

ОСНОВЫ ОБЪЕКТНО-ОРИЕНТИРОВАННОГО ПРОГРАММИРОВАНИЯ В СРЕДЕ

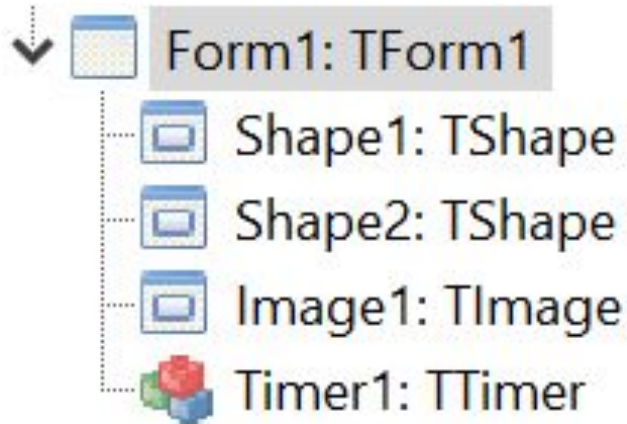


LAZARUS

Урок 16



События объекта TForm



OnKeyDown	FormKeyDown
OnKeyPress	FormKeyPress
OnKeyUp	
OnMouseDown	
OnMouseEnter	
OnMouseLeave	
OnMouseMove	

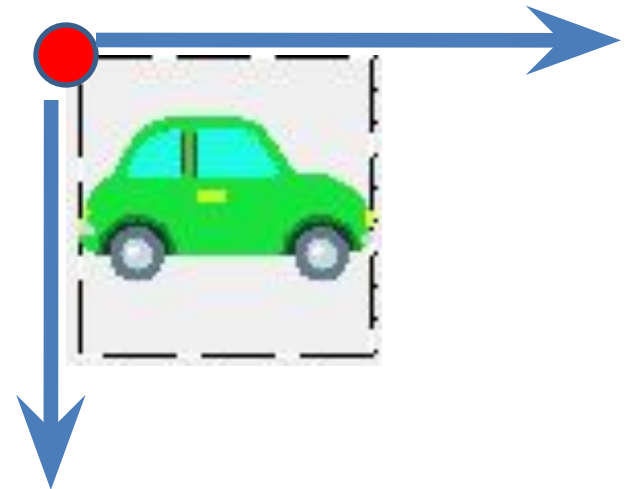
События объекта TForm

```
procedure TForm1.FormKeyPress(Sender: TObject; var Key: char);
begin
  case Key of
    'w': imagel.Top := imagel.Top - 2;
    's': imagel.Top := imagel.Top + 2;
    'a': imagel.Left := imagel.Left - 2;
    'd': imagel.Left := imagel.Left + 2;
  end;
end;
```

Свойства	События	Избранное	Ограничения
Align		alNone	^
> Anchors		[akTop,akLeft]	

...Top + 10

...Left + 10



События объекта TForm

```
implementation  
uses LCLType;
```

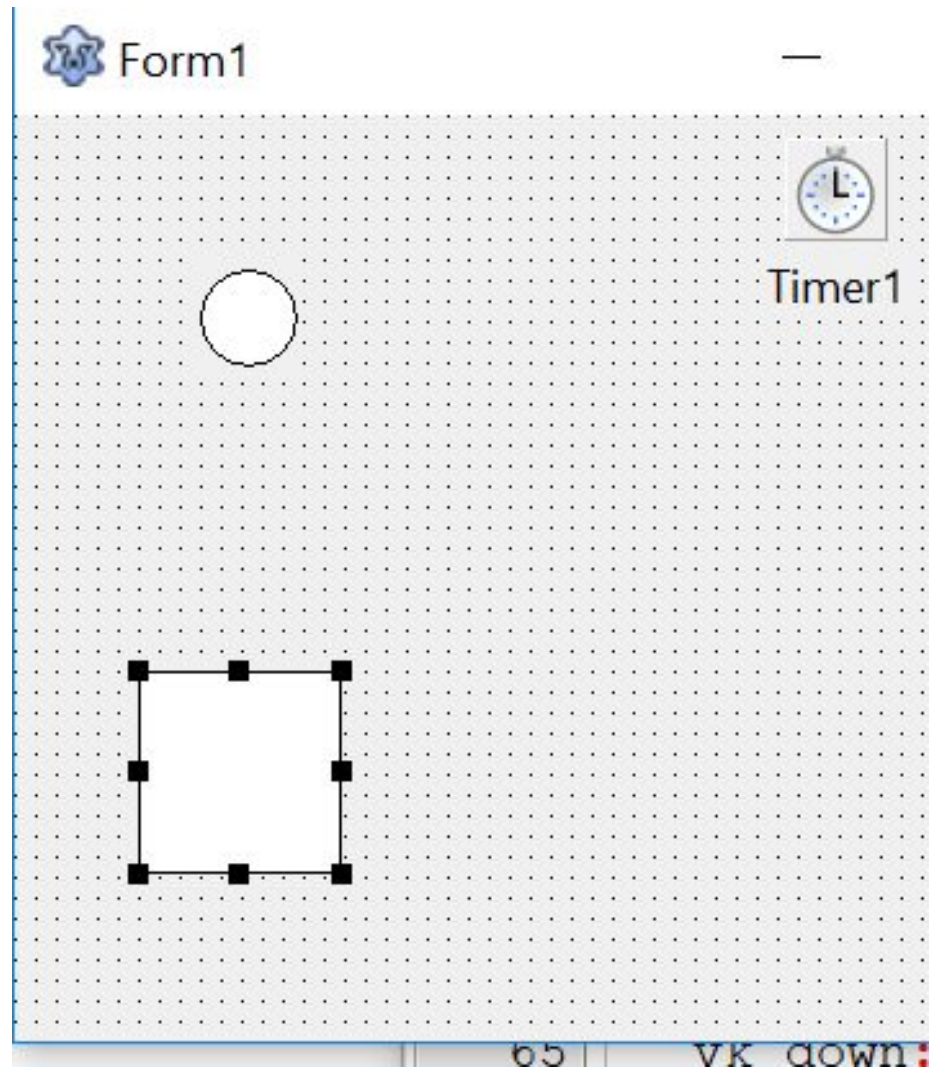
```
procedure TForm1.FormKeyDown(Sender: TObject; var Key: Word; Shift: TShiftState  
);  
begin  
  case Key of  
    vk_up: shapel.Top := shapel.Top - 5;  
    vk_down: shapel.Top := shapel.Top + 5;  
    vk_left: shapel.Left := shapel.Left - 5;  
    vk_right: shapel.Left := shapel.Left + 5;  
  end;  
end;
```

