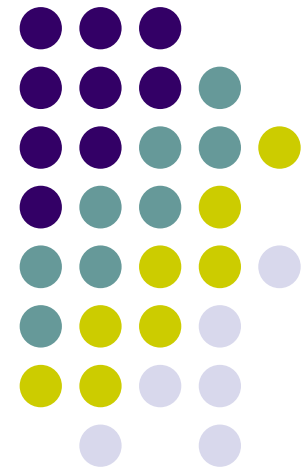


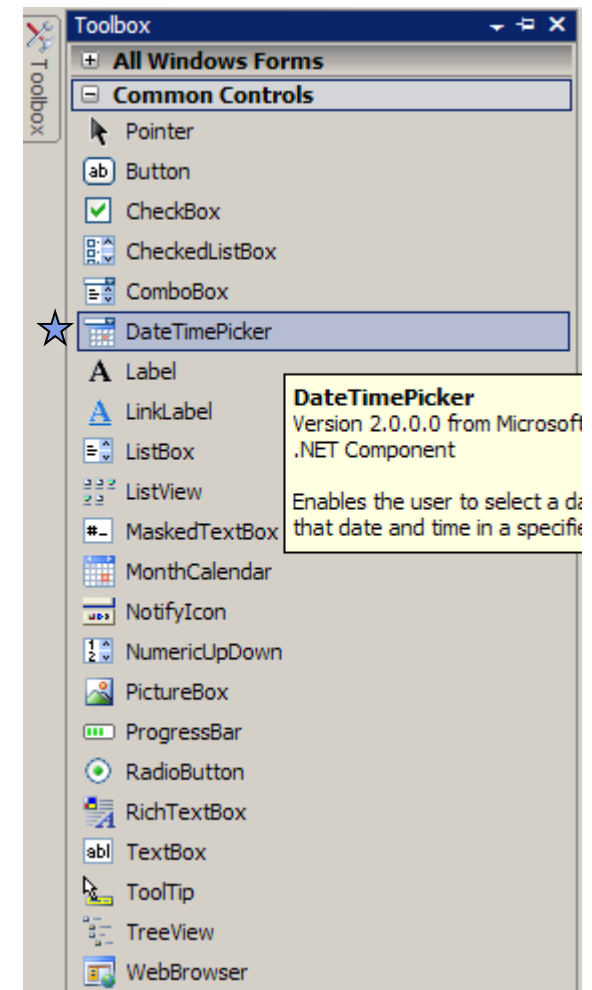
Controls Part 2



DateTimePicker Control



- Used for representing Date/Time information and take it as input from user.
- Date information is automatically created.
- Prevents wrong date and time input.



Fundamental Properties of DateTimePicker



- Format
- CustomFormat
- Colors...
- MaxDate
- MinDate
- Value
- Location
- Size



DateTimePicker Control

- Date and time information that is stored in DateTimePicker resides in **Value** property which is **DateTime** type.
- To set **Value** property first we should create a new DateTime object;
 - **public DateTime(int year, int month, int day);**
 - **public DateTime(int year, int month, int day, int hour, int minute, int second);**



DateTimePicker Control

- To return value as **string**;
 - We use
`DateTimePicker.Value.ToString(string format)`
function.
 - Possible format input types
 - Year : 'y'
 - Month : 'M'
 - Day : 'd'
 - Hour : 'h'
 - Minute : 'm'
 - Second : 's'



