
{
    textBox2.Text = "UNESITE TEKST U VISELINIJSKO POLJE";
}
```

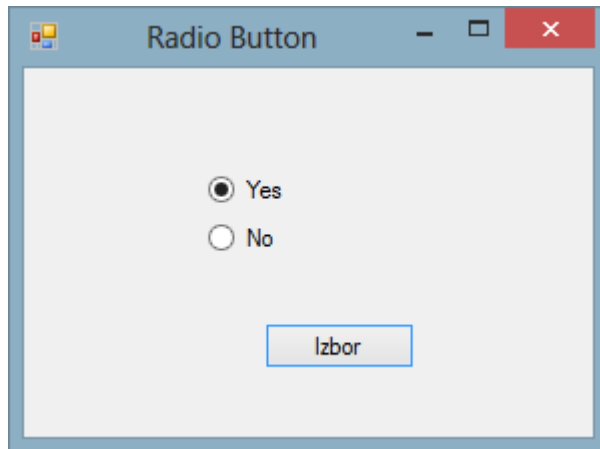


Scenarij izvršavanja:

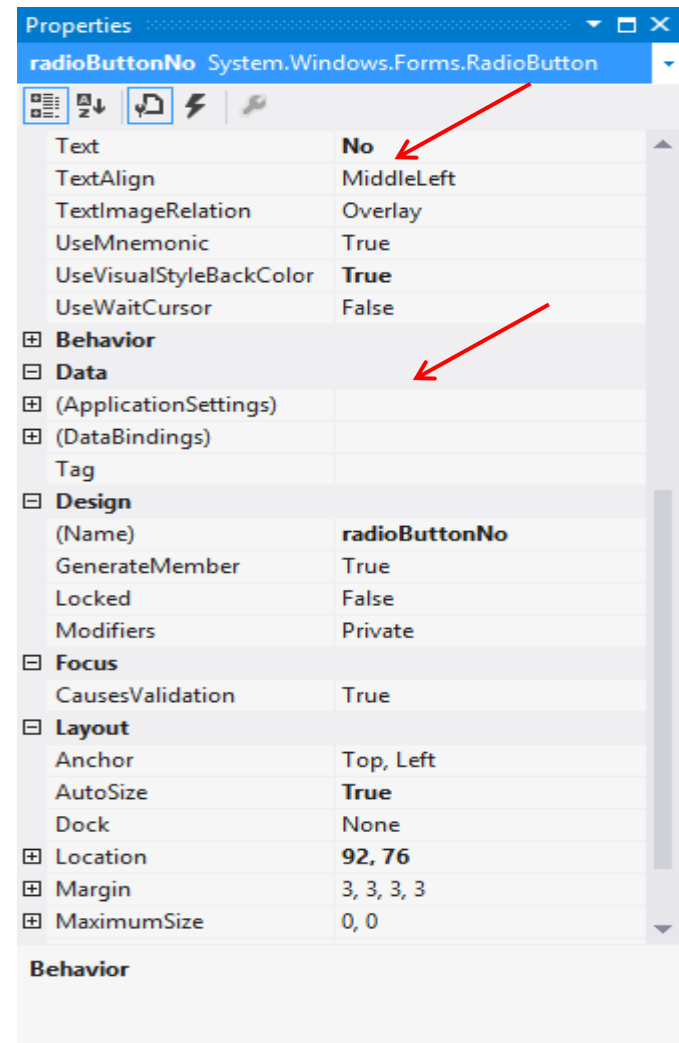
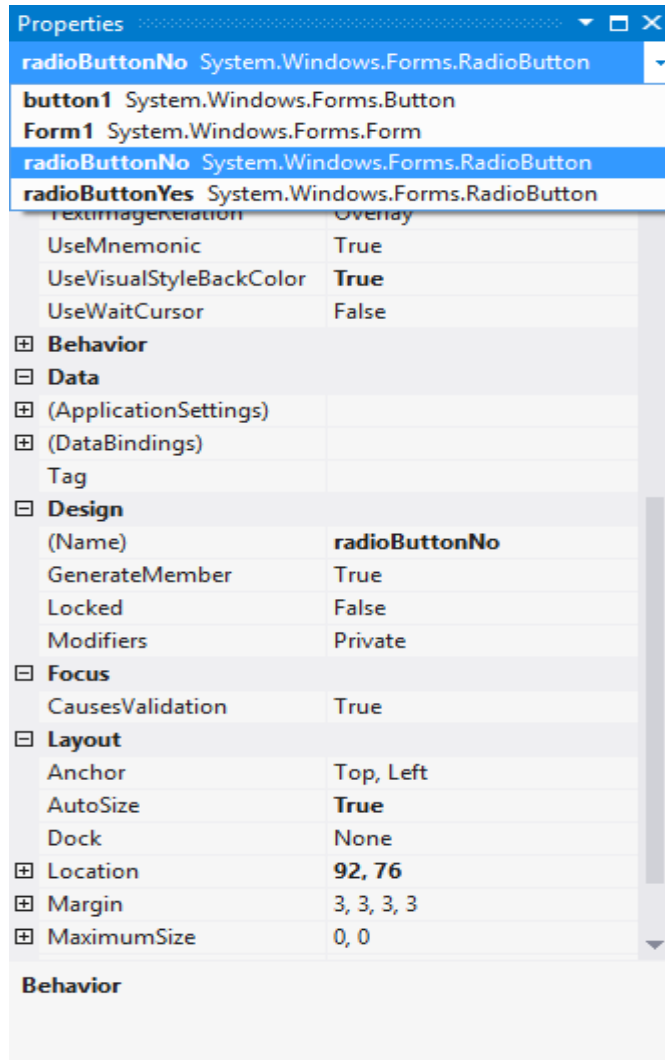


Primjer 8

- Potrebno je kreirati formu kao na slici. Forma treba da sadrži radio button (Yes, No). Poruka o tome koji je radio button označen dobija se nakon klika na button Izbor.



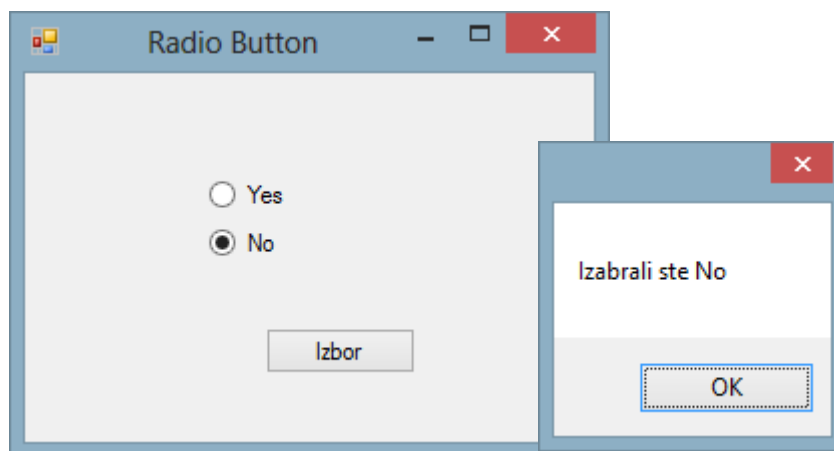
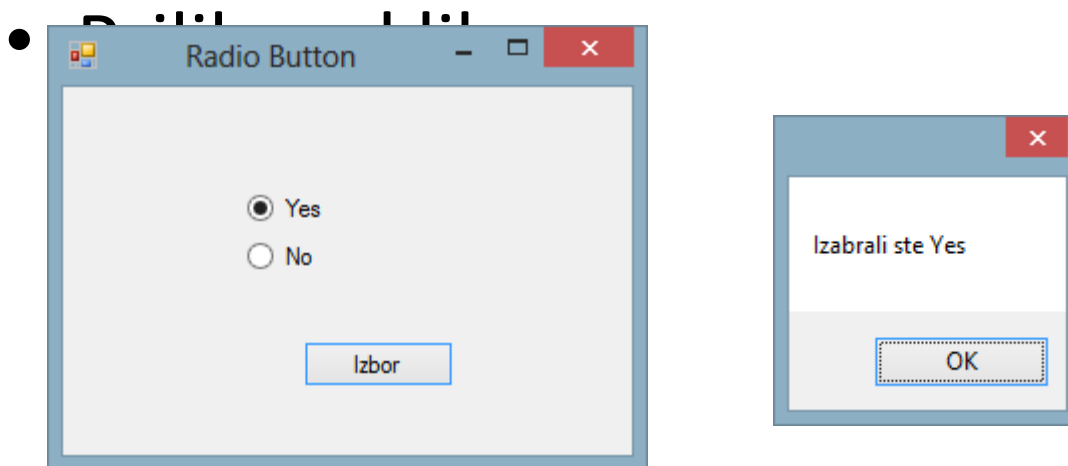
Potrebno je kreirati kontrole (button, 2 radio buttona) na formu i postaviti njihove osobine.



Metoda za upravljanje klikom na button provjera stanje radio buttona i na osnovu toga se ispisuje poruka.

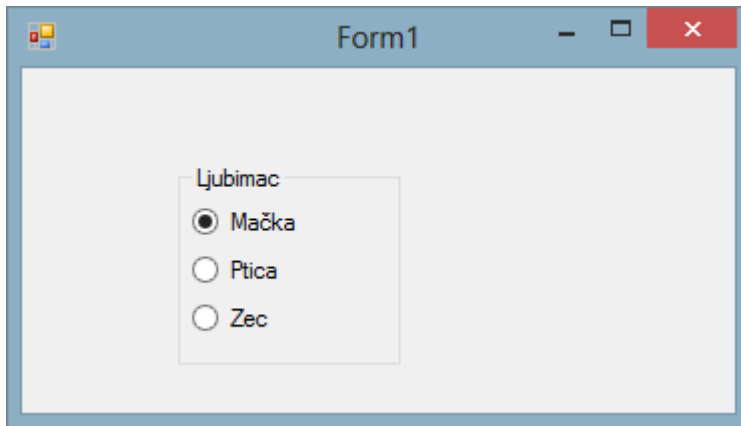
```
private void button1_Click(object sender, EventArgs e)
{
    if (radioButtonYes.Checked)
        MessageBox.Show("Izabrali ste Yes");
    else
        MessageBox.Show("Izabrali ste No");
}
```

Scenarij izvršavanja



Primjer 9

- Kreirati formu kao na slici. Pomoću radio buttona koji su smješteni u grupu bira se ljubimac. Kada se desi odabir ili promjena izbora korisnik se obavještava o selektiranom izboru.



