Windows Forms kullanarak Graphical User Interface-2

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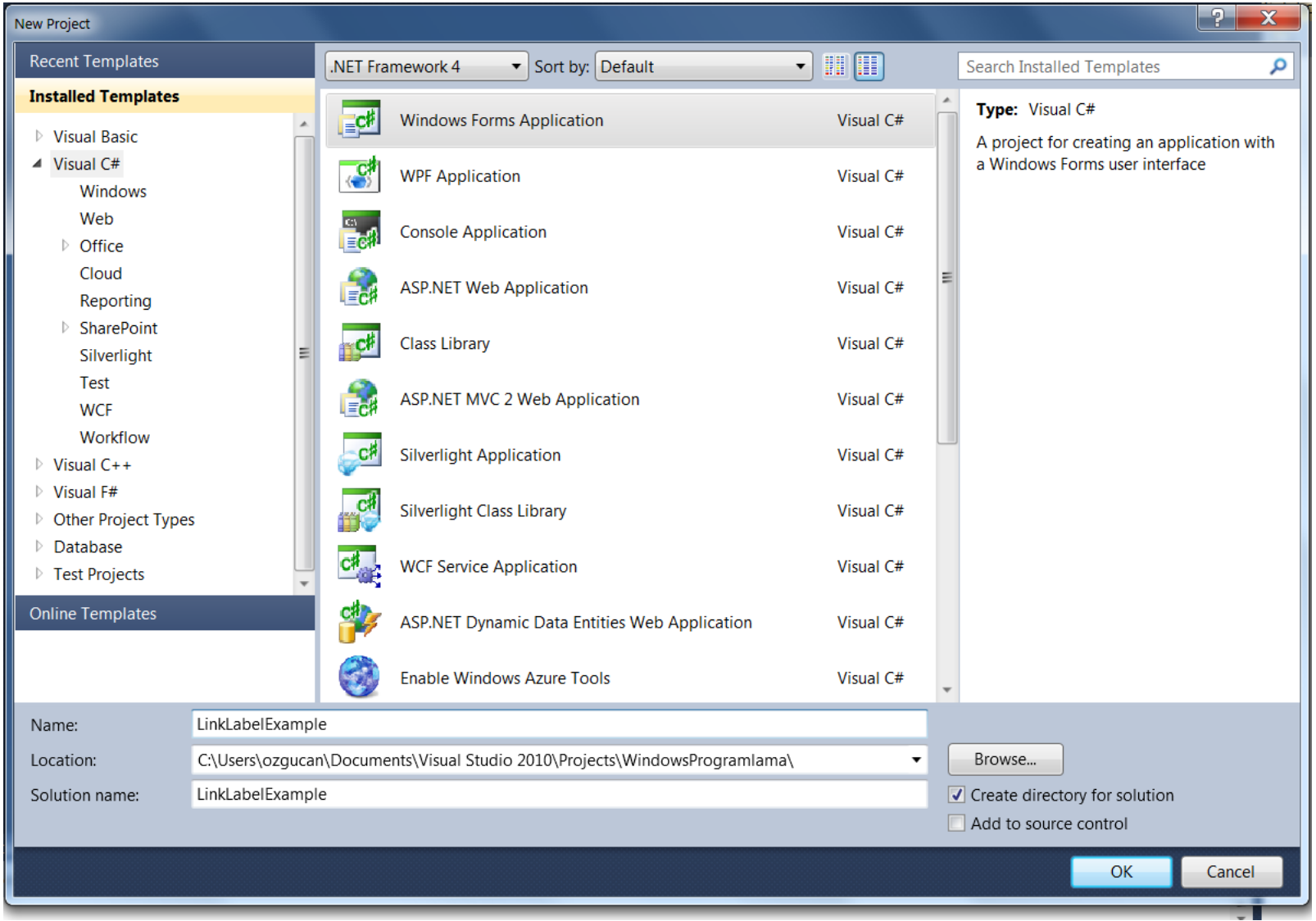
LinkLabel

- Diğer kaynaklara olan bağlantıları gösterir.
  - Dosya
  - Web Sayfası
- **`Label`** sınıfından olduğundan, **`Label`** sınıfının tüm fonksiyonelliğini kalıtım yolu ile alır.

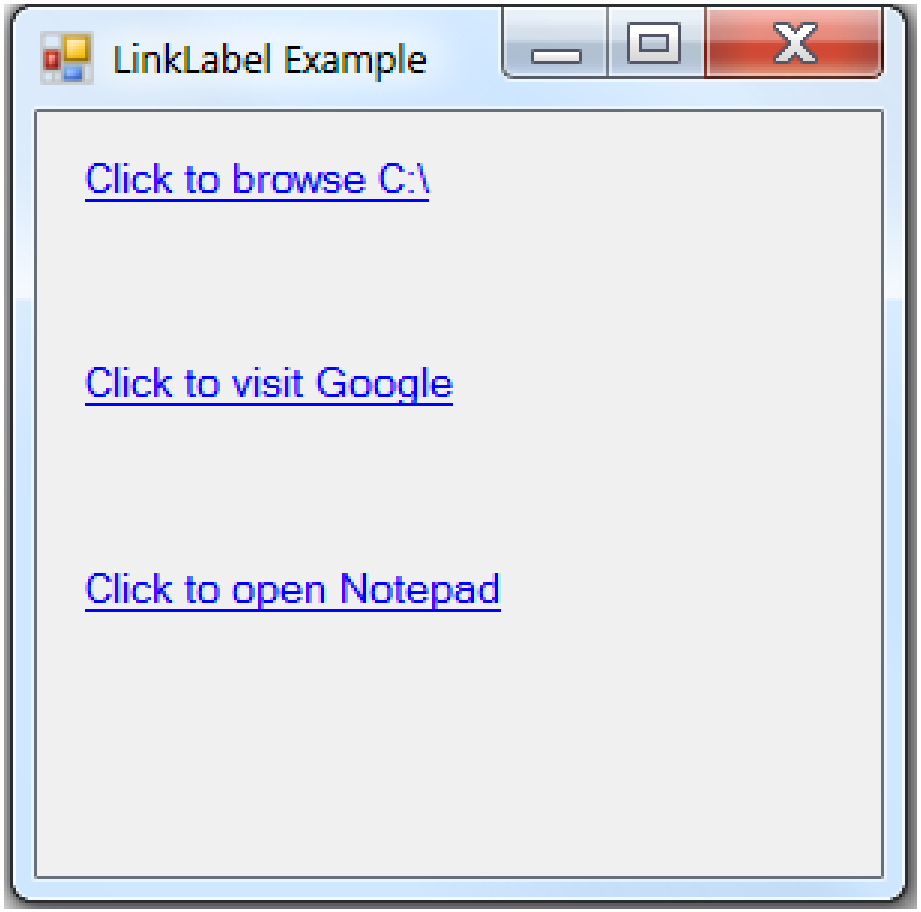
Örnek Uygulama - LinkLabel



Örnek Uygulama - LinkLabel

- 3 **LinkLabel**
  - **LinkLabel 1**
    - **Text** = **Click to browse C:**
    - **Name** = **cDriveLinkLabel**
  - **LinkLabel 2**
    - **Text** = **Click to visit Google**
    - **Name** = **googleLinkLabel**
  - **LinkLabel 3**
    - **Text** = **Click to open Notepad**
    - **Name** = **notepadLinkLabel**

