Exception Handling Assignment

Write a program that reads an ARXML file containing a list of containers, each with a unique ID, and reorders the containers alphabetically by their name sub- container ""SHORT-NAME"

". The program should write the reordered containers to a new ARXML file.

ARXML stands for Autosar xml

Autosar stands for AUTomotive Open System ARchitecture

Delivery:

1- Link to a **git-hub repository** including your implementation.
2- Readme.md file must exist with proper documentation.
3- **Batch file** which invoke the three possible cases:
   - Normal case --> provide the input file and specify it's name inside the batch script.
   - Not valid Autosar file case --> provide the file also
   - Empty file
   - The goal is that I'm able to run the batch file to test all cases.
   - Include compilation of the java file at the beginning.

Requirements:

1- The name of the arxml file shall be **an argument** which needs to passed through the command line.
2- If the file is not having .arxml extension then you should trigger a user defined **checked** exception "NotVaildAutosarFileException".
3- If the file is empty, then you should trigger user defined **unchecked** exception "EmptyAutosarFileException"
4- The output file shall be named as the same of the input file concatenated with "_mod.arxml"
   - e.g. if the input was named "Rte_Ecuc.arxml" then the output should be "Rte_Ecuc_mod.arxml".
5- Assume any missing requirement.

Sample input file:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<AUTOSAR>
    <CONTAINER UUID="198ae269-8478-44bd-92b5-14982c4ff68a">
        <SHORT-NAME>ContainerB</SHORT-NAME>
        <LONG-NAME>AA</LONG-NAME>
    </CONTAINER>
    <CONTAINER UUID="198ae269-8478-44bd-92b5-14982c4ff68b">
        <SHORT-NAME>ContainerA</SHORT-NAME>
        <LONG-NAME>BB</LONG-NAME>
    </CONTAINER>
    <CONTAINER UUID="198ae269-8478-44bd-92b5-14982c4ff68c">
        <SHORT-NAME>ContainerC</SHORT-NAME>
        <LONG-NAME>CC</LONG-NAME>
    </CONTAINER>
</AUTOSAR>
```

Output should be:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<AUTOSAR>
    <CONTAINER UUID="198ae269-8478-44bd-92b5-14982c4ff68b">
        <SHORT-NAME>ContainerA</SHORT-NAME>
        <LONG-NAME>BB</LONG-NAME>
    </CONTAINER>
    <CONTAINER UUID="198ae269-8478-44bd-92b5-14982c4ff68a">
        <SHORT-NAME>ContainerB</SHORT-NAME>
        <LONG-NAME>AA</LONG-NAME>
    </CONTAINER>
    <CONTAINER UUID="198ae269-8478-44bd-92b5-14982c4ff68c">
        <SHORT-NAME>ContainerC</SHORT-NAME>
        <LONG-NAME>CC</LONG-NAME>
    </CONTAINER>
</AUTOSAR>
```