- Kreirati formu i na formu postaviti kontrole:
 - group box – promijeniti tekst osobine na Ljubimac
 - u group box staviti 3 radio-buttona, promijeniti njihovu tekst osobinu u Macka, Ptica, Zec.

S obzirom da su radio buttoni cjelina u group boxu za sve radio buttone se veže ista metoda za upravljanjem događajem CheckedChanged.

Primjer 9

Properties

radioButton1 System.Windows.Forms.RadioButton

(DataBindings)

AppearanceChanged	
AutoSizeChanged	
BackColorChanged	
BackgroundImageChanged	
BackgroundImageLayoutChanged	
BindingContextChanged	
CausesValidationChanged	
ChangeUICues	
CheckedChanged	radioButton1_CheckedChanged
Click	
ClientSizeChanged	
ContextMenuStripChanged	
ControlAdded	
ControlRemoved	
CursorChanged	
DockChanged	
DragDrop	
DragEnter	
DragLeave	
DragOver	
EnabledChanged	
Enter	
FontChanged	
ForeColorChanged	

CheckedChanged

Occurs whenever the 'checked' property changes value.

Properties

radioButton2 System.Windows.Forms.RadioButton

(DataBindings)

AppearanceChanged	
AutoSizeChanged	
BackColorChanged	
BackgroundImageChanged	
BackgroundImageLayoutChanged	