Örnek Uygulama - LinkLabel

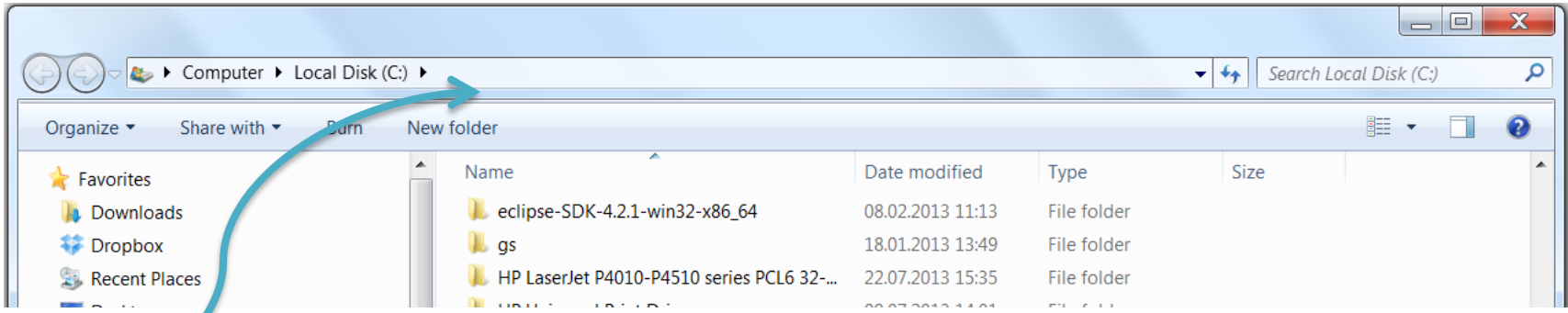


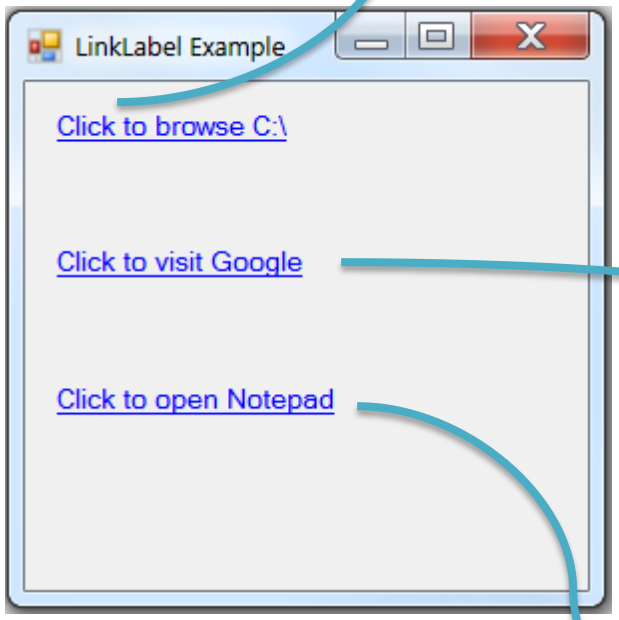
Örnek Uygulama - LinkLabel

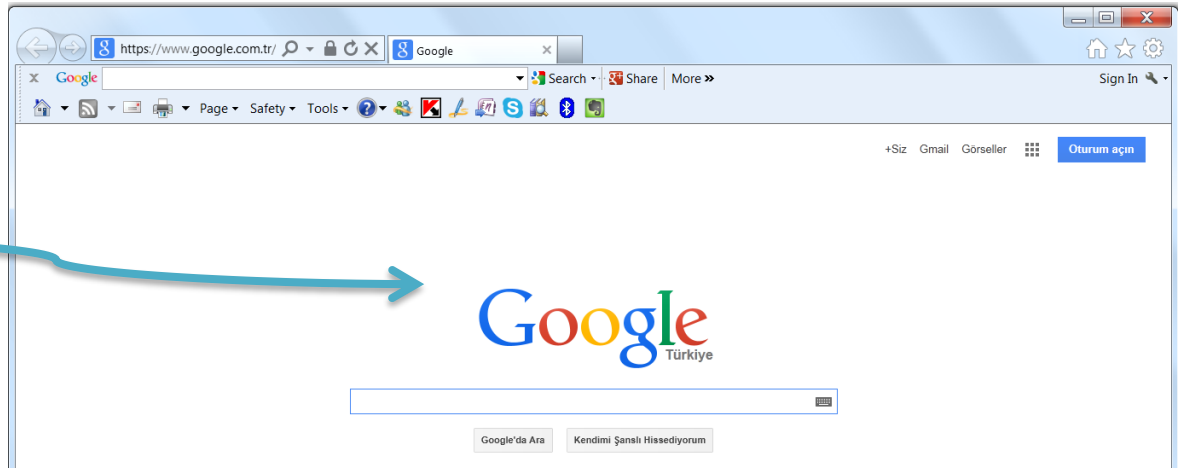
```
private void cDriveLinkLabel_LinkClicked(object sender, LinkLabelLinkClickedEventArgs e)
{
    // change LinkColor after it has been clicked
    cDriveLinkLabel.LinkVisited = true;

    System.Diagnostics.Process.Start(@"C:\");
}

private void googleLinkLabel_LinkClicked(object sender, LinkLabelLinkClickedEventArgs e)
{
    // change LinkColor after it has been clicked
    googleLinkLabel.LinkVisited = true;

    System.Diagnostics.Process.Start("http://www.google.com");
}

private void notepadLinkLabel_LinkClicked(object sender, LinkLabelLinkClickedEventArgs e)
{
    // change LinkColor after it has been clicked
    notepadLinkLabel.LinkVisited = true;

    System.Diagnostics.Process.Start("Notepad");
}
```

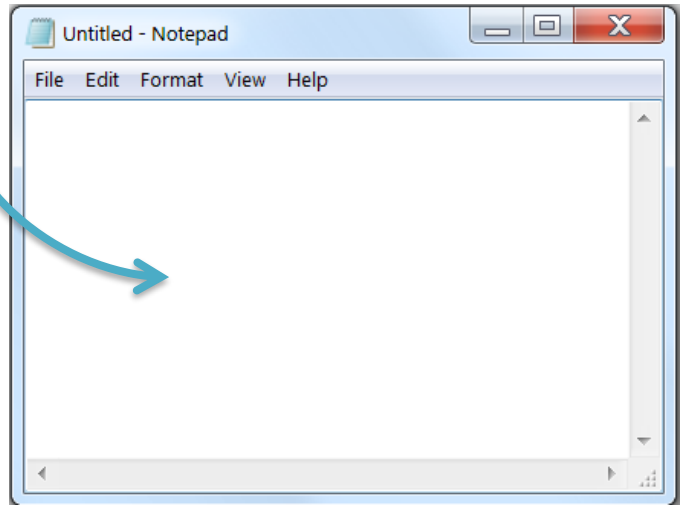
Verbatim String

- Önüne eklendiği string'in literal olarak okunmasını sağlar.
- İlk ve son çift tırnak işaretleri arasındaki string'i olduğu gibi okur.
- Özel karakter ve dosya yolu belirtilirken kullanılır.


