

Editor Form



/*

Professional Windows GUI Programming Using C#
by Jay Glynn, Csaba Torok, Richard Conway, Wahid Choudhury,
Zach Greenvoss, Shripad Kulkarni, Neil Whitlow

Publisher: Peer Information

ISBN: 1861007663

*/

```
using System.Windows.Forms;
using System;
using System.Drawing;
using System.IO;
```

```
namespace Chapter2App
```

```
{
```

```
public class EditorForm : System.Windows.Forms.Form
```

```
{
```

```
// The RichTextBox control
```

```
private RichTextBox richTxtBox;
```

```
// constructor
```

```
public EditorForm()
```

```
{
```

```
// Instantiate the richTextBox member
```

```
this.richTxtBox = new RichTextBox();
```

```
// Set the Dock style so that the control fills the Form
```

```
this.richTxtBox.Dock = DockStyle.Fill;
```

```
// Add the RichTextBox to the Form
```

```
this.Controls.Add(this.richTxtBox);
```

```
}
```

```
public string EditText
```

```
{
```

```
get
{
return this.richTextBox.Text;
}
set
{
richTextBox.Text = value;
}
}
```

```
public class MyForm : System.Windows.Forms.Form
{
private System.Windows.Forms.MainMenu mainMenu;
private ToolBar toolBar;
private StatusBar statusBar;
```

```
// constructor
```

```
public MyForm()
```

```
{
```

```
// set the title
```

```
this.Text = "Hello world";
```

```
// set the default size
```

```
this.Size = new System.Drawing.Size(500,500);
```

```
// set make the form non resizable with sunken edge
```

```
//this.FormBorderStyle = FormBorderStyle.Fixed3D;
```

```
// Create the menu items
```

```
MenuItem miNew = new MenuItem("&New",new
EventHandler(OnMenuNew));
```

```
// adding a "-" titled menu item adds a divider on the menu
```

```
MenuItem miDash = new MenuItem("-");
```

```
MenuItem miOpen = new MenuItem("&Open",new
EventHandler(OnMenuOpen));
```

```
MenuItem miSave = new MenuItem("&Save",new
EventHandler(OnMenuSave));
```

```

// Create the array of menu items which will form the submenu
of File
MenuItem[] fileMiArray = new MenuItem[]
{miNew,miDash,miOpen,miSave};
// create the File menu Item
MenuItem miFile = new MenuItem("&File",fileMiArray );
// Create the array of menu item for the main menu
MenuItem[] mainMiArray = new MenuItem[] {miFile};
// Create the main menu
this.mainMenu = new MainMenu(mainMiArray);

// Another way of creating MainMenu object and attaching a
MenuItem
//this.mainMenu = new MainMenu();
//this.mainMenu.MenuItems.Add(miFile );

// Add the Help menu using a different route
MenuItem aboutMenuItem = new MenuItem();
aboutMenuItem.Text = "&About";
aboutMenuItem.Click += new EventHandler(OnMenuAbout);

MenuItem helpMenuItem = new MenuItem();
helpMenuItem.Text = "&Help";
helpMenuItem.MenuItems.Add(aboutMenuItem);

mainMenu.MenuItems.Add(helpMenuItem);

// Attach the main menu object to the form
this.Menu = this.mainMenu;

// Context Menu
//MenuItem redContext = new MenuItem("Make Form Red",new
EventHandler(OnContextRed));
//MenuItem greyContext = new MenuItem("Make Form Grey",new
EventHandler(OnContextGrey));

//ContextMenu colorContextMenu = new ContextMenu(new
MenuItem[] {redContext, greyContext});
MenuItem colorContext = new MenuItem("Change the color of the

```

```

Form",new EventHandler(OnContextColor));
ContextMenu colorContextMenu = new ContextMenu(new MenuItem[]
{colorContext});

this.ContextMenu = colorContextMenu;

// Make this Form a MDI container
this.IsMdiContainer = true;

// Toolbar

// The ImageList of the toolbar
ImageList imageLst = new ImageList();
// Create Bitmap objects to add to the ImageList
//Bitmap bmpStrip = new Bitmap("ToolBarStrip.bmp");
Bitmap bmpStrip = new Bitmap(GetType(),"ToolBarStrip.bmp");
imageLst.Images.AddStrip(bmpStrip);
imageLst.TransparentColor = Color.Red;

// Need the actual bmp files on the directory of the app!
//Bitmap bmpNew = new Bitmap("NEW.bmp");
//Bitmap bmpOpen = new Bitmap("OPEN.bmp");
//Bitmap bmpSave = new Bitmap("SAVE.bmp");
// Add the images created to the ImageList
//imageLst.Images.Add(bmpNew);
//imageLst.Images.Add(bmpOpen);
//imageLst.Images.Add(bmpSave);
// Set transparent color so that background dont show

// Create the ToolBar object
toolBar = new ToolBar();
// Toolbar belongs to this Form
toolBar.Parent = this;
// ImageList is the one we just created
toolBar.ImageList = imageLst;

/*
// Add 3 buttons
for(int i=0; i< 3;i++) { // Create the buttons ToolBarButton

