

**22/SP-COP-2805C-61163 Java Advanced**

**Assignment 12.21**

Document Version: 0.1

Version Date: 05/05/2022

Created By: Tristan Rogers

# Document Version Control

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Author | Rationale |
| 0.1 | 2022 MAY 05 | Tristan Rogers | First Draft |

# Document Purpose

The purpose of this document is to outline and demonstrate the ability to read and sort a file within Java.

# Technical Specifications

## Purpose of Technical Implementation

The purpose of this program is to demonstrate the ability to read and sort data within a file. The program will check to see if the file exists. If it does, it will read the file. If it does not exist, the program will throw an exception and display a message that the file does not exist. Using boolean values while reading the file will determine if the file is sorted properly.

## Technical Implementation Components

* This program starts by creating a new file using the available file path. It will check to see if the file exists. If it does, it will read and determine the sorting of the file. If it does not exist, the program will display an error message for the exception. Once it reads the file, it will ensure that the file is sorted properly. If it is not, it will return the first two strings that are out of order.

## Technical Implementation Pseudocode

*Search for file*

*if file exists*

*read file*

*determine if file is properly sorted*

*return first two unsorted values*

## Assignment 12-21 Implementation

This program contains only one main method.

First, the program checks to see if the file exists. If the file does not exist, an error message is displayed saying that the file does not exist.

If the file does exist, it will display the file name to the user to ensure that the correct file was selected. Then it will us the boolean value dataSorted to read through the strings within the file to search if there are any out of order. If the value gets set to false, it will record it and continue sorting the data. Once the first two abnormalities are found, the program will display them to the user.

If all strings within the file are in increasing order, a message will be displayed to the user that the data is in increasing order.