Computer ▸ Local Disk (C:) ▸
Search Local Disk (C:)
Organize
Share with
Burn
New folder
Favorites
Downloads
Dropbox
Recent Places
Name
Date modified
Type
Size
eclipse-SDK-4.2.1-win32-x86_64
08.02.2013 11:13
File folder
gs
18.01.2013 13:49
File folder
HP LaserJet P4010-P4510 series PCL6 32-...
22.07.2013 15:35
File folder


LinkLabel Example
Click to browse C:\
Click to visit Google
Click to open Notepad


https://www.google.com.tr/
Google
Search
Share
More
Sign In
Page
Safety
Tools
+Siz
Gmail
Görseller
Oturum açın
Google
Türkiye
Google'da Ara
Kendimi Şanslı Hissediyorum


Untitled - Notepad
File
Edit
Format
View
Help

ListBox

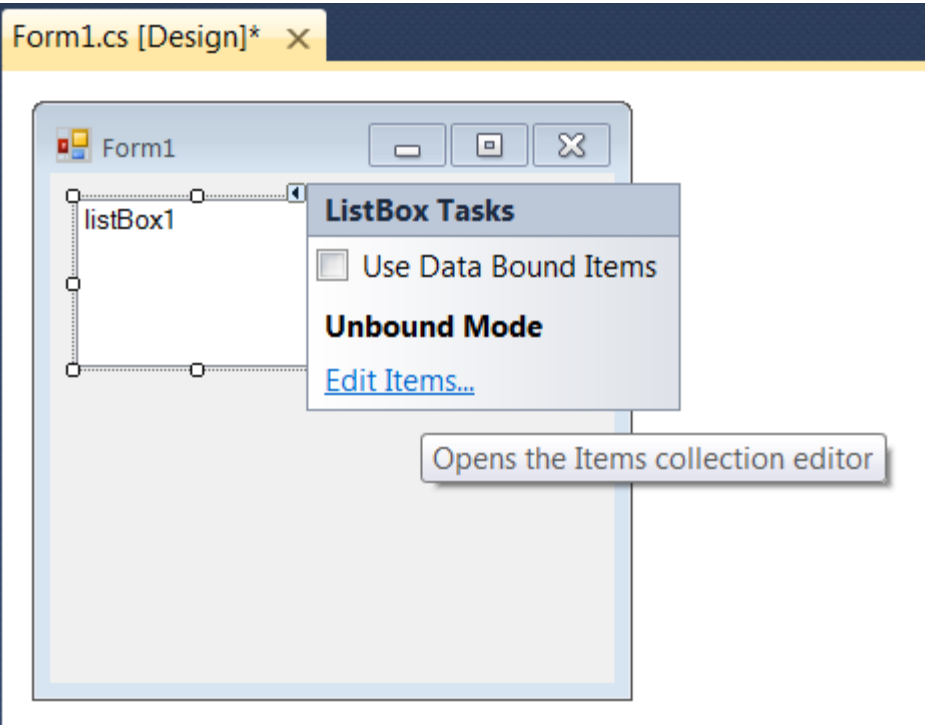
- Kullanıcının liste öğelerini **görmesini** ve **seçim yapmasını** sağlar.

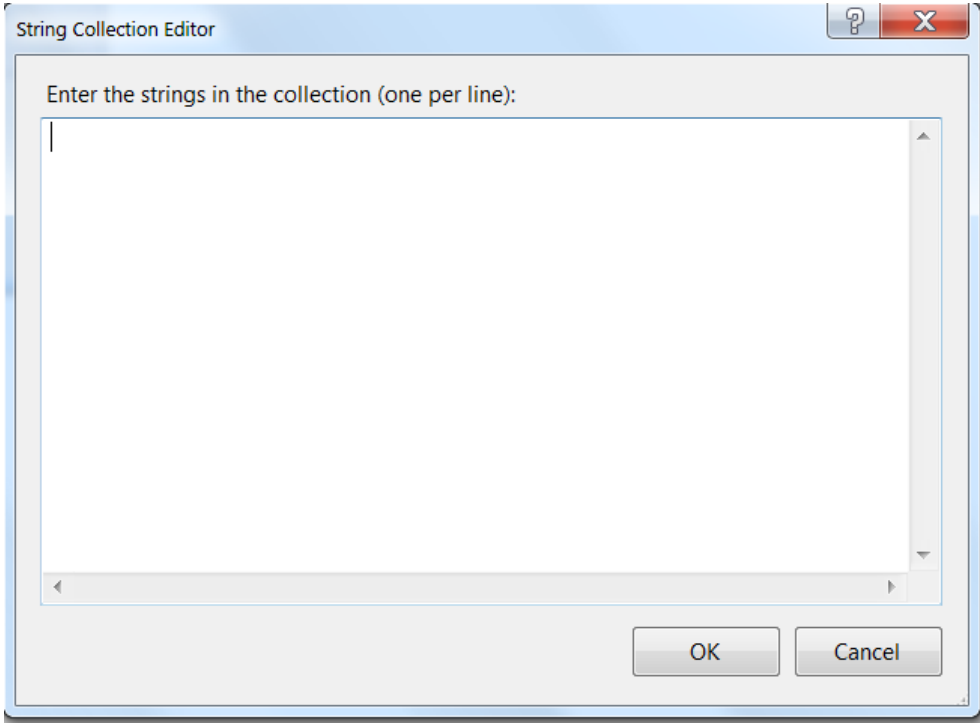
- Statiktir.
  - Kullanıcı liste öğelerini değiştiremez.

`ListBox` properties, methods and an event	Description
Common Properties	
`Items`	The collection of items in the `ListBox`.
`MultiColumn`	Indicates whether the `ListBox` can display multiple columns. Multiple columns eliminate vertical scrollbars from the display.
`SelectedIndex`	Returns the index of the selected item. If no items have been selected, the property returns `-1`. If the user selects multiple items, this property returns only one of the selected indices. If multiple items are selected, use property `SelectedIndices`.
`SelectedIndices`	Returns a collection containing the indices for all selected items.
`SelectedItem`	Returns a reference to the selected item. If multiple items are selected, it returns the item with the lowest index number.
`SelectedItems`	Returns a collection of the selected item(s).
`SelectionMode`	Determines the number of items that can be selected and the means through which multiple items can be selected. Values `None`, `One` (the default), `MultiSimple` (multiple selection allowed) or `MultiExtended` (multiple selection allowed using a combination of arrow keys or mouse clicks and *Shift* and *Ctrl* keys).
`Sorted`	Indicates whether items are sorted alphabetically. Setting this property's value to `true` sorts the items. The default value is `false`.
Common Methods	
`ClearSelected`	Deselects every item.
`GetSelected`	Returns `true` if the item at the specified index is selected.
Common Event	
`SelectedIndexChanged`	Generated when the selected index changes. This is the default event when the control is double clicked in the designer.

