

Bitmap CLASS - System.Drawing

Bitmap (string filename) - filename: Bitmap file name and path
FileNotFoundException - specified File Not Found

Color GetPixel (int x, int y)
x - x-coord of pixel to get
y - y-coord of pixel to get
Returns Color struct of specified pixel
ArgumentOutOfRangeException - x < 0 OR = Width
OR y < 0 OR = Height
Exception - operation failed.

Color Struct: System.Drawing
Color FromARGB (int Alpha, int Red, int Green, int Blue)
alpha - 0-255
Red - 0-255
Green - 0-255
Blue - 0-255
Returns Color Struct
ArgumentException - Alpha, Red, Green, or Blue < 0 OR > 255

RectangleF GetBounds (ref GraphicsUnit pageUnit)
pageUnit - One of GraphicsUnit values indicating unit of measurement for bounding rectangle.
returns RectangleF represents bounds of image in specified unit.

GraphicsUnit - Display
Document
Inch
Millimeter
Pixel
Point
World

RectangleF Structure (System.Drawing)
Stores Set of 4 floats represent location and size of a rectangle.

Drag and Drop

Not enabled by default.
Set: AllowDrop = true

Typically involves 2 parties:

- Drag Source
- Drop Target

Can be same App or different.
Actions are App specific, determined by context.

In WPF any UIElement or ContentElement can participate events and methods - DragDrop class
System.Windows.DragDrop
Analogous to copy-paste.

Data Transfer

requires: Source object (Provides Data)
• Way to temporarily store transferred data
• Target object (receives Data)

Drag Source initiates D/D calling static DragDrop.DoDragDrop method - pass data.

Drop Target responsible for extracting data.

Drag Drop EFFECTS

WPF Defines DragDropEffects enum.

All - Data is copied, removed from source, and scrolled in target.

Copy - Data is copied to target

Link - Data from source is linked

Move - Data from source is moved to target

None - Target does not accept data

Scroll - scrolling about to start or is currently occurring in target

Events

DragEnter

DragLeave

DragOver

Drop - occurs when object dropped on target

Implementing

Identify element that will be source
Create event handler on source to initiate Drag/Drop ops.

Call DoDragDrop in source event handler

Identify element that will be target

Set AllowDrop = "true" on target element

Create Drop event handler to process data

Extract Data from DragEventArgs by using

GetDataPresent and GetData

Use Data to perform desired effect.

```
private void Drag (object sender, DragEventArgs e)
{
    if (e.Data.GetDataPresent (DataFormats.FileDrop))
    {
        String[] fileList = (String[]) e.Data.GetData (DataFormats.FileDrop);
    }
}
```