**FilesUtility.java**

**package** com.assessment;

**import** java.io.File;

**import** java.io.FileNotFoundException;

**import** java.io.FileWriter;

**import** java.io.IOException;

**import** java.util.Calendar;

**public** **class** FilesUtility {

**static** String *Folder*=System.*getProperty*("user.dir")+"//AppFolder//";

**public** **void** addFile(String fileName)

{

**try**{

File file = **new** File(*Folder*+fileName);

**if**(file.createNewFile())

{

FileWriter fr = **new** FileWriter(file);

fr.write("This file is created on "+ Calendar.*getInstance*().getTime());

System.***out***.println("\*\* File:"+fileName+" created successfully..");

**if**(fr!=**null**)

fr.close();

}

**else**

{

System.***err***.println("File:"+fileName+" already exist");

}

} **catch** (FileNotFoundException e) {

System.***err***.println("Exception Occurred while creating the file "+fileName);

} **catch** (IOException e) {

System.***err***.println("Exception Occurred while creating the file "+fileName);

}

}

**public** **void** sortFileNames()

{

File file = **new** File(*Folder*);

**try**{

String[] fileNames = file.list();

**if**(fileNames.length==0)

{

System.***out***.println("\*\* There are no files to display..");

}**else**

{

//Bubble sort in Ascending Order- ignoring case sensitivity

**for**(**int** i=0;i<fileNames.length;i++)

{

**for**(**int** j=i;j<fileNames.length;j++)

{

**if**(fileNames[i].compareToIgnoreCase(fileNames[j])>0)

{

String temp=fileNames[i];

fileNames[i]=fileNames[j];

fileNames[j]=temp;

}

}

}

System.***out***.println("\*\* please find below the list of files present in the Application");

**for**(String fileName : fileNames)

{

System.***out***.println(fileName);

}

}

}**catch** (Exception e) {

System.***err***.println("Exception occurred while trying to display the files");

}

}

**public** **void** deleteFile(String fileName)

{

File file = **new** File(*Folder*+fileName);

**try**{

**if**(file.exists())

{

file.delete();

**if**(!file.exists())

{

System.***out***.println("\*\* File:"+fileName+" deleted successfully..");

}**else**

{

System.***err***.println("File:"+fileName+" not deleted");

}

}**else**

{

System.***err***.println("File:"+fileName+" does not exist");

}

}**catch** (Exception e) {

System.***err***.println("Exception occurred while trying to delete the File:"+fileName);

}

}

**public** **void** searchFile(String fileName)

{

File file = **new** File(*Folder*+fileName);

**try**{

**if**(file.exists())

{

System.***out***.println("\*\* File:"+fileName+" found successfully..");

}**else**

{

System.***err***.println("File:"+fileName+" not found");

}

}**catch** (Exception e) {

System.***err***.println("Exception occurred while trying to Search for the File:"+fileName);

}

}

}

**Main.Java**

**package** com.assessment;

**import** java.util.Scanner;

**public** **class** Main {

**public** **static** **void** main(String[] args) {

Scanner sc = **new** Scanner(System.***in***);

FilesUtility fUtil = **new** FilesUtility();

**boolean** isCloseCalled = **false**;

**do**{

System.***out***.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Main Menu \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

System.***out***.println("Choose the Operation you want to perform:");

System.***out***.println("enter 1 to Retrieve the file names in an ascending order");

System.***out***.println("enter 2 to Add a file, Delete a file or Search for a file in the Application");

System.***out***.println("enter 3 to Close the Application");

System.***out***.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

**int** operation=0;

**try**{

operation=Integer.*parseInt*(sc.nextLine());

}**catch** (Exception e) {

//do not do anything

}

String fileName="";

**switch**(operation)

{

**case** 1:

fUtil.sortFileNames();

**break**;

**case** 2:

**boolean** continueCurrentContext=**true**;

**do**{

System.***out***.println("\*\*\*\*\*\*\*\*\*\*\* Business-level Operations Menu \*\*\*\*\*\*\*\*\*\*\*");

System.***out***.println("Choose the Operation you want to perform:");

System.***out***.println("enter 1 to Add a file to the application");

System.***out***.println("enter 2 to Delete a file from the application");

System.***out***.println("enter 3 to Search a file in the application");

System.***out***.println("enter 4 to go back to Main Menu");

System.***out***.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

**int** option=0;

**try**{

option=Integer.*parseInt*(sc.nextLine());

}

**catch** (Exception e) {

// do not do anythig

}

**switch**(option)

{

**case** 1: System.***out***.println("Enter the name of the file you want to add");

fileName=sc.nextLine();

fUtil.addFile(fileName);

**break**;

**case** 2: System.***out***.println("Enter the name of the file you want to delete");

fileName=sc.nextLine();

fUtil.deleteFile(fileName);

**break**;

**case** 3: System.***out***.println("Enter the name of the file you want to search for");

fileName=sc.nextLine();

fUtil.searchFile(fileName);

**break**;

**case** 4: System.***out***.println("You chose to navigate to Main Menu.");

continueCurrentContext=**false**;

**break**;

**default**: System.***out***.println("you did not choose the valid option.. please try again!");

**break**;

}

}**while**(continueCurrentContext);

**break**;

**case** 3: System.***out***.println("You chose to close the Application, Closing the Application..");

isCloseCalled=**true**;

**break**;

**default**: System.***out***.println("you did not choose the valid option.. please try again!");

**break**;

}

}**while**(!isCloseCalled);

**if**(sc!=**null**) sc.close();

System.***out***.println("Application Closed Successfully!");

}

}