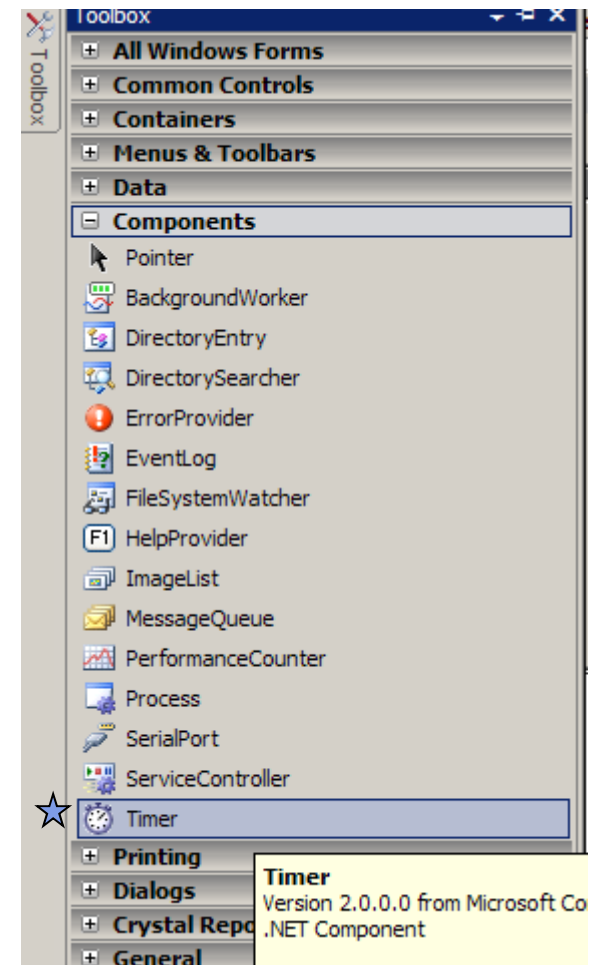
Exercise

- Previously we created a form which takes user's name and surname. Now add a DateTimePicker control to the form. Then show user's birth date in the MessageBox.

A screenshot of a Windows application window titled "İlk Ekran". The window contains a form with three input fields: "Ad", "Soyad", and "Doğum Tarihi". The "Doğum Tarihi" field is a DateTimePicker control showing the date "3/ 4/2007". Below the input fields is a button labeled "Merhaba".

Timer Control

- Timer control is used for performing some tasks periodically.
- Time period can be set during development or runtime.





Timer Properties

- Enabled
- Interval
- Note : Timer can not be seen on the form. It runs at background and performs it's action when determined time is passed.



Exercise

- Add time property to our program.
- To accomplish this add a Timer control named **timerClock** to Form. Then set **Interval** property to 1000 msec = 1sec and **Enabled** property to **true**.
- Add a **Label** to form and set it's name to **lblHour**.
- Open **Events** view and create **Tick Event Handler** for Timer.



Exercise

- Add the code to **timerClock_Tick** function that will write current to **lblHour**.
- Note: To obtain current time you may use **DateTime.Now.ToString()** function.

İlk Ekran

08:03:43

Ad

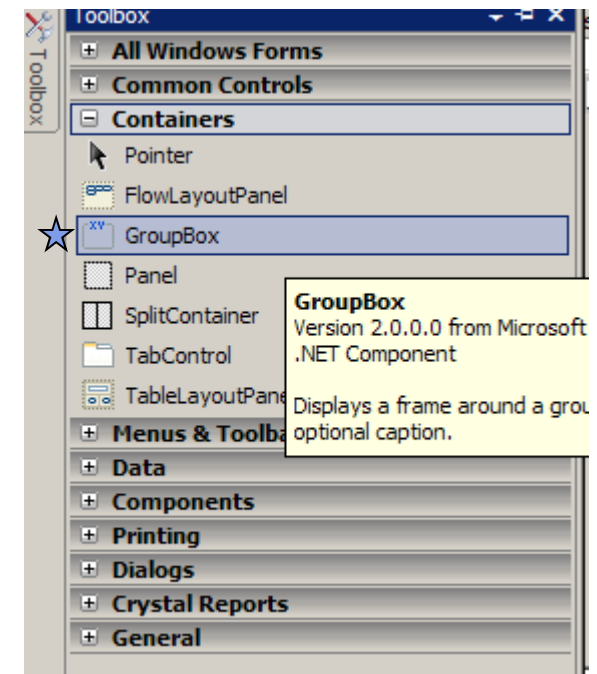
Soyad

Doğum Tarihi

Merhaba

GroupBox

- Used for grouping a bunch of elements that are logically related with each other.
- Creates sub-sets of elements on the form depending on their functionalities.
- Relations between of some the controls (e.g. RadioButtons) are automatically assigned when they reside in the same group.