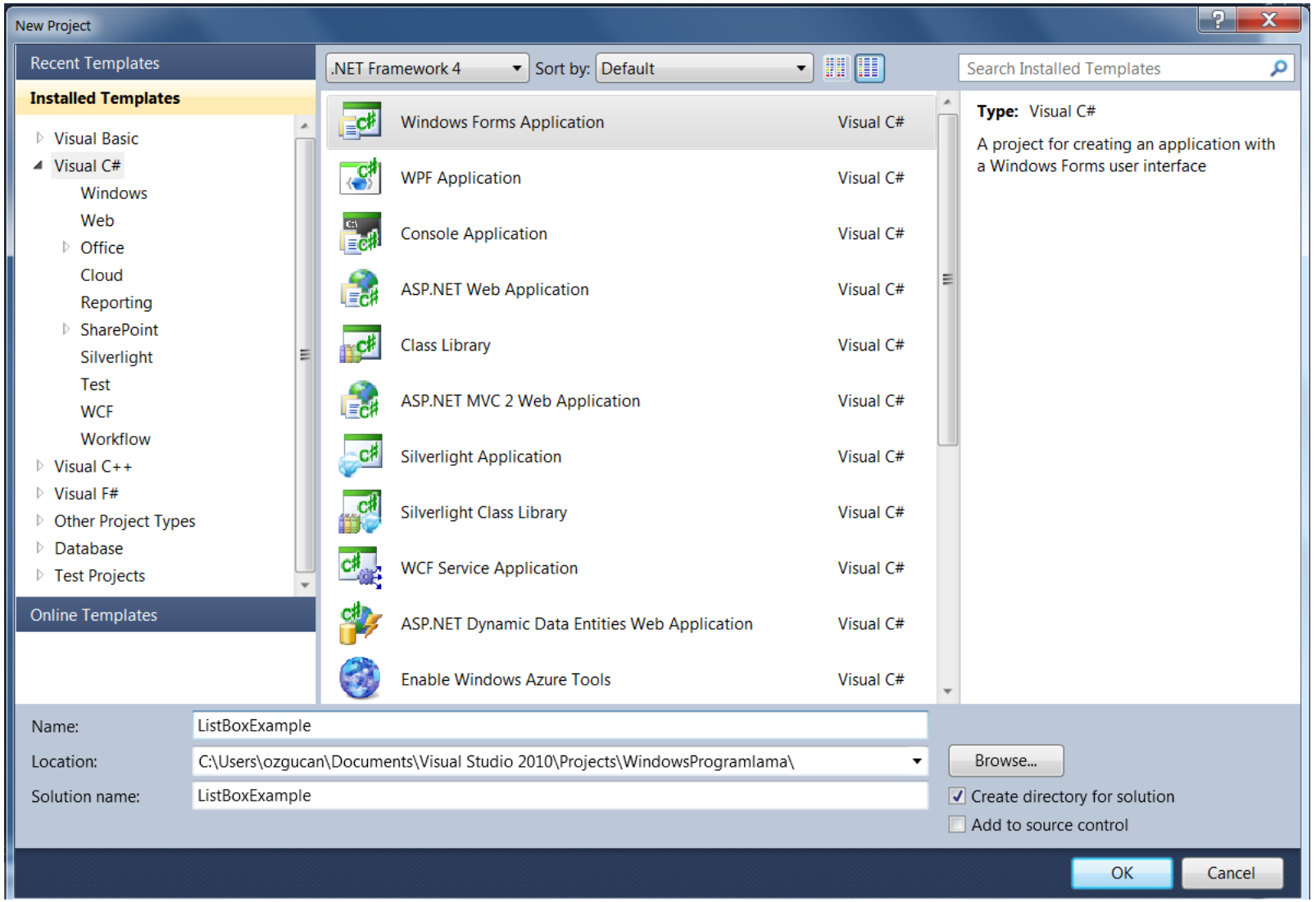
ListBox

- ListBox'a öğe ekleme:
  - **Add** metodu
  - **String Collection Editor**





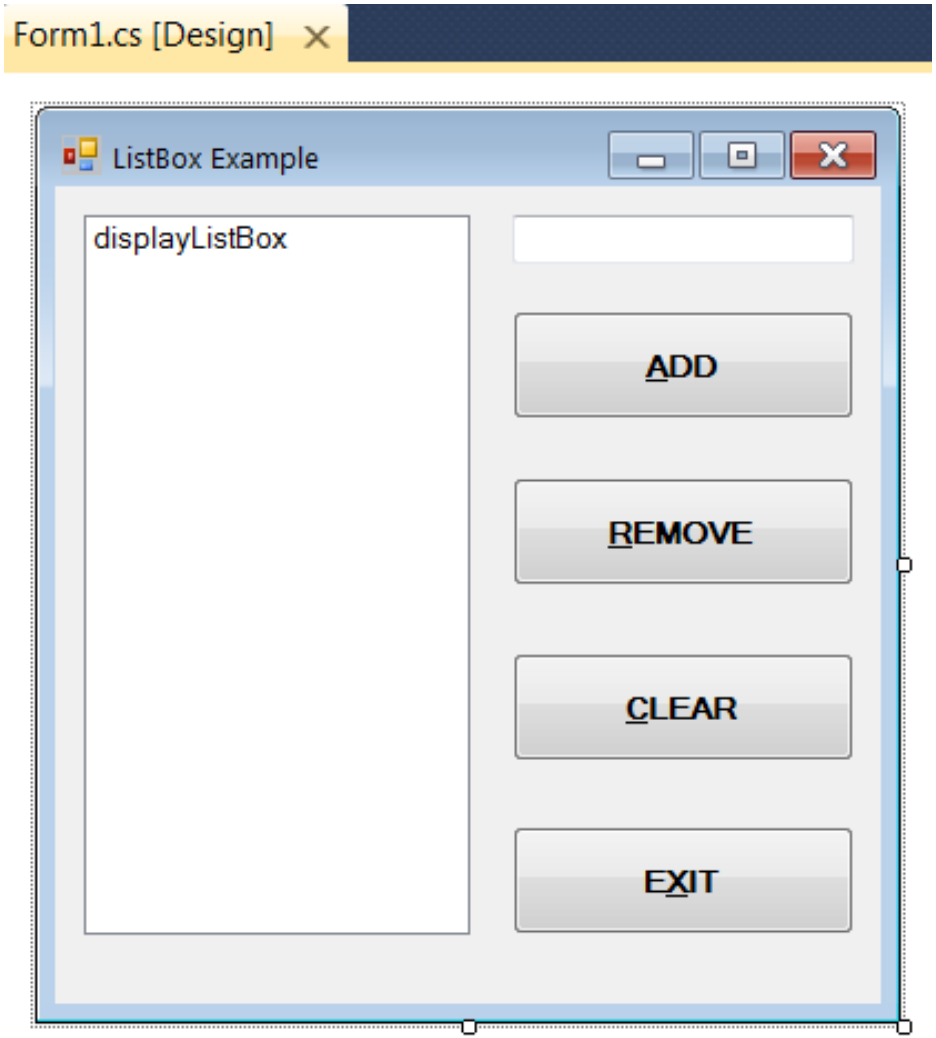
Örnek Uygulama - ListBox



Örnek Uygulama - ListBox

- ListBox
  - Name = displayListBox
- TextBox
  - Name = inputTextBox
- 4 Button
  - Button1
    - Text = Add
    - Name = addButton
  - Button2
    - Text = Remove
    - Name = removeButton
  - Button3
    - Text = Clear
    - Name = clearButton
  - Button4
    - Text = Exit
    - Name = exitButton

