

Test - .NET Application Developer (C#)

Introduction

The primary focus of this test is to check your ability on creating readable and efficient code by using C#. We'll check how well you understand the technical requirements and how well you are able structure and isolate components in your source code.

Task

Let's presume we've got two directories, each one contains several subdirectories and files. Each subdirectory again contains directories and files (... and so on).

Your task is to write an application which can be used to compare both directories and show a "diff" description of what must be done to make the structure of the second directory identical to the one of the first directory.

The rules are:

- Files and directories either do exist or not, creation date or file contents don't matter
- To delete a directory, this directory must be empty
- To create a directory or file, the containing directory must exist

By following the rules and order above, display all the steps necessary for making the second directory identical to the first one. The result can be shown as Windows Forms or preferable using a WPF Application.

You are free to decide how the results are displayed or if you want to graphically highlight the necessary steps.

As an example, a basic version could simply show the steps in a list:

1. Delete file "file0.ext"
2. Create file "file1.ext"
3. Create directory "dir1"
4. Create directory "dir1\dir2"
5. Create file "dir1\dir2\file2.ext"



- You can use the free Visual Studio 2017 Community Edition, which is available via <https://www.visualstudio.com/downloads/>
- The application can target .NET Framework versions from 2.0 to 4.6.2
- Do not use optional frameworks or API's that are not part of the .NET Framework
- Please use code comments if you want to highlight things for the reviewer

Please provide all files necessary to compile and run the project to us within 7 days