CMPE2800 – Drag and Drop Primer

Instead of using an `OpenFileDialog` to open and operate a file, you may alternatively use a drag and drop operation. This will permit the user to literally drag one or more files in the operating system to your application and drop them in the client area, or on a particular control.

The control (including the main window) that intends to receive the drag and drop items should, at the very least, provide event handlers for `DragEnter`, and `DragDrop`.

As the items are dragged over the window, the `DragEnter` event hander will permit an icon change to show the user that the operation is permitted. This means that the user will visually get a clue that the control will accept what is being dragged. Since drag and drop may include several different types of data formats, it is here that you will provide visual clues for the formats you are interested in.

For example, if you are interested only in files, you could implement the `DragEnter` handler like this:

```
private void [control]DragEnter(object sender, DragEventArgs e)
{
    if (e.Data.GetDataPresent(DataFormats.FileDrop))
        e.Effect = DragDropEffects.Copy;
    else
        e.Effect = DragDropEffects.None;
}
```

In this case, only a drag operation with files will trigger a visual change to the mouse cursor.

Providing a `DragDrop` hander permits inspection of the drop data formats, and processing of the items dropped on the control. Types that are not expected should be ignored.

Because the user may drop multiple items, you need to manage the collection of drop items, manage associated errors (not shown), and process the items as required:

```
private void [control]DragDrop(object sender, DragEventArgs e)
{
    string fname = ((string[])e.Data.GetData(DataFormats.FileDrop)).First();
…
```

Ensure that it is clear in your application that it supports drag and drop operations; the user would have little clue if you don't provide instructions.

The control you are operating may require you to set the 'AllowDrop' property to true, or none of the above will function!