C#

Advance Programming 1   Session 12

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ایجاد دانه های برف

```csharp
Random rnd = new Random();
PictureBox[] x = new PictureBox[200];
 for (int i = 0; i < 200; i++)
    {
        x[i] = new PictureBox();
        x[i].SizeMode = PictureBoxSizeMode.StretchImage;
        this.Controls.Add(x[i]);
        x[i].Left = rnd.Next(0, this.Width);
        x[i].Top = -rnd.Next(0, this.Height);
        x[i].Width = rnd.Next(5, 10);
        x[i].Height = x[i].Width;
        x[i].Image =   System.Drawing.Image.FromFile
            (Environment.CurrentDirectory + @"\Resources.ico");
    }
```
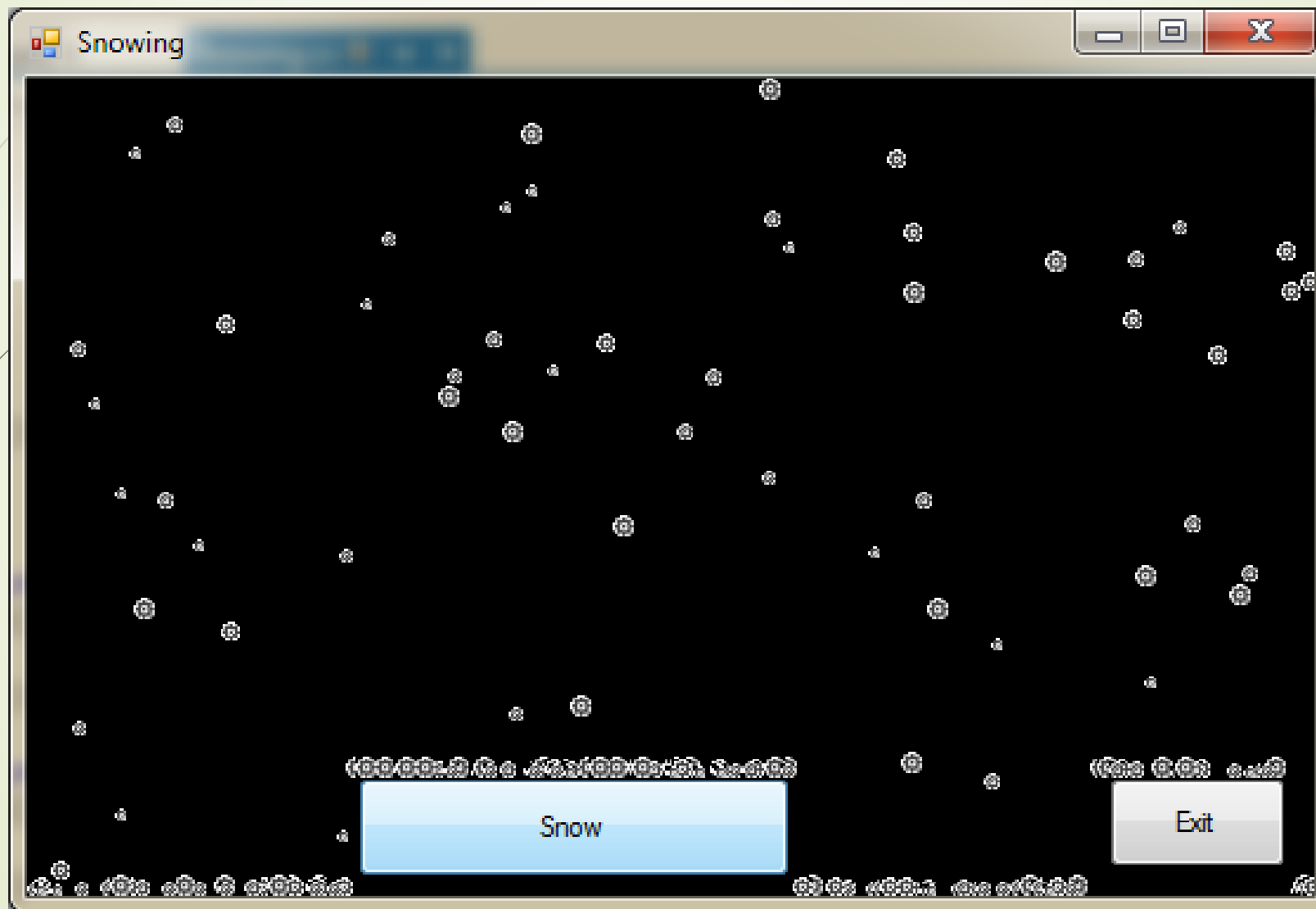
قرار دادن زمان روی دانه های برف

```csharp
Timer[] t = new Timer[200];
for (int i = 0; i < 200; i++)
        {
            t[i] = new Timer();
            t[i].Interval = rnd.Next(50, 100);
            t[i].Enabled = true;
            t[i].Tag = i;
            t[i].Tick += Timer_Tick;
        }
```

```csharp
private void Timer_Tick(object sender, EventArgs e)
    {
        Random rnd = new Random();
        int i = System.Convert.ToInt32(((Timer)sender).Tag.ToString());
        x[i].Top = x[i].Top + rnd.Next(30, 50);
        if (x[i].Top + x[i].Height >= this.ClientSize.Height)
         {
           t[i].Stop();
         }
    }
```

ویرایش کد رویداد زمان برای تشخیص موانع

```csharp
private void Timer_Tick(object sender, EventArgs e)
{
    Random rnd = new Random();
    int i = System.Convert.ToInt32(((Timer)sender).Tag.ToString());
    x[i].Top = x[i].Top + rnd.Next(30, 50);
    bool Hit,HitForm,HitButton,HitExit;
    HitForm = (x[i].Bottom  >= this.ClientSize.Height );
    HitButton = (x[i].Bottom>=btnSnow.Top) && (x[i].Right>=btnSnow.Left ) &&(x[i].Left<=btnSnow.Right );
    HitExit = (x[i].Bottom >= btnExit.Top) && (x[i].Right >= btnExit.Left) && (x[i].Left <= btnExit.Right);
    Hit = HitForm || HitButton||HitExit ;
    if (Hit)
    {
        if (HitButton)
        {
            x[i].Top = btnSnow.Top - x[i].Height;
        }
      if (HitExit )
        {
            x[i].Top =btnExit.Top-x[i].Height  ;
        }
        if(HitForm )
        {
            x[i].Top = this.ClientSize.Height - x[i].Height;
        }
        t[i].Stop();
    }
}
```

از توجه شما متشکرم

پایان