BindingContextChanged	
CausesValidationChanged	
ChangeUICues	
CheckedChanged	radioButton1_CheckedChanged
Click	
ClientSizeChanged	
ContextMenuStripChanged	
ControlAdded	
ControlRemoved	
CursorChanged	
DockChanged	
DragDrop	
DragEnter	
DragLeave	
DragOver	
EnabledChanged	
Enter	
FontChanged	
ForeColorChanged	

CheckedChanged

Occurs whenever the 'checked' property changes value.

Properties

radioButton3 System.Windows.Forms.RadioButton

(DataBindings)

AppearanceChanged	
AutoSizeChanged	
BackColorChanged	
BackgroundImageChanged	
BackgroundImageLayoutChanged	
BindingContextChanged	
CausesValidationChanged	
ChangeUICues	
CheckedChanged	radioButton1_CheckedChanged
Click	
ClientSizeChanged	
ContextMenuStripChanged	
ControlAdded	
ControlRemoved	
CursorChanged	
DockChanged	
DragDrop	
DragEnter	
DragLeave	
DragOver	
EnabledChanged	
Enter	
FontChanged	
ForeColorChanged	

CheckedChanged

Occurs whenever the 'checked' property changes value.

Metoda za upravljanjem događajem Checked_Changed

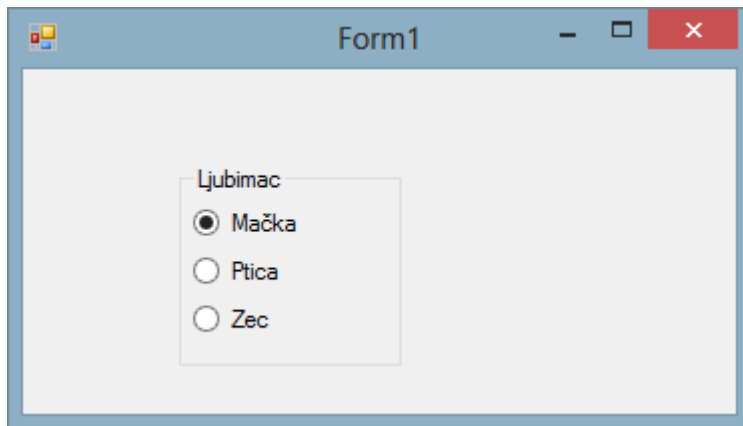
```
private void radioButton1_CheckedChanged(object sender, EventArgs e)
{