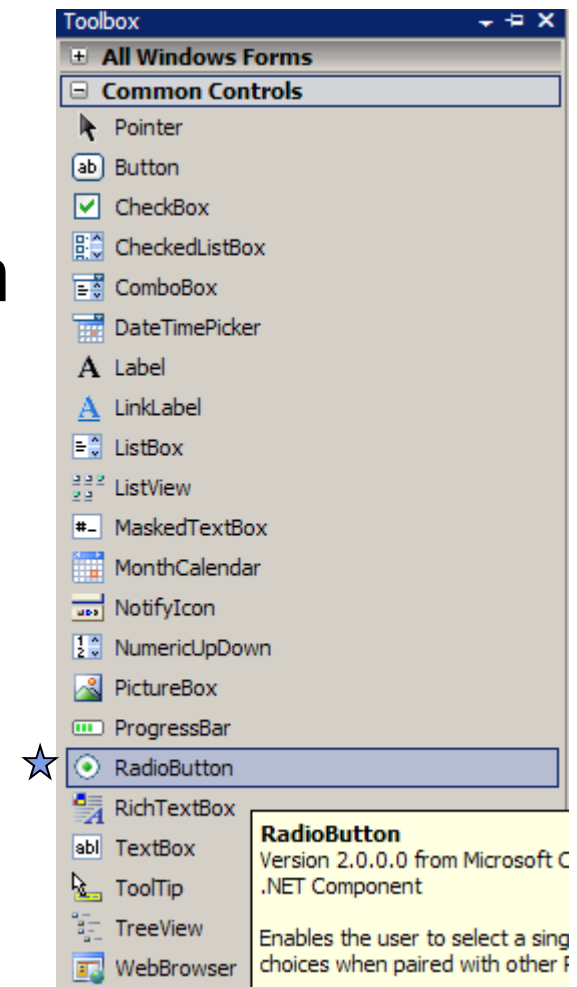
Fundamental Properties of GroupBox



- BackColor
- ForeColor
- Text
- Enabled
- Visible
- Name

RadioButton Control

- Enables user to select a single option from a group of choices.
- Only one RadioButton can be in selected state within a form or GroupBox.



Fundamental Properties of RadioButton



- BackColor
- CheckAlign
- Checked
- ForeColor
- Text
- Enabled
- Visible

Fundamental Events of RadioButton



- Click
- CheckedChanged



Exercise

- Add a functionality to the form that asks user about his/her gender.
- In this task create a **GroupBox** named **grpGender** and set its **Text** property to “Gender”.
- Add two **RadioButtons** (**rbMale** and **rbFemale**) to the **GroupBox** and set appropriate texts to the radio buttons.
- Change **Checked** property of one of the **RadioButton** to true.

Exercise



- Show the gender of the user in the MessageBox by using the choice seen in RadioButtons

The screenshot shows a Windows application window titled "İlk Ekran" with a clock displaying "09:03:59". The form contains the following fields:

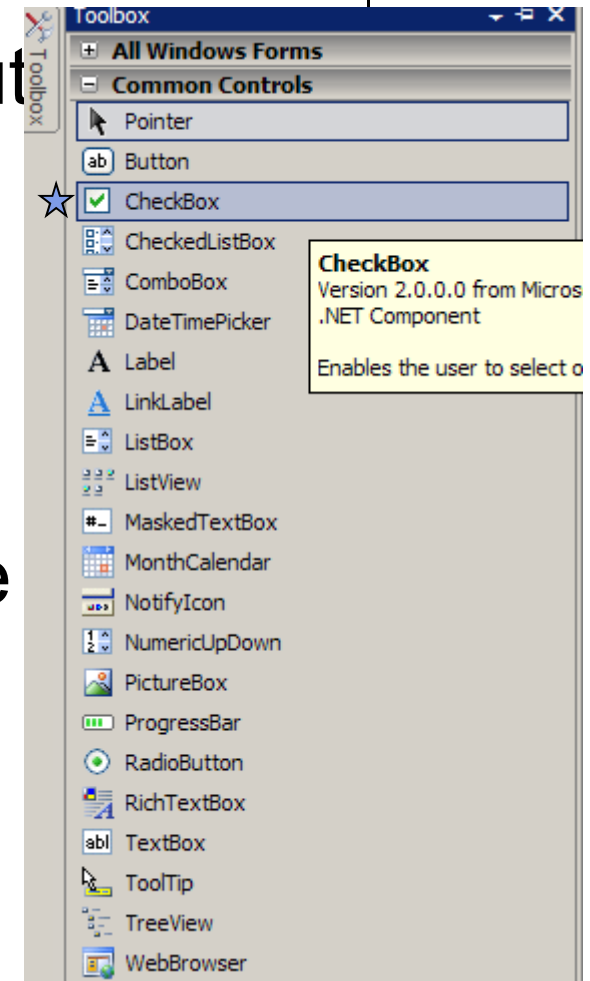
- Ad: Oğuz
- Soyad: Altuğ
- Doğum Tarihi: 11/16/1979
- Cinsiyet: Erkek Kadın

A "Tanım" (Information) dialog box is open, displaying the user's details: "Kullanıcı adı :Oğuz Altuğ, doğum tarihi : 16/11/1979, cinsiyet : Erkek". The dialog box has an "OK" button.

CheckBox Control



- It is similar to the RadioButton but all CheckBoxes can be selected in a CheckBox group.
- In other words, CheckBoxes are used when user can select multiple options between multiple choices.