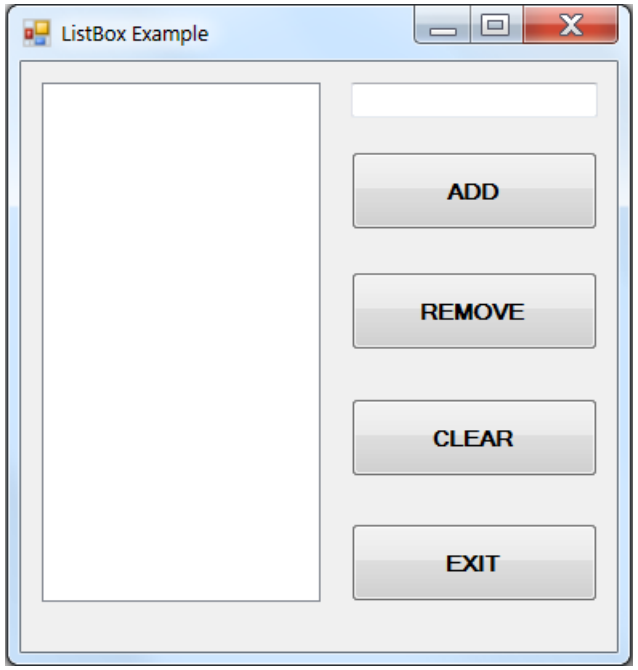
Örnek Uygulama - ListBox

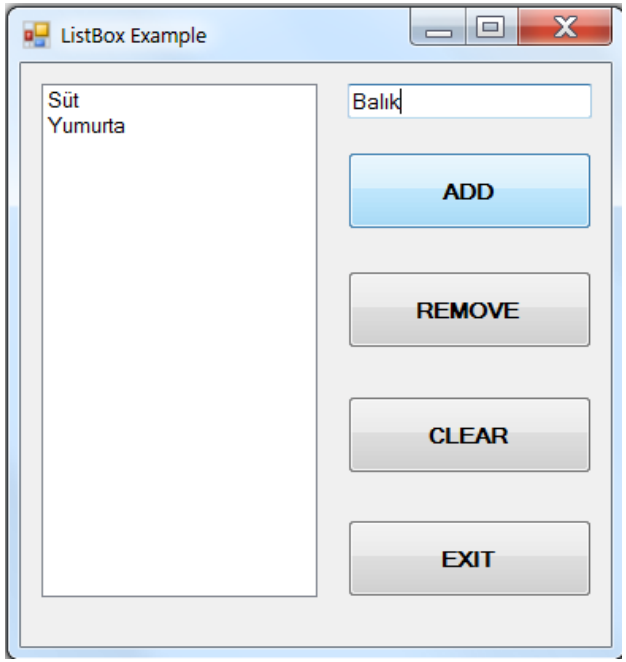


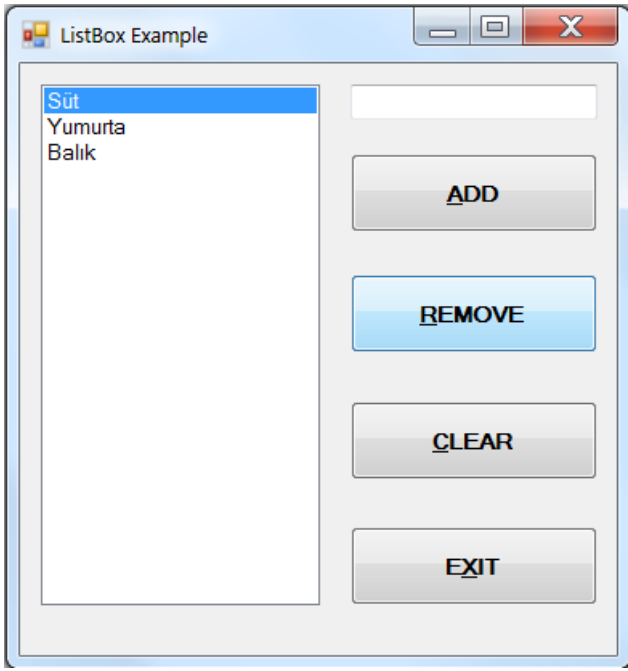
Örnek Uygulama - ListBox

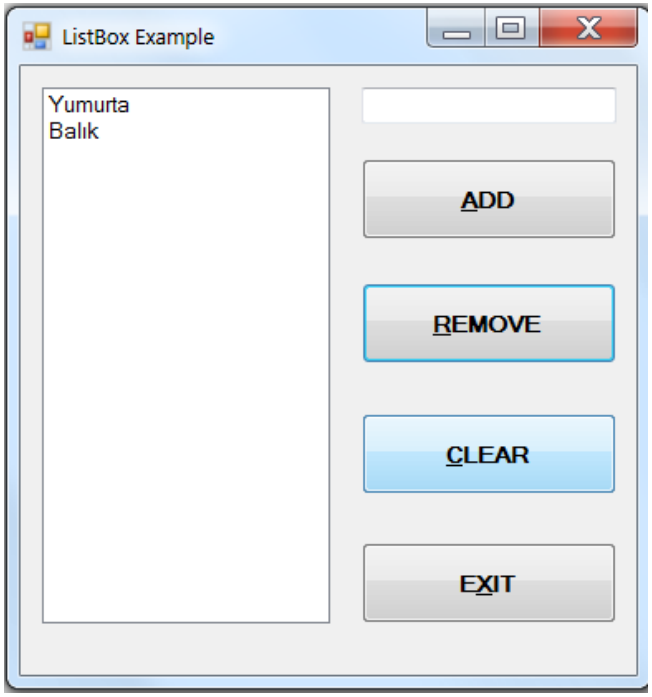
```
private void addButton_Click(object sender, EventArgs e)
{
    displayListBox.Items.Add(inputTextBox.Text);
    inputTextBox.Clear();
}

private void removeButton_Click(object sender, EventArgs e)
{
    // check if item is selected, remove if selected
    if (displayListBox.SelectedIndex != -1)
        displayListBox.Items.RemoveAt(displayListBox.SelectedIndex);
}

private void clearButton_Click(object sender, EventArgs e)
{
    displayListBox.Items.Clear();
}

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

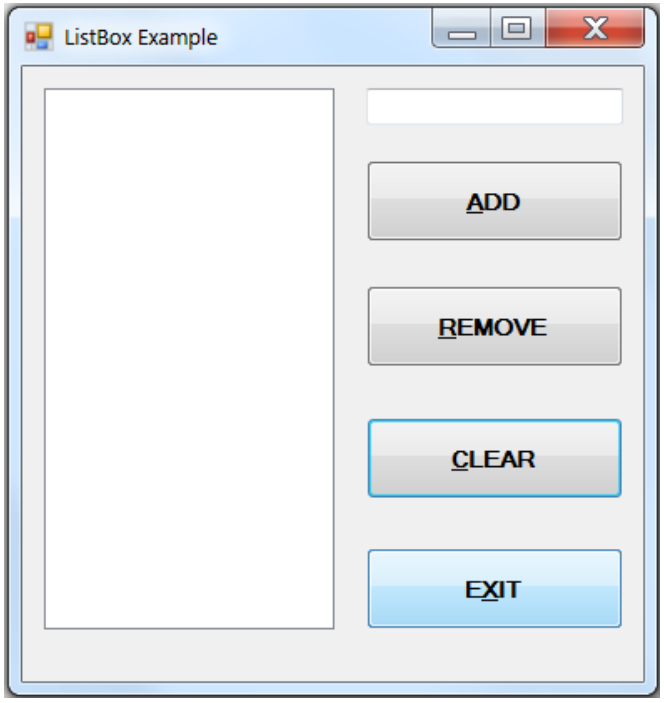
Herhangi bir item seçilmemiş ise → -1


ListBox Example
ADD
REMOVE
CLEAR
EXIT


ListBox Example
Süt
Yumurta
Balık
ADD
REMOVE
CLEAR
EXIT


ListBox Example
Süt
Yumurta