    string result1 = null;
    if (radioButton1.Checked)
    {
        result1 = radioButton1.Text;
    }
    else if (radioButton2.Checked)
    {
        result1 = radioButton2.Text;
    }
    else
        result1 = radioButton3.Text;

    MessageBox.Show(result1, "Izbor ljubimca");

}
```

Scenarij izvršavanja:



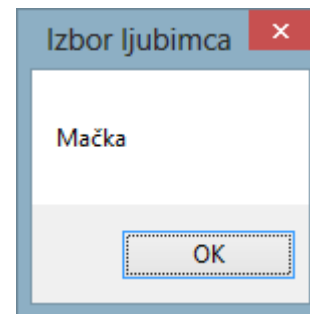
Form1

Ljubimac

☒ Mačka

☐ Ptica

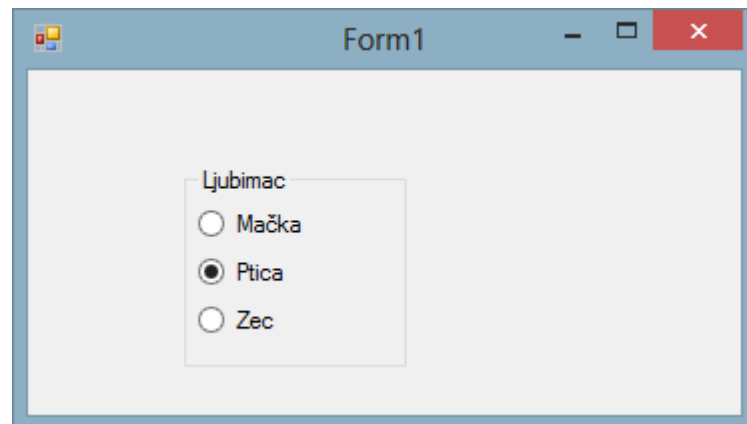
☐ Zec



Izbor ljubimca

Mačka

OK



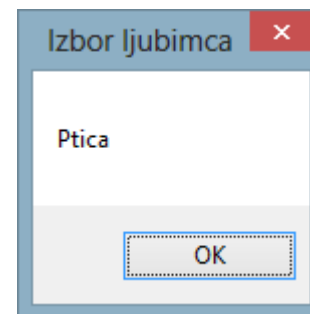
Form1

Ljubimac

☐ Mačka

☒ Ptica

☐ Zec



Izbor ljubimca

Ptica

OK

Detekcija promjene stanja radio buttona može se postići i sa Click događajem.

PropertiesradioButton1 System.Windows.Forms.RadioButton

ClickradioButton1_Click

ClickOccurs when the component is clicked.

PropertiesradioButton2 System.Windows.Forms.RadioButton

ClickradioButton1_Click

ClickOccurs when the component is clicked.

PropertiesradioButton3 System.Windows.Forms.RadioButton

ClickradioButton1_Click

ClickOccurs when the component is clicked.

Metoda za upravljanjem događajem Click