```

```

toolBtn = new ToolBarButton(); // Show the image i from the
ImageList of the toolbar toolBtn.ImageIndex = i; // Add the
button to the Toolbar toolBar.Buttons.Add(toolBtn); } */ //
Create the buttons ToolBarButton toolBtnNew = new
ToolBarButton(); ToolBarButton toolBtnOpen = new
ToolBarButton(); ToolBarButton toolBtnSave = new
ToolBarButton(); // Show the image i from the ImageList of the
toolbar toolBtnNew.ImageIndex = 0; toolBtnOpen.ImageIndex = 1;
toolBtnSave.ImageIndex = 2; // Add the appropriate menu items
toolBtnNew.Tag = miNew; toolBtnOpen.Tag = miOpen;
toolBtnSave.Tag = miSave; // Add the button to the Toolbar
toolBar.Buttons.Add(toolBtnNew);
toolBar.Buttons.Add(toolBtnOpen);
toolBar.Buttons.Add(toolBtnSave); // Wire the button click
handler for the toolbar toolBar.ButtonClick += new
ToolBarButtonClickEventHandler(ToolBarClick); statusBar = new
StatusBar(); //statusBar.Text = "I am a status bar";
statusBar.ShowPanels = true; statusBar.Parent = this; //
Create and the Help panel StatusBarPanel statusPanelHelp = new
StatusBarPanel(); statusPanelHelp.AutoSize =
StatusBarPanelAutoSize.Spring; statusPanelHelp.Text = "This is
the place for help!"; statusBar.Panels.Add(statusPanelHelp);
// Create and add the Date panel StatusBarPanel
statusPanelDate = new StatusBarPanel();
statusPanelDate.AutoSize = StatusBarPanelAutoSize.Contents; //
Get today's date DateTime dt= DateTime.Now;
statusPanelDate.Text = dt.ToShortDateString();
statusBar.Panels.Add(statusPanelDate); // Wire the Closing
event to the HandleClosing method // this.Closing += new
System.ComponentModel.CancelEventHandler(HandleClosing); }
void ToolBarClick(object sender,ToolBarButtonClickEventArgs e)
{ MenuItem menuItemForButton = (MenuItem) e.Button.Tag;
menuItemForButton.PerformClick(); /* // Find out which button
is clicked by their position
switch(toolBar.Buttons.IndexOf(e.Button)) { case 0: // First
button is the New button // Call the menu handler but passing
null on the 2nd param this.OnMenuNew(sender,null); break; case

```

```

1: // Second button is the Open button this.OpenDocument();
break; case 2: // Third button is the Save button
this.SaveActiveDocument(); break; } */ } void
OnContextColor(object obj, EventArgs e) { ColorDialog colorDlg
= new ColorDialog(); if(colorDlg.ShowDialog() ==
DialogResult.OK) { // Grab the third child f this Form and set
its color this.Controls[2].BackColor = colorDlg.Color; //
Does't work after adding the status bar since the status bar
becomes the second child // Grab the second child of this Form
and set its color //this.Controls[1].BackColor =
colorDlg.Color; // Doesn't work with toolbar, because toolbar
becomes the first child: // Grab the first child control of
this Form and set its color //this.Controls[0].BackColor =
colorDlg.Color; } // Doesn't work for MDI container since this
Form is hidden // by a new MDI child Form managing Form
//this.BackColor = Color.Red; } void OnContextRed(object obj,
EventArgs e) { // Grab the first child control of this Form
and set its color this.Controls[1].BackColor = Color.Red; //
Doesn't work for MDI container since this Form is hidden // by
a new MDI child Form managing Form //this.BackColor =
Color.Red; } void OnContextGrey(object obj, EventArgs e) { //
Grab the first child control of this Form and set its color
this.Controls[0].BackColor = Color.Gray; // Doesn't work for
MDI ... //this.BackColor = Color.Gray; } void
OnMenuAbout(object obj, EventArgs e) { // Forces the context
menu for the main Form to pop up at // the given position.
this.ContextMenu.Show(this, new Point(20,100)); } void
OnMenuNew(object obj, EventArgs e) { // Instantiate our custom
form and show it EditorForm editForm = new EditorForm();
editForm.MdiParent = this; editForm.Show(); // Count the
number of MDI child Forms and set the title of the // main
form and the newly created Form editForm.Text = "Document " +
this.MdiChildren.Length.ToString(); } void OnMenuOpen(object
obj, EventArgs e) { OpenDocument(); } void OpenDocument() {
OpenFileDialog openDlg = new OpenFileDialog(); openDlg.Filter
= "Text Files|*.txt;*.text;*.doc|All Files|*.*";
openDlg.InitialDirectory="C: "; DialogResult dr =

