

Assignment 2

Due Date: February 21, 2022 at 7:30 PM

Overview

This assignment will be worth **4.5%** of your total grade. Parts 1 and 2 are designed to utilize the asynchronous properties of Node.js. Part 3 is a way to try out a new, fun package.

Important: If you are on a Windows machine, do not take into account `/r` for anything, you will lose points if you do.

Specifications

For this assignment, you will need to understand the asynchronous properties of Node.js.

Part 1: Asynchronous Newline Count

Write a program called `asyncNewlines.js` that uses a single asynchronous filesystem operation to read a file and print the number of newlines it contains to the console (`stdout`).

You will have a file name as the third argument just like in assignment 1.

Hint: Instead of `fs.readFileSync()` you will want to use `fs.readFile()` and instead of using the return value of this method you need to collect the value from a callback function that you pass in as the second argument.

An example run would be: `node asyncNewlines.js test.txt`

Part 2: File Count

Write a program called `asyncFileCount.js` that prints the number of files with a given extension in a given directory. The first argument will be the path to the directory we want to filter on (e.g. `"/path/to/dir/"`) and a file extension to filter by as the second argument.

For example, if you get `'.txt'` as the second argument then you will need to filter the list to only files that end with `.txt`

Below are some example runs:

An example run would be: `node asyncFileCount.js . .js`

Another example run would be: `node asyncFileCount.js /Users/jalirani/Desktop`

.docx

Part 3: Error Handling

You will not submit a file for this portion of the assignment, rather ‘spice’ up the output for the previous two parts.

- For part 1: display a red error message in the console if the user does not provide a file or if the filename provided cannot be read, display a red error message saying: “No file found”. All other outputs should be in green.
- For part 2: if there are no files in the directory provided matching the file extension given, display “No files found with *extension_name* using a red error message. All other outputs should be in green.

Try looking at the package, Chalk

Submission

Please submit the following on Blackboard (may need submit as a .zip):

- asyncNewlines.js
- asyncFileCount.js