```
// Varijanta 1 koja prolazi kroz groupBox
private void radioButton1_Click(object sender, EventArgs e)
{
    string result1 = null;

    foreach (RadioButton rb in groupBox1.Controls)
    {
        if (rb.Checked)
        {
            result1 = rb.Text;
            MessageBox.Show(result1, "Izbor ljubimca");
        }
    }
}

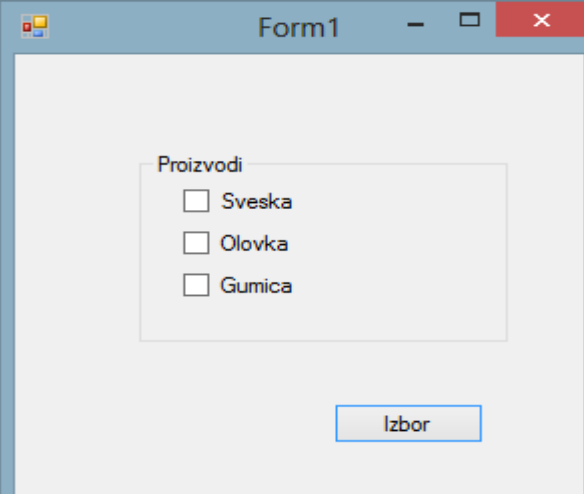
// varijanta 2 - direktno cast sendera u MessageBox kontroli
private void radioButton1_Click(object sender, EventArgs e)
{
    MessageBox.Show((sender as RadioButton).Text);

    return;
}

// varijanta 3
```

Primjer 10

- Kreirati formu koja će se koristiti za izbor/kupovinu proizvoda. Moguće je kupiti Svesku, Olovku, Gumicu. Korisnik bira koje će proizvode kupiti (može npr. Svesku i Gumicu, sva tri proizvoda,...). Nakon izbora na odvojenom prozoru se ispisuju odabrani proizvodi.



The screenshot shows a Windows application window titled "Form1". Inside the window, there is a group box labeled "Proizvodi". Within this group box, there are three unchecked checkboxes, each followed by a product name: "Sveska", "Olovka", and "Gumica". Below the group box, centered at the bottom of the form, is a button labeled "Izbor".

Kreirati formu i potrebne kontrole (button, 3 check boxa, group box).

Properties

Form1 System.Windows.Forms.Form

button1 System.Windows.Forms.Button

checkBox1 System.Windows.Forms.CheckBox

checkBox2 System.Windows.Forms.CheckBox

checkBox3 System.Windows.Forms.CheckBox

Form1 System.Windows.Forms.Form

groupBox1 System.Windows.Forms.GroupBox

KeyPreview	False
Language	(Default)
Localizable	False
Location	0, 0
Locked	False
MainMenuStrip	(none)
MaximizeBox	True
MaximumSize	0, 0
MinimizeBox	True
MinimumSize	0, 0
Opacity	100%
Padding	0, 0, 0, 0
RightToLeft	No
RightToLeftLayout	False
ShowIcon	True
ShowInTaskbar	True
Size	300, 300
SizeGripStyle	Auto
StartPosition	WindowsDefaultLocation
Tag	
Text	Form1

Text

The text associated with the control.

Properties

checkBox1 System.Windows.Forms.CheckBox

Dock	None
Enabled	True
FlatAppearance	
FlatStyle	Standard
Font	Microsoft Sans Serif, 8.25pt
ForeColor	ControlText
GenerateMember	True
Image	(none)
ImageAlign	MiddleCenter
ImageIndex	(none)
ImageKey	(none)
ImageList	(none)
Location	22, 20
Locked	False
Margin	3, 3, 3, 3
MaximumSize	0, 0
MinimumSize	0, 0
Modifiers	Private
Padding	0, 0, 0, 0
RightToLeft	No
Size	62, 17
TabIndex	0
TabStop	True
Tag	
Text	Sveska

Text

The text associated with the control.

Metoda za upravljanjem događajem Click

