# Assignment 7 – File Systems and Asynchronous Programming

Due: Tuesday, December 13, 11:59PM

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| 1. | Create a program that allows a user to browse to a folder. The program should then list all the folders and files that are in that folder and how many there are. The form should have a checkbox that lets the user decide if it should only count folders/files in the top directory, or if it should include subdirectories. Use the existing .NET classes FolderBrowserDialog and Directory to help you (we’ve used similar in class; use the intellisense and online documentation to help you figure out how to use them, and/or Chapter 17 in the book). | 50% |
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| 2. | If you choose a folder with many items underneath, such as C:\, and if you are looking in subdirectories, this operation can take a long time and cause the form to become unresponsive. Modify the form to use asynchronous programming (multithreading) to prevent the program from ‘blocking’ (when it says ‘this program is not responding’ because its busy working). You will need the keywords async, await, and the Task class. Refer to Chapter 26 to help you. | 50% |
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Submit the files to the assignment on MUOnline in a compressed (.zip) format. Include all project files for your programming solution. The submission should follow the naming convention:

IST303\_*LastName\_FirstInitial\_*A7.zip