**CSC123 Programming Project 3**

**Exception and Exception Handling**

**File Exceptions**

1. Develop a class that reads an array of String from a file. The class should have a method

void getStrings()

which reads from the file, and catches in order: FileNotFoundException (handled by printing “Error – file not found”), EOFException (handled by printing “Done reading file”), and IOException (handled by printing “Problem reading file” + e.getMessage()). Use a finally block to close the file.

1. Develop another class that reads characters from a file and echo prints each one. The class should have a method

void getChars()

which reads characters from a file and echo on screen. The method doesn’t handle any exceptions but throws exception to the caller.

1. Develop a test class that reads two file names from the user and read an array of String from the first file and reads characters from the second file. Your test method should catch and handle an IOException by printing “Error” along with explanation, and a FileNotFoundException by printing “File <filename> not Found”. Catch these exceptions in the correct order (IOException last).

**Requirements**

1. Design all classes.
2. Implement all classes.
3. Test the complete implementation.

**Submission**

The completed project should be included in a single file and submitted onto the blackboard. The hardcopy or email submission will not be accepted. Your submission should include:

1. The class diagram.
2. The Java code for all classes.
3. Your test: including test data, test cases, and test results