```
private void button1_Click(object sender, EventArgs e)
{
    string proizvod = String.Empty;

    if (checkBox1.Checked)
        proizvod += "\n Sveska";
    if (checkBox2.Checked)
        proizvod += "\n Olovka";
    if (checkBox3.Checked)
        proizvod += "\n Gumica";
    MessageBox.Show("Kupili ste: " + proizvod);
}
```

Scenarij izvršavanja

Form1

Proizvodi

☐ Sveska

☐ Olovka

☐ Gumica

Izbor

Form1

Proizvodi

☒ Sveska

☐ Olovka

☐ Gumica

Izbor

Kupili ste:
Sveska

OK

Form1

Proizvodi

☒ Sveska

☐ Olovka

☒ Gumica

Izbor

Kupili ste:
Sveska
Gumica

OK

Form1

Proizvodi

☒ Sveska

☒ Olovka

☒ Gumica

Izbor

Kupili ste:
Sveska
Olovka
Gumica

OK

Primjer 11

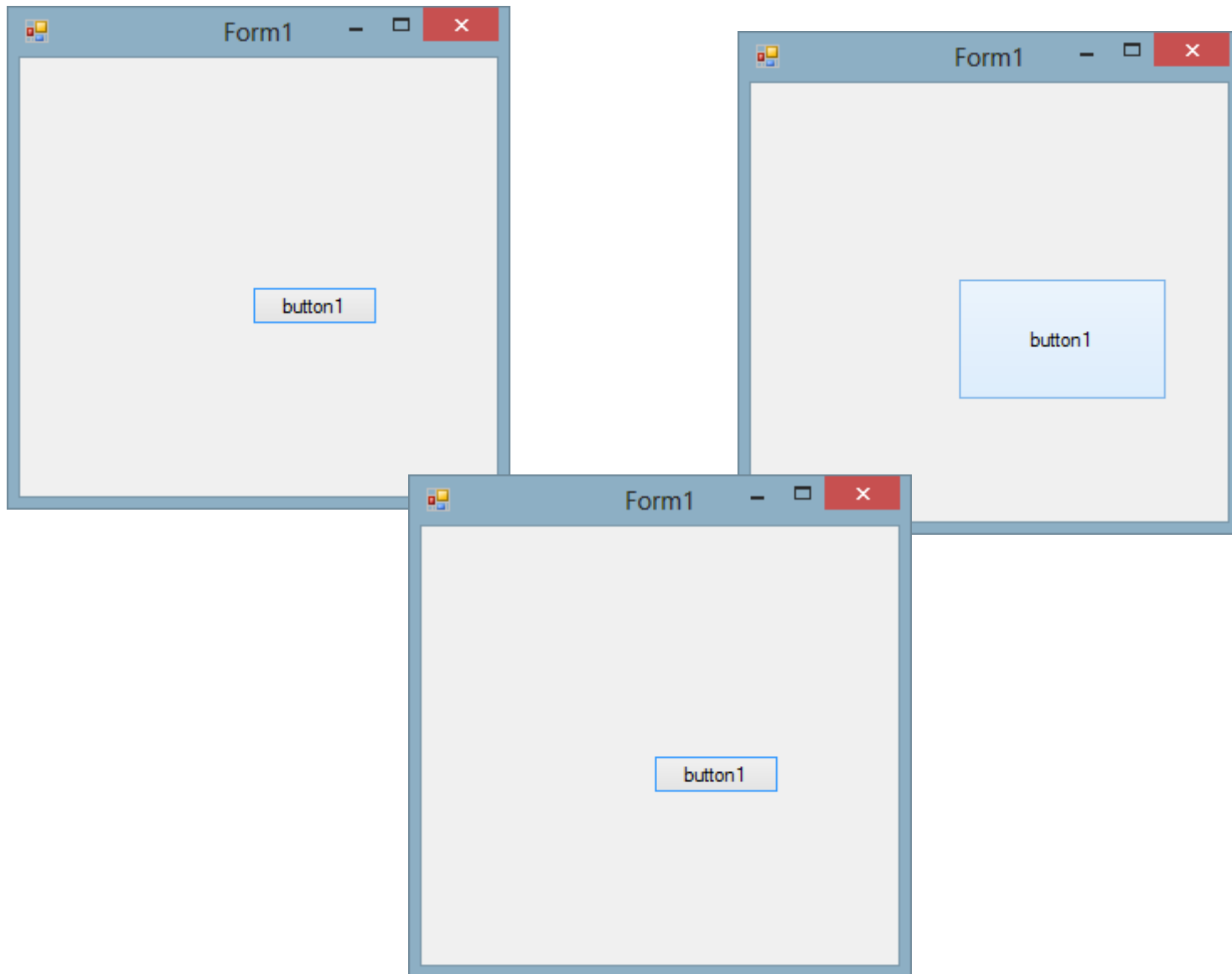
- Kreirati formu na kojoj se nalazi button. U slučaju kada miš 'uđe' na polje potrebno je da se button poveća. Kada napusti polje potrebno je da se vrate dimenzije buttona na prvobitne.

Potrební događaji

