**Software Used**

Apache Maven 3.0.5

STS

Java Platform SE 6

jUnit 4

**Two pronged strategy:** I have solved the given assignment using 2 different programming approaches. Each approach was created as a Maven Module.

**First Approach (fed-file-handler)**

This approach uses design and development methodology which is widespread.

Interface is without clear boundaries. "Program to an interface" with little OO priciples.

Less regard has been paid to OO features and have used Functional approach.

Classes have many responsibilities and is fragile. Code can grow uncontrollably.

I have used JUnit and TDD to design the code. Source code / tests are attached in the Zip file.

Here are the major files.

Interface : com.fed.file.api.IFedFileTask

Implementation : com.fed.file.task.FedFileTask

Utility : com.fed.file.util.FileUtility

Application : com.fed.file.app.FedAssignmentApp

Stemmer as is.

As you can see, code fulfills everything that is required in the assignment

I have intentionally not used comments in the code. I try to make my code readable so comments, that can become stale fast, are not required.

**How to Run**

For ease, I have created Executable Jar

Extract the jar file *fed-file-handler.jar*

Run using : java –jar fed-file-handler.jar

**Second Approach (fed-file-handler-oo)**

Here I have tried to design my code applying OO principles as much as possible.

My objects are well defined and have a Single Responsibility.

The classes are Designed to Interfaces.

Objects are Immutable.

OO, rather than functional constructs, are used. This has caused some duplicate code in tests but that should be ok.

Here also TDD using jUnit has been used to design the code.

**Major files.**

Interfaces under the package com.fed.file.api

Implementations under the package com.fed.file.task

Application com.fed.file.app.FedAssignmentApp

Stemmer as is.

I have intentionally not used comments in the code. I try to make my code readable so comments, that can become stale fast, are not required.

**How to Run**

For ease, I have created Executable Jar

Extract the jar file *fed-file-handler-oo.jar*

Run using : java –jar fed-file-handler-oo.jar

**Outputs are attached**

Output from approach 1 : fed-file-handler.out

Output from approach 2 : fed-file-handler-oo.out

Source Code are attached in one Zip File.