Lesson 30 - File Handling

Writing to Files

The `System.IO` namespace has various classes that are used for performing numerous operations with files, such as creating and deleting files, reading from or writing to a file, closing a file, and more. The `File` class is one of them.

```
string str = "Hello File!";
File.WriteAllText("hello.txt", str);
```

The `WriteAllText()` method creates a file with the specified path and writes the content to it. If the file already exists, it is **overwritten**. The code above creates a file `test.txt` and writes the contents of the `str` string into it.

> To use the `File` class you need to use the `System.IO` namespace: `using System.IO;`

Reading from Files

You can read the content of a file using the `ReadAllText()` method of the `File` class.

```
string txt = File.ReadAllText("hello.txt");
Console.WriteLine(txt);
```

Other Methods of the File class

`AppendAllText()`

Appends text to the end of the file.

```
string path = "C:\temp\MyTest.txt";
string appendText = "This is extra text";
File.AppendAllText(path, appendText);
```

`Create()`

Creates a file in the specified location.

```
string path = "C:\temp\MyTest.txt";
File.Create(path);
```

`Delete()`

Deletes the specified file.

```
string path = "C:\temp\MyTest.txt";
File.Delete(path);
```

`Exists()`

Determines whether the specified file exists.

```
string path = "C:\temp\MyTest.txt";
Console.WriteLine(File.Exists(path) ? "File exists." : "File does not exist.");
```

`Copy()`

Copies a file to a new location.

```
string path = "C:\temp\MyTest.txt";
string pathCopied = "C:\temp\Copied.txt";
File.Copy(path, pathCopied);
```

`Move()`

Moves a specified file to a new location.

```
string path = "C:\temp\MyTest.txt";
string pathMoved = "C:\tempMove\MyText.txt";
File.Move(path, pathMoved);
```

> All methods automatically close the file after performing the operation.

Configuration Handling

Logging