```

```

openDlg.ShowDialog(); if(dr == DialogResult.OK) { // User
click on Open // Open the file and get its content string
txtFromFile = OpenFileAndReturnText(openDlg.FileName); //
Instantiate our custom form and show it EditorForm editForm =
new EditorForm(); editForm.MdiParent = this; // Set the title
of the Form editForm.Text = openDlg.FileName; // Set the
contents of the Editor Form editForm.EditText = txtFromFile;
editForm.Show(); } } string OpenFileAndReturnText(string
filename) { // Open the file given by param filename, read it
// and return content System.IO.StreamReader reader; try {
reader = new System.IO.StreamReader(filename); return
reader.ReadToEnd(); } catch { MessageBox.Show("File could not
be accessed"); return ""; } } void OnMenuSave(object obj,
EventArgs e) { SaveActiveDocument(); } protected void
SaveActiveDocument() { // Get the active MDI child Form and
cast it to the custom Form EditorForm activeForm =
(EditorForm) this.ActiveMdiChild; if(activeForm != null) { //
Instantiate the object SaveFileDialog savedlg = new
SaveFileDialog(); // Set the suggested name savedlg.FileName =
activeForm.Text; savedlg.InitialDirectory="C:"; // Set filter,
this also sets extension savedlg.Filter = "Text Files|*.txt;
*.text; *.doc|All Files|*.*"; // Let the dialog set extension
savedlg.AddExtension = true; if(savedlg.ShowDialog() ==
DialogResult.OK) { FileInfo fi = new
FileInfo(savedlg.FileName); StreamWriter sw = fi.CreateText();
sw.Write(((EditorForm)this.ActiveMdiChild).EditText);
sw.Close(); } } } protected override void
OnClosing(System.ComponentModel.CancelEventArgs e) { // Create
an instance of the form that is to shown modally. Form
modalForm = new Form(); // Create two buttons to use as the
Yes and No buttons. Button yesButton = new Button (); Button
noButton = new Button (); // Set the text of yes button.
yesButton.Text = "Yes"; // Set the position of the button on
the form. yesButton.Location = new System.Drawing.Point (10,
10); // Set the text of no button. noButton.Text = "No"; //
Set the position of the button based on the location of the
yes button. noButton.Location = new System.Drawing.Point

```

```
(yesButton.Right + 10, yesButton.Top); // Set the caption bar
text of the modal form. modalForm.Text = "Are you sure you
want to close?"; // set the size modalForm.Size = new
System.Drawing.Size(300,100); // Add DialogResult values of
the button yesButton.DialogResult = DialogResult.Yes;
noButton.DialogResult = DialogResult.No; // Add the buttons to
the form. modalForm.Controls.Add(yesButton);
modalForm.Controls.Add(noButton); // Display the form as a
modal dialog box. if(modalForm.ShowDialog()== DialogResult.No)
{ // setting the Cancel property of the CancelEventArgs
cancels // the event and keeps the Form open e.Cancel = true;
} else { // the Yes button was clicked so we need to do
nothing } // Call the base method so that the event do get
raised base.OnClosing(e); } static void HandleClosing(object
sender, System.ComponentModel.CancelEventArgs e) { // Create
an instance of the form that is to shown modally. Form
modalForm = new Form(); // Create two buttons to use as the
Yes and No buttons. Button yesButton = new Button (); Button
noButton = new Button (); // Set the text of yes button.
yesButton.Text = "Yes"; // Set the position of the button on
the form. yesButton.Location = new System.Drawing.Point (10,
10); // Set the text of no button. noButton.Text = "No"; //
Set the position of the button based on the location of the
yes button. noButton.Location = new System.Drawing.Point
(yesButton.Right + 10, yesButton.Top); // Set the caption bar
text of the modal form. modalForm.Text = "Are you sure you
want to close?"; // set the size modalForm.Size = new
System.Drawing.Size(300,100); // Add DialogResult values of
the button yesButton.DialogResult = DialogResult.Yes;
noButton.DialogResult = DialogResult.No; // Add the buttons to
the form. modalForm.Controls.Add(yesButton);
modalForm.Controls.Add(noButton); // Display the form as a
modal dialog box. if(modalForm.ShowDialog()== DialogResult.No)
{ // setting the Cancel property of the CancelEventArgs
cancels // the event and keeps the Form open e.Cancel = true;
} else { // the Yes button was clicked so we need to do
nothing // the Form will close itself. } } static void Main()
```

```
{ //Instantiate the derived Form MyForm myForm = new MyForm();  
// Start the app Application.Run(myForm); } } }  
Chapter2App.zip( 38 k)[/csharp]
```