```
private void button1_MouseEnter(object sender, EventArgs e)
{
    button1.Height += 50;
    button1.Width += 50;
    button1.Top -= 20;
    button1.Left -= 15;
}
```

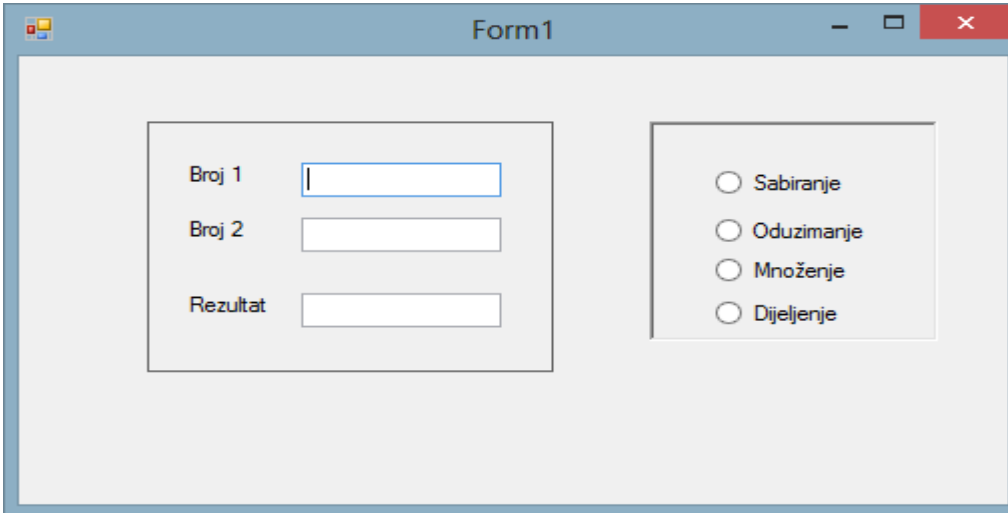
```
private void button1_MouseLeave(object sender, EventArgs e)
{
    button1.Height -= 50;
    button1.Width -= 50;
    button1.Top += 20;
    button1.Left += 15;
}
```


Scenarij izvršavanja



Primjer 12

- Kreirati formu kao na slici. Korisnik nakon unosa brojeva bira operaciju koju će primijeniti. Rezultat se prikazuje u polje označeno labelom Rezultat.



The image shows a screenshot of a Windows application window titled "Form1". The window contains a simple calculator interface. On the left side, there are three labels: "Broj 1", "Broj 2", and "Rezultat", each followed by a text input field. The "Broj 1" field contains the digit "1". On the right side, there are four radio buttons, each with a label: "Sabiranje" (Addition), "Oduzimanje" (Subtraction), "Množenje" (Multiplication), and "Dijeljenje" (Division). The "Sabiranje" radio button is selected.

Kreirati potrebne kontrole:

Properties

oduzimanjeRadioButton System.Windows.Forms.RadioButton

broj1TextBox System.Windows.Forms.TextBox

broj2TextBox System.Windows.Forms.TextBox

dijeljenjeradioButton System.Windows.Forms.RadioButton

Form1 System.Windows.Forms.Form

label1 System.Windows.Forms.Label

label2 System.Windows.Forms.Label

label3 System.Windows.Forms.Label

mnozenjeRadioButton System.Windows.Forms.RadioButton

oduzimanjeRadioButton System.Windows.Forms.RadioButton

panel1 System.Windows.Forms.Panel

panel2 System.Windows.Forms.Panel

rezultatTextBox System.Windows.Forms.TextBox

sabiranjeRadioButton System.Windows.Forms.RadioButton

ClientSizeChanged	
ContextMenuStripChanged	
ControlAdded	
ControlRemoved	
CursorChanged	
DockChanged	
DragDrop	
DragEnter	
DragLeave	
DragOver	
EnabledChanged	
Enter	
FontChanged	
ForeColorChanged	

Paint

Occurs when a control needs repainting.

Properties

panel1 System.Windows.Forms.Panel

Accessibility

AccessibleDescription	
AccessibleName	
AccessibleRole	Default

Appearance

BackColor	<input type="checkbox"/> Control
BackgroundImage	<input type="checkbox"/> (none)
BackgroundImageLayout	Tile
BorderStyle	FixedSingle
Cursor	Default

Font

Font	Microsoft Sans Serif, 8.25pt
ForeColor	<input type="checkbox"/> ControlText
RightToLeft	No
UseWaitCursor	False

Behavior

AllowDrop	False
ContextMenuStrip	(none)
Enabled	True
ImeMode	NoControl
TabIndex	6
TabStop	False
Visible	True

Data

(ApplicationSettings)	
(DataBindings)	

BorderStyle

Indicates whether the panel should have a border.

Properties

sabiranjeRadioButton System.Windows.Forms.RadioButton

2

(DataBindings)

AppearanceChanged	
AutoSizeChanged	
BackColorChanged	
BackgroundImageChanged	
BackgroundImageLayoutChanged	
BindingContextChanged	
CausesValidationChanged	
ChangeUICues	
CheckedChanged	sabiranjeRadioButton_Checked
Click	
ClientSizeChanged	
ContextMenuStripChanged	
ControlAdded	
ControlRemoved	
CursorChanged	
DockChanged	
DragDrop	
DragEnter	
DragLeave	
DragOver	
EnabledChanged	
Enter	
FontChanged	
ForeColorChanged	

CheckedChanged

Occurs whenever the 'checked' property changes value.

Properties

oduzimanjeRadioButton System.Windows.Forms.RadioButton

2

(DataBindings)

AppearanceChanged	
AutoSizeChanged	
BackColorChanged	
BackgroundImageChanged	
BackgroundImageLayoutChanged	
BindingContextChanged	
CausesValidationChanged	
ChangeUICues	
CheckedChanged	oduzimanjeRadioButton_Checked
Click	
ClientSizeChanged	
ContextMenuStripChanged	
ControlAdded	
ControlRemoved	
CursorChanged	
DockChanged	
DragDrop	
DragEnter	
DragLeave	
DragOver	
EnabledChanged	
Enter	
FontChanged	
ForeColorChanged	

Paint

Occurs when a control needs repainting.