Fundamental Properties of CheckBox



- BackColor
- CheckAlign
- Checked
- CheckState
- ForeColor
- Text
- Enabled
- Visible

Fundamental Events of CheckBox



- Click
- CheckedException



Exercise

- Create a GroupBox named grpLectures and place at least four CheckBoxes that holds lecture names.
- Depending of the check state of these CheckBoxes write the lectures to the MessageBox which are selected by user.

Exercise



ilk Ekran

09:03:38

Ad: Oğuz

Soyad: Altuğ


Doğum Tarihi: 11/16/1979

Cinsiyet: Erkek Kadın

Aldığı dersler:

- Matematik
- Fizik
- Kimya
- Biyoloji

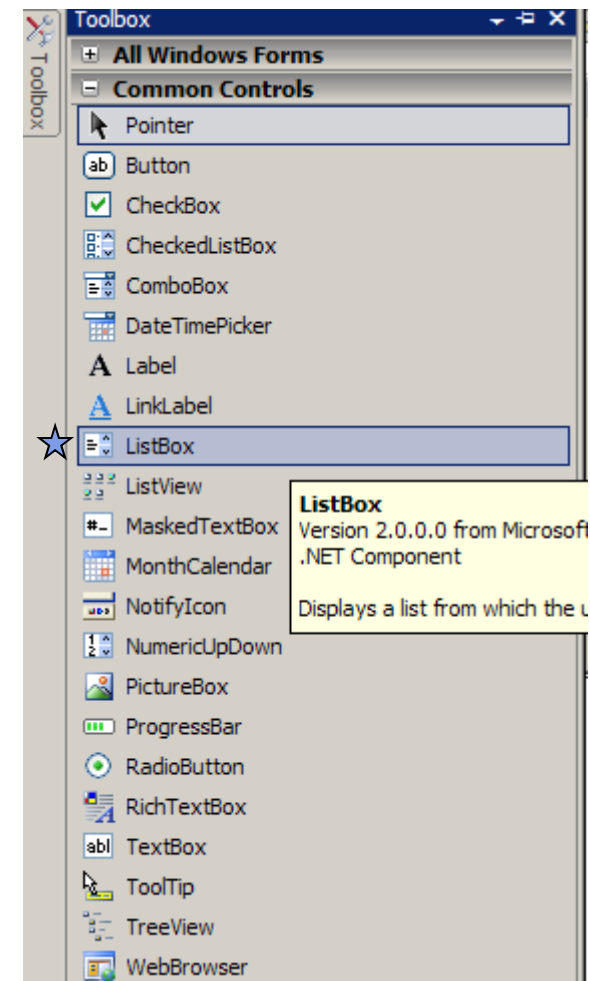
Tamam

 Kullanıcı adı :Oğuz Altuğ, doğum tarihi : 16/11/1979, cinsiyet : Erkek, aldığı dersler : Biyoloji Fizik

OK

ListBox Control

- Allows user to select one or multiple options between a listed collection of choices.



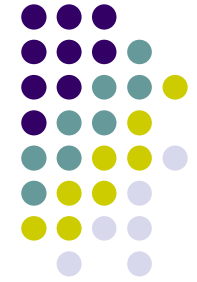
Fundamental Properties of ListBox



- SelectionMode
- Sorted
- Items
- SelectedIndex
- SelectedItem

- Note : To add items to a ListBox;
 - You should call `Items.Add()` function during run-time or
 - Add lines to the window which is opened when Items element is clicked in Properties during design time.