Balık
ADD
REMOVE
CLEAR
EXIT


ListBox Example
Yumurta
Balık
ADD
REMOVE
CLEAR
EXIT

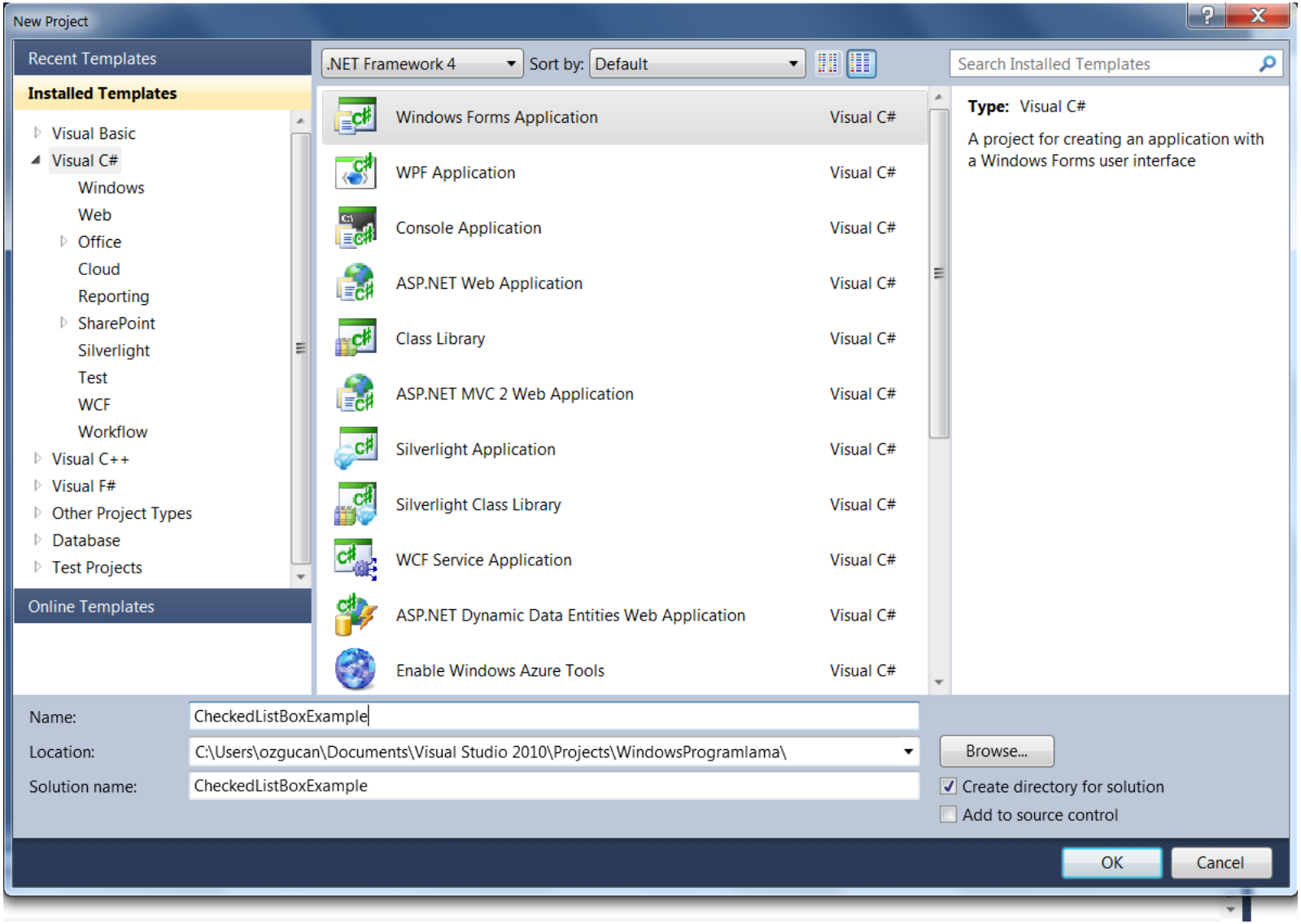

ListBox Example
ADD
REMOVE
CLEAR
EXIT

CheckedListBox

- Her bir öğeyi yanında bir **`CheckBox`** ile görüntüler.
- Birden fazla öğe seçilmesine izin verir.
- **`SelectionMode`**
  - **`One`**
    - Tekli seçim
  - **`None`**
    - Seçim yok

CheckedListBox properties, a method and an event	Description
Common Properties	*(All the `ListBox` properties, methods and events are inherited by `CheckedListBox`.)*
`CheckedItems`	Returns the collection of items that are checked as a `CheckedListBox.CheckedItemCollection`. This is distinct from the selected item, which is highlighted (but not necessarily checked). [*Note:* There can be at most one selected item at any given time.]
`CheckedIndices`	Returns indices for all checked items as a `CheckedListBox.CheckedIndexCollection`.