Виртуальные коды клавиш

VK_SPACE – пробел
VK_LEFT – стрелка влево
VK_UP – стрелка вверх
VK_RIGHT – стрелка вправо
VK_DOWN – стрелка вниз

Проект «Ловушка»

- Form1: TForm1
 - Shape1: TShape
 - Shape2: TShape
 - Image1: TImage
 - Timer1: TTimer



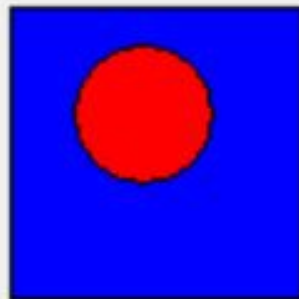
Проект «Ловушка»

```
procedure TForm1.FormKeyDown(Sender: TObject; var Key:
);
begin
  case Key of
    vk_up: shapel.Top := shapel.Top - 5;
    vk_down: shapel.Top := shapel.Top + 5;
    vk_left: shapel.Left := shapel.Left - 5;
    vk_right: shapel.Left := shapel.Left + 5;
  end;
end;
```

```
procedure TForm1.FormCreate(Sender: TObject);
begin
  randomize;
  shape2.Left:=random(400)+40;
  shape2.Brush.color:=clblue;
  shapel.Brush.color:=clblue;
end;
```

Проект «Ловушка»

```
procedure TForm1.Timer1Timer(Sender: TObject);  
begin  
  shape2.Top:=shape2.top+random(10);  
  if (shapel.Left<=shape2.Left) and  
    (shapel.Left+shapel.Width>=shape2.Left+shape2.Width) and  
    (shapel.Top<=shape2.Top) and  
    (shapel.Top+shapel.Height>=shape2.Top+shape2.Height)  
  then shape2.Brush.color:=clred;  
end;
```



Проект «Ловушка»

Доделать проект:

1. Шарик останавливается в корзине
2. Начинает падать новый шарик

3. Счетчик

The screenshot shows the Delphi IDE interface. On the left is the Component Tray with a tree view of the form's components:

- Form1: TForm1
 - Shape2: TShape
 - Shape1: TShape
 - Panel1: TPanel
 - Label3: TLabel
 - Label4: TLabel
 - Button1: TButton
 - Timer1: TTimer

On the right is the Object Inspector for the selected component, Button1. The 'Свойства' (Properties) tab is active, showing the following properties:

Property	Value
Left	13
ModalResult	mrNone
Name	Button1
ParentBidiMode	<input checked="" type="checkbox"/> (True)
ParentFont	<input checked="" type="checkbox"/> (True)
ParentShowHint	<input checked="" type="checkbox"/> (True)
PopupMenu	
ShowHint	<input type="checkbox"/> (False)
TabOrder	0
TabStop	<input type="checkbox"/> (False)
Tag	0

События объекта TForm

OnKeyDown	FormKeyDown
OnKeyPress	FormKeyPress
OnKeyUp	
OnMouseDown	
OnMouseEnter	
OnMouseLeave	
OnMouseMove	

```
procedure TForm1.FormMouseMove(Sender: TObject; Shift: TShiftState; X,  
    Y: Integer);  
begin  
    if (x>200) and (y>150) then showmessage('!!!!!!!!!!!!');  
end;
```