Fundamental Events of ListBox

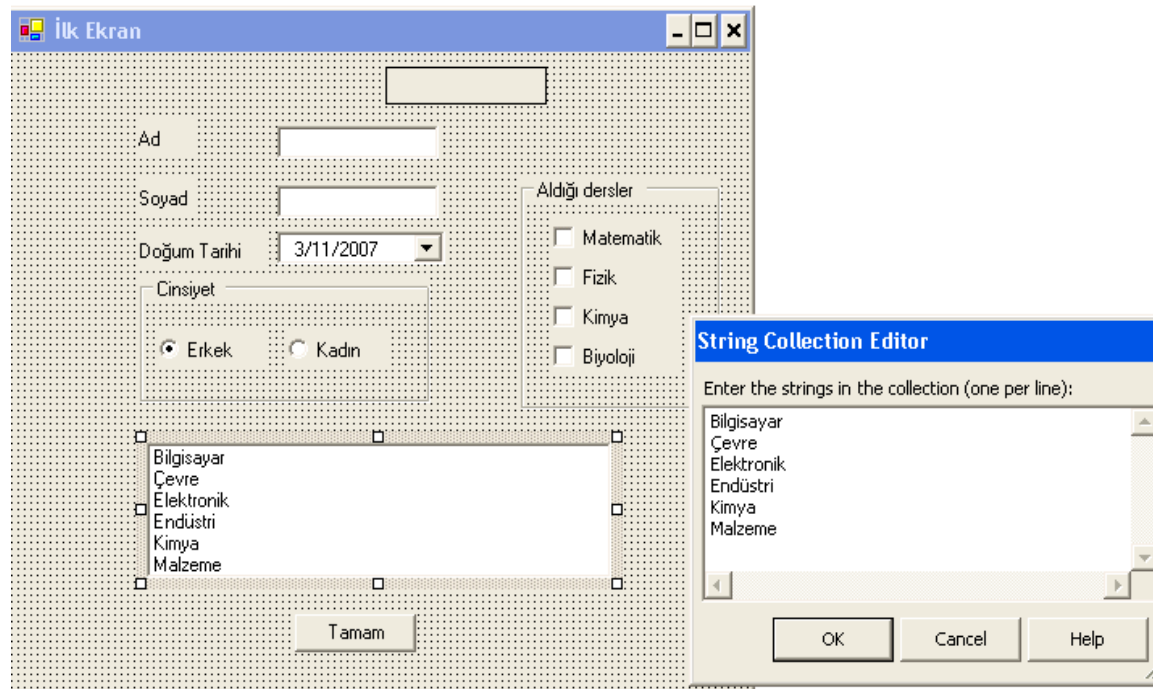


- DoubleClick
- SelectedIndexChanged



Exercise

- Add a ListBox named lbDepartment to the Form. And add a couple of departments the the window which is opened when Items property is clicked.



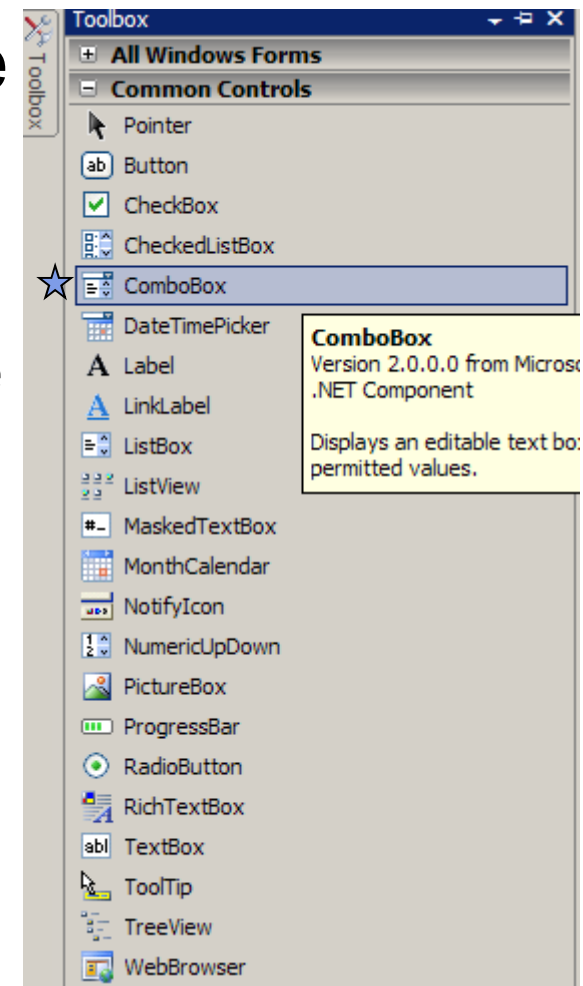


Exercise

- Show the department that is selected in the MessageBox.

ComboBox Control

- Enables user to select only one option between a listed collection.
- During selection all items in the collection are displayed but, after selection only selected item is displayed.



Fundamental Properties of ComboBox



- DropDownWidth
- MaxDropDownItems
- Sorted
- Items
- SelectedIndex
- SelectedItem

.

Fundamental Events of ComboBox



- SelectedIndexChanged

Exercise



- Convert ListBox control that we have added to the Form to a ComboBox control.



Exercise

- Write a program that calculates the bills in a restaurant.
- Program first should ask table number and customer name.
- Then dishes should be selected from menu and added to the bill. Finally account of invoice is calculated after processing discounts.

Exercise



Restoran 0.0

Müşteri Bilgileri

Müşteri Adı: Oğuz

Müşteri Soyadı: Altuğ

Masa No: 11

İndirimler

Öğrenci Tam

Ek İndirimler

Yemek Çeki Grup

Daimi Müşteri

Yemekler

Hamburger

Pide

Döner

Lahmacun

Köfte

Döner

Ekle

Çıkar

Hesapla

Tutar: 20.45