`CheckOnClick`	When `true` and the user clicks an item, the item is both selected and checked or unchecked. By default, this property is `false`, which means that the user must select an item, then click it again to check or uncheck it.
`SelectionMode`	Determines whether items can be selected and checked. The possible values are `One` (the default; allows multiple checks to be placed) or `None` (does not allow any checks to be placed).
Common Method	
`GetItemChecked`	Takes an index and returns `true` if the corresponding item is checked.
Common Event	*(Event arguments `ItemCheckEventArgs`)*
`ItemCheck`	Generated when an item is checked or unchecked.
`ItemCheckEventArgs` Properties	
`CurrentValue`	Indicates whether the current item is checked or unchecked. Possible values are `Checked`, `Unchecked` and `Indeterminate`.
`Index`	Returns the zero-based index of the item that changed.
`NewValue`	Specifies the new state of the item.

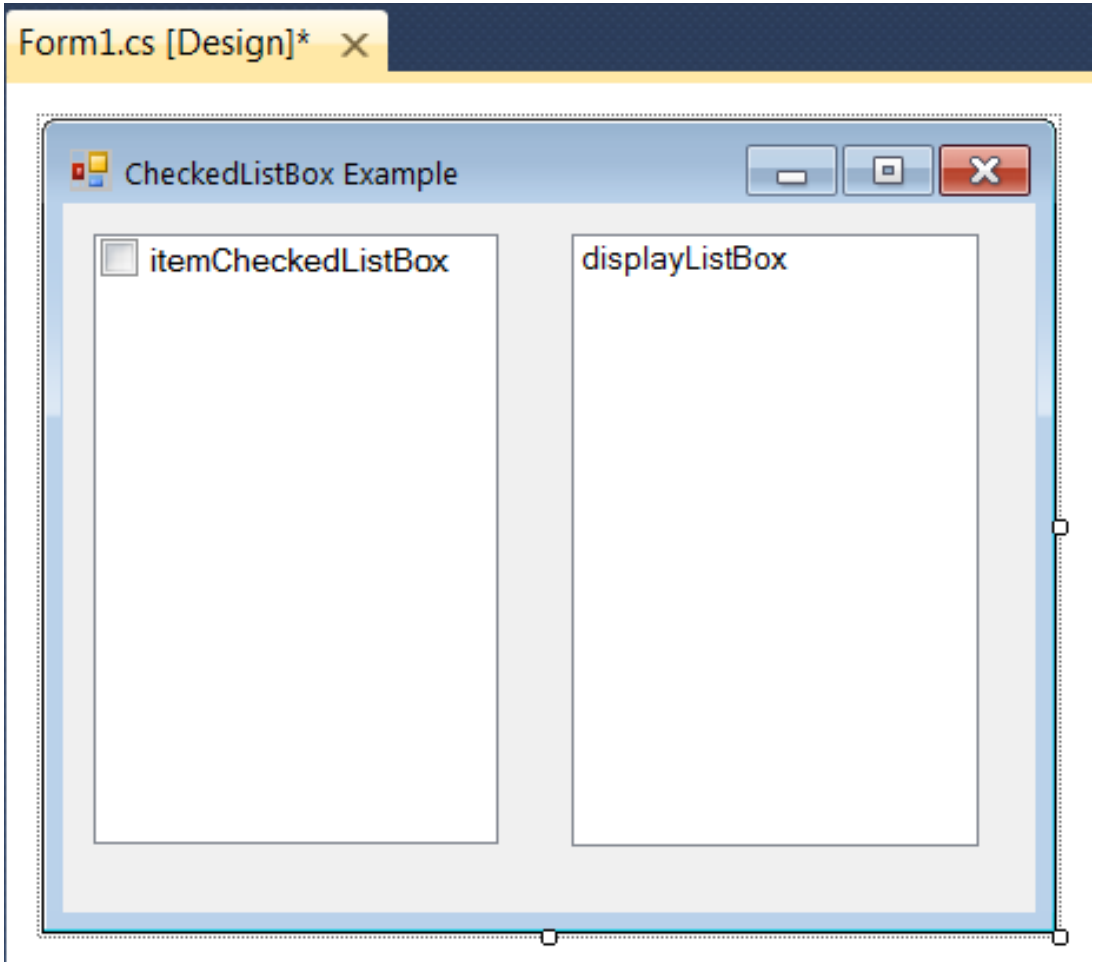
