Create files and directories

2 minutes 100 XP

Creating and deleting new files and directories programmatically is a common requirement for line-of-business applications.

So far, you've learned how to work with files and directories by using the Directory class. You can also use the Directory class to create, delete, copy, move, and otherwise manipulate directories on a system programmatically. You can use an analogous class, File, to do the same on files.

Here, you learn how to use the Directory and File classes to create directories and files.

Create directories

Use the Directory.CreateDirectory method to create directories. The following method creates a new folder called newDir inside the 201 folder:

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Directory.CreateDirectory(Path.Combine(Directory.GetCurrentDirectory(), "stores","201","newDir"));

If /stores/201 doesn't already exist, it's created automatically. The CreateDirectory method doesn't fail. It creates any directories and subdirectories passed to it.

Make sure directories exist

Sometimes, you need to check if a directory already exists. For example, you might need to check before you create a file in a specified directory to avoid an exception that could cause your program to stop abruptly.

To see if a directory exists, use the Directory. Exists method:

C#

bool doesDirectoryExist = Directory.Exists(filePath);

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Create files

You can create files by using the File. WriteAllText method. This method takes in a path to the file and the data you want to write to the file already exists, it's overwritten.

For instance, this code creates a file called *greeting.txt* with the text "Hello World!" inside:

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File.WriteAllText(Path.Combine(Directory.GetCurrentDirectory(), "greeting.txt"), "Hello World!");

In the next exercise, you use your knowledge of how to create files and directories to extend the program by creating a directory that stores the total of all the individual stores' sales files.