```
private void sabiranjeRadioButton_CheckedChanged(object sender, EventArgs e)
{
    double broj1, broj2 ;

    broj1 = Convert.ToDouble(broj1TextBox.Text);
    broj2 = Convert.ToDouble(broj2TextBox.Text);

    rezultatTextBox.Text = (broj1+broj2).ToString();
}
```

```
private void oduzimanjeRadioButton_CheckedChanged(object sender,
EventArgs e)
{
    double broj1, broj2;

    broj1 = Convert.ToDouble(broj1TextBox.Text);
    broj2 = Convert.ToDouble(broj2TextBox.Text);

    rezultatTextBox.Text = (broj1 - broj2).ToString();
}
```

!za množenje i dijeljenje anlogno se programiraju događaji

Scenarij izvršavanja

Form1

Broj 1

Broj 2

Rezultat

☐ Sabiranje
☐ Oduzimanje
☐ Množenje
☐ Dijeljenje

Form1

Broj 1

Broj 2

Rezultat

☐ Sabiranje
☐ Oduzimanje
☐ Množenje
☐ Dijeljenje

Form1

Broj 1

Broj 2

Rezultat

☒ Sabiranje
☐ Oduzimanje
☐ Množenje
☐ Dijeljenje

Form1

Broj 1

Broj 2

Rezultat

☐ Sabiranje
☒ Oduzimanje
☐ Množenje
☐ Dijeljenje

- Na predavanjima će se kroz okruženje raditi navedeni primjeri.
- Studentima se preporučuje da sami kroz okruženje urade primjere i da i programiraju metode za upravljanje događajima i za događaje koji nisu obrađeni u prezentaciji.