Örnek Uygulama - CheckedListBox



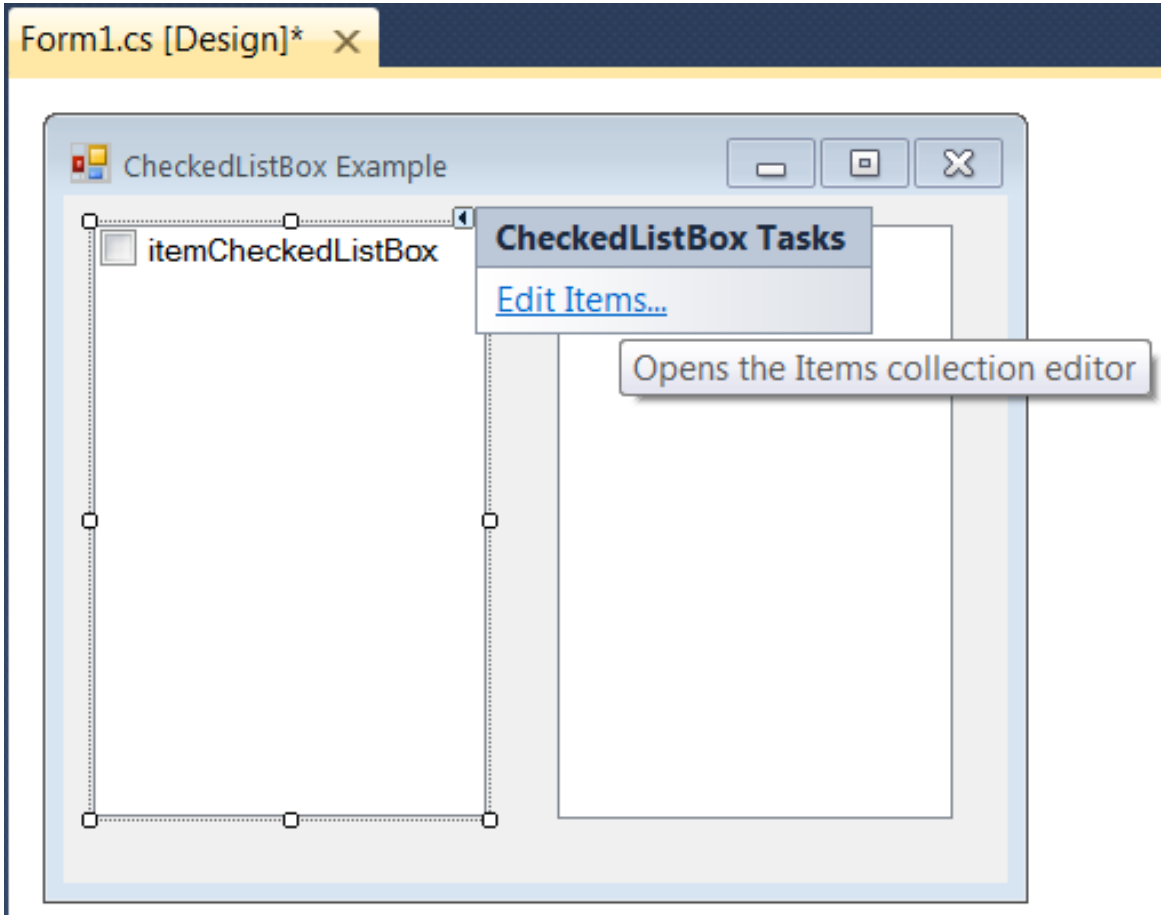
Örnek Uygulama - CheckedListBox

- **CheckedListBox**
  - `Name = itemCheckedListBox`
- **ListBox**
  - `Name = displayListBox`

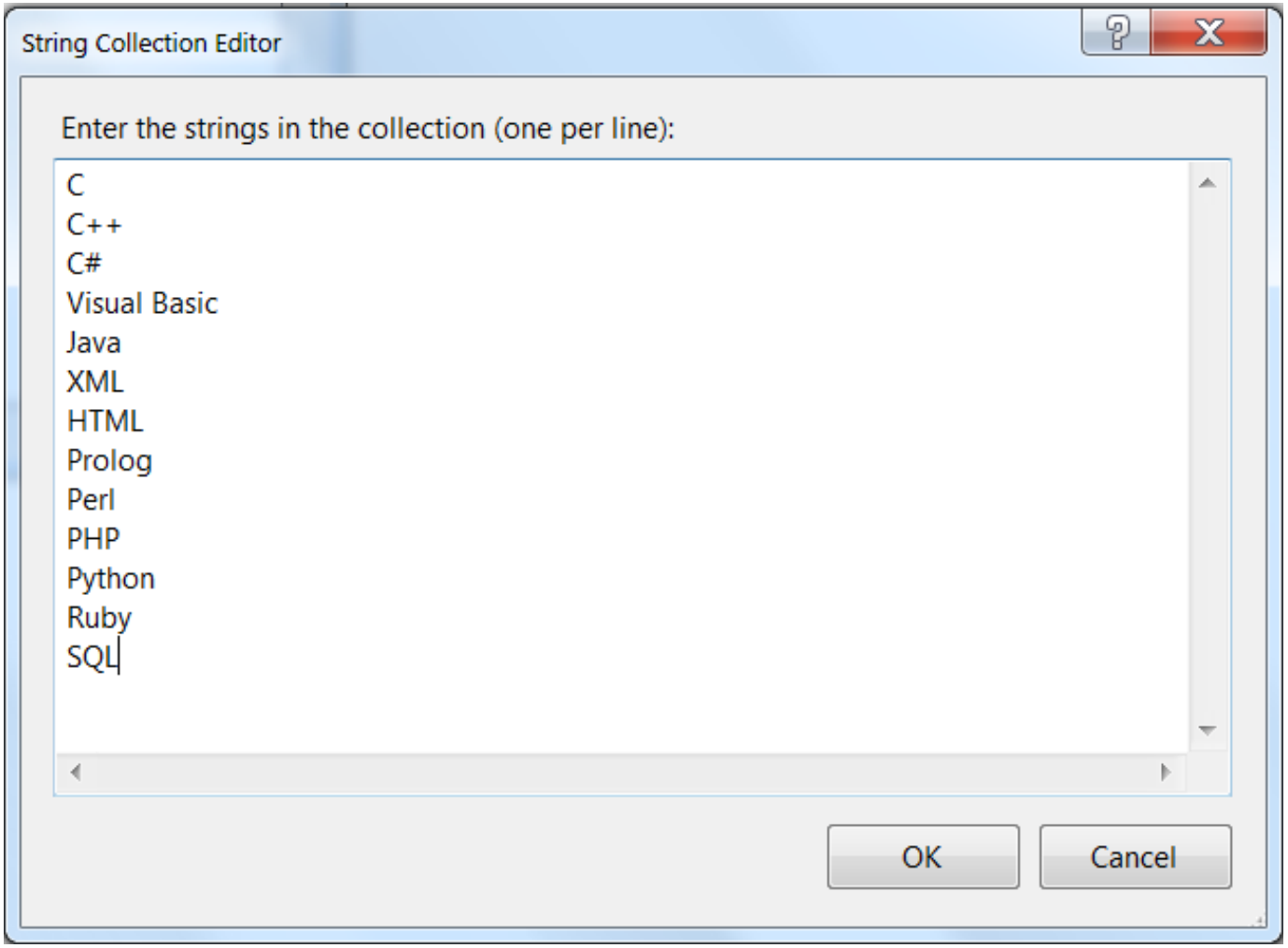
Örnek Uygulama - CheckedListBox



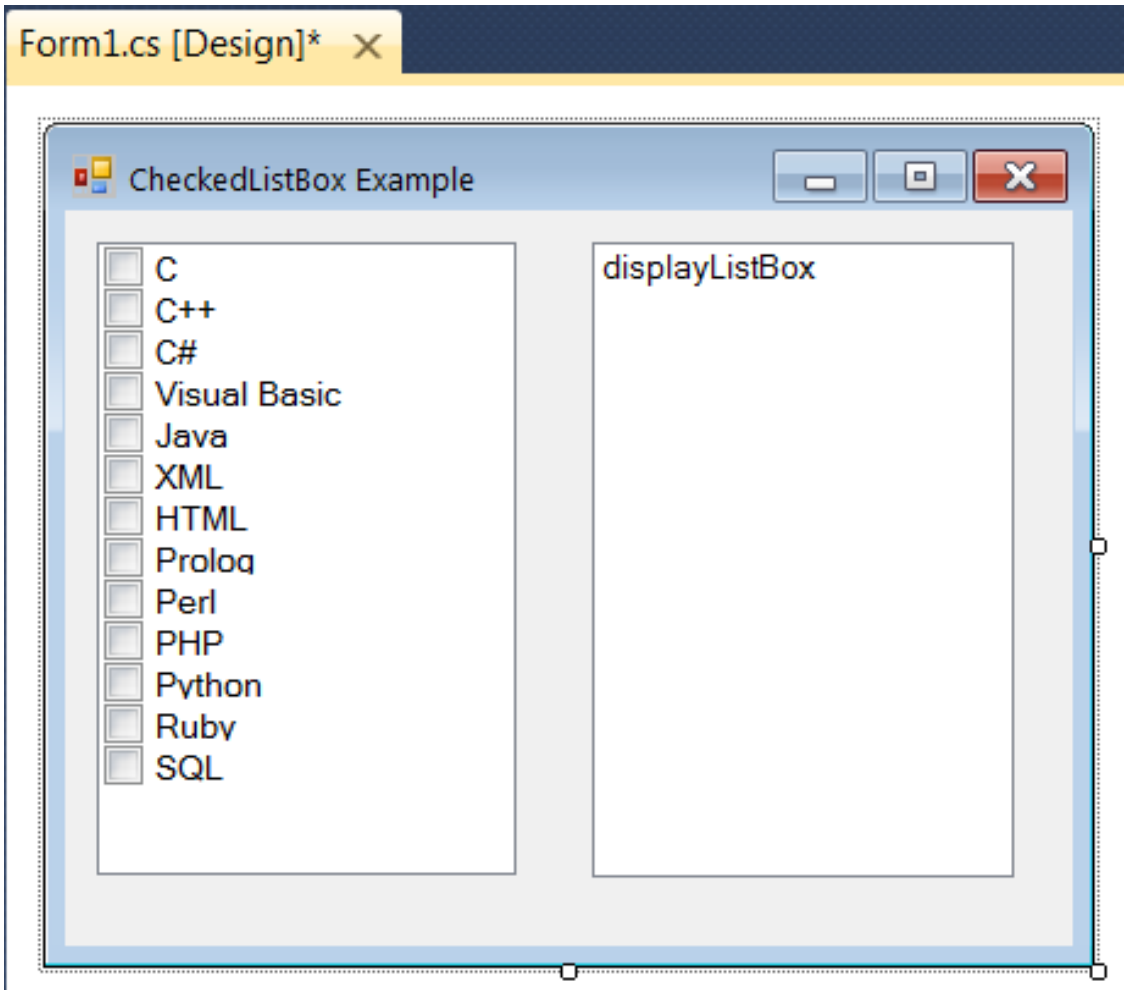
String Collection Editor



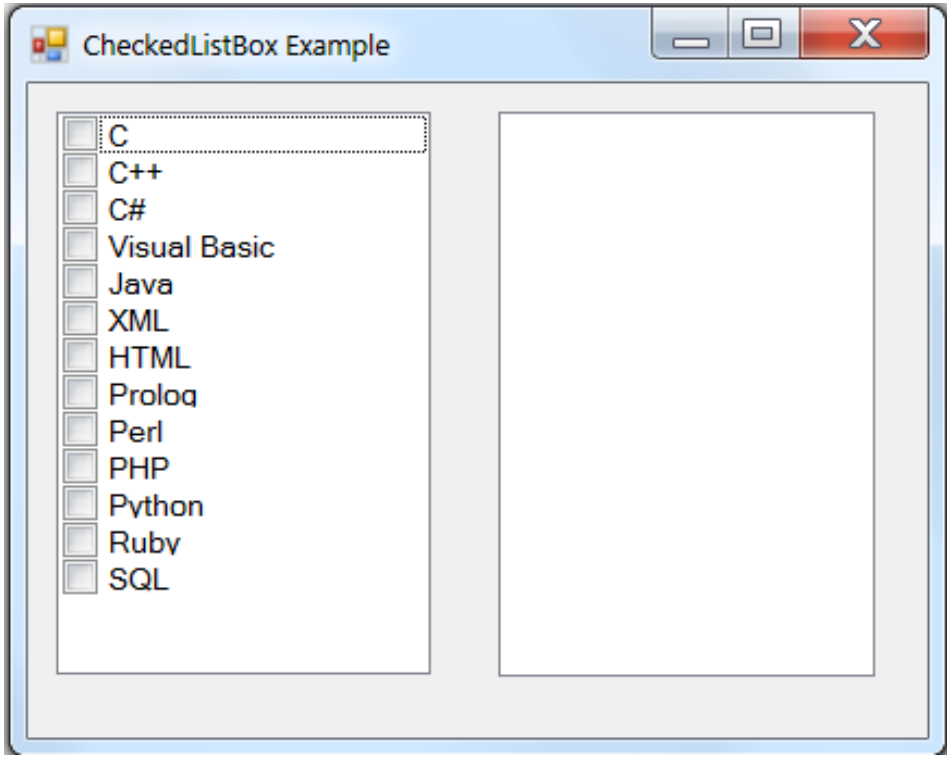
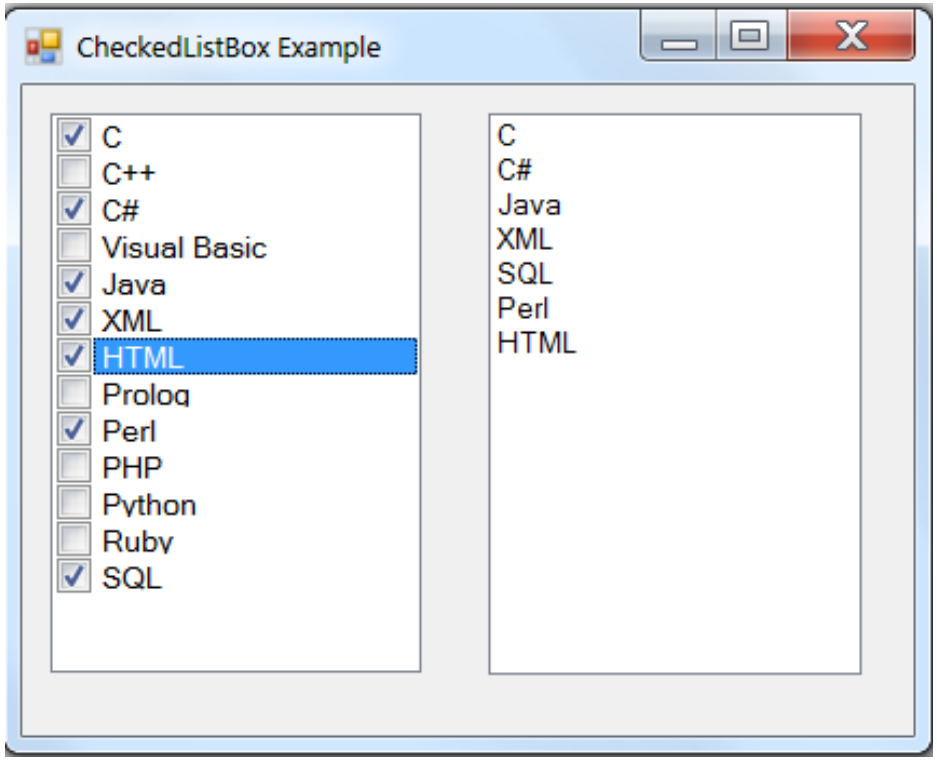
String Collection Editor



String Collection Editor



Örnek Uygulama - CheckedListBox

```
private void itemCheckedListBox_ItemCheck(object sender, ItemCheckEventArgs e)
{
    // obtain reference of selected item
    string item = itemCheckedListBox.SelectedItem.ToString();

    // if item checked add to ListBox
    // otherwise remove from ListBox
    if (e.NewValue == CheckState.Checked)
        displayListBox.Items.Add(item);
    else
        displayListBox.Items.Remove(item);
}
```

Örnek Uygulama - CheckedListBox