

//File Shredder Code Sample (C# 4.0)

//It has been a while since I last posted a code sample.

//So here is one for you guys to take a look at.

//Below is the file/directory shredder class.

```
class FileUtilities
```

```
{
```

```
    private static Random Randomizer = new Random();
```

```
    public static bool Shred(string directoryPath, bool shouldDelete = true)
```

```
    {
```

```
        bool success = true;
```

```
        try
```

```
        {
```

```
            string[] files = Directory.GetFiles(directoryPath, "*", SearchOption.AllDirectories);
```

```
            foreach (string file in files)
```

```
            {
```

```
                success &= FileUtilities.ShredFile(file, shouldDelete);
```

```
            }
```

```
            string[] directories = Directory.GetDirectories(directoryPath,
```

```
                "*",
```

```
                SearchOption.AllDirectories).OrderByDescending(str =>
```

```
                    str.Split('\\').Length - 1).ToArray();
```

```
            foreach (string directory in directories)
```

```
            {
```

```
                success &= FileUtilities.ShredDirectory(directory, shouldDelete);
```

```
}
```

```
    success &= FileUtilities.ShredDirectory(directoryPath, shouldDelete);
```

```
}
```

```
catch
```

```
{
```

```
    success = false;
```

```
}
```

```
return success;
```

```
}
```

```
public static bool ShredDirectory(string directoryPath, bool shouldDelete = true)
```

```
{
```

```
    bool success = true;
```

```
    try
```

```
    {
```

```
        DirectoryInfo directoryInfo = new DirectoryInfo(directoryPath);
```

```
        string[] directoryBits = directoryPath.Split("\\");
```

```
        directoryBits[directoryBits.Length - 1] =  
FileUtilities.RandomName(directoryInfo.Name.Length);
```

```
        string newDirectoryPath = String.Join("\\", directoryBits);
```

```
        directoryInfo.MoveTo(newDirectoryPath);
```

```
        if (shouldDelete)
```

```
        {
```

```
            directoryInfo.Delete();
```

```
    }  
}  
catch  
{  
    success = false;  
}  
return success;  
}
```

```
public static bool ShredFile(string filePath, bool shouldDelete = true)  
{  
    bool success = true;  
    try  
    {  
        FileStream fs = new FileStream(filePath, FileMode.Open, FileAccess.Write);  
        for (long i = 0; i < fs.Length; i++)  
        {  
            fs.WriteByte((byte)Randomizer.Next(0, 255));  
        }  
        fs.Close();  
  
        FileInfo fileInfo = new FileInfo(filePath);  
        fileInfo.MoveTo(fileInfo.DirectoryName + @"\" +  
FileUtilities.RandomName(fileInfo.Name.Length));  
  
        if (shouldDelete)  
        {  
            fileInfo.Delete();  
        }  
    }  
}
```

```

        }

    }

    catch

    {

        success = false;

    }

    return success;

}

private static string RandomName(int length)

{

    string fileNameChars =
"abcdefghijklmnopqrstuvwxyz1234567890ABCDEFGHIJKLMNOPQRSTUVWXYZ~!@#$%&'()*+`,`{}[
;";

    string newFileName = String.Empty;

    for (int i = 0; i < length; i++)

    {

        newFileName += fileNameChars[Randomizer.Next(0, fileNameChars.Length)];

    }

    return newFileName;

}

}

```

//The usage calls for these functions as follows:

```
bool success = FileUtilities.Shred(@"D:\Temp"); // This method will recursively shred a file / folder.
```

```
bool success = FileUtilities.ShredDirectory(@"D:\Temp"); // This method will shred the contents of a
folder and the root folder.
```

```
bool success = FileUtilities.ShredFile(@"D:\Temp\test.txt"); // This method will shred a specified file.
```