

**<22/SP-COP-2800-72035> Java Advanced**

**<Assignment 12-15>**

Document Version: 0.1

Version Date: July 17, 2022

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# Document Version Control

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| Version | Date | Author | Rationale |
| 0.1 | 2022 JUL 17 | David Duron | Submit Assignment |

# Document Purpose

The purpose of this document is to define the Main class and discuss how to implement and use it.

# Technical Specifications

## Purpose of Technical Implementation

The purpose of the Main class is to determine if a file exists, and if not, write data to a file; if the file is already in existence, it will display a message to the user.

## Technical Implementation Components

I supplemented the Main class with the utilities and io built-in Java APIs. The Main class begins by creating an object instance of the File class and we immediately determine if the specified file exists. Then, we create an object instance of the PrintWriter class inside of a try catch method. The reasoning for the try catch method is because the app will continue to read all of our source code and will fail to perform any other actions. Once the try catch is completed, we then create an ArrayList object and perform another try catch method to create an object instance of the Scanner class and use a while loop to read each line. Once that is completed, we then use the Collections.sort method and pass our ArrayList object as an argument. Finally, we display the data in ascending order.

**Properties**

1. None

**Methods**

1. public static void main(String[] args) throws Exception

**Constructors**

The developer can create an instance of the Main class one way

1. public static void main(String[] args) throws Exception

# Technical Implementation Pseudocode

1. import the java utilities api
2. import the java input output api
3. create the main class
4. create the constructor
5. create File object
6. check if exists, run code for if yes or if no
7. try creation of PrintWriter object
8. catch for loop that writes 100 random int to the file
9. create object instance of ArrayList class and cast as Integer
10. try creation of scanner object
11. catch while loop to iterate through each line of the file
12. use the Collections class to sort our ArrayList object
13. display data in ascending order

End