**package** com.shazia.LockedMe;

**import** java.io.File;

**import** java.io.IOException;

**import** java.util.Arrays;

**import** java.util.Comparator;

**import** java.util.Scanner;

**public** **class** VirtualKey {

/\*problem statement: creating a protocol of file handling to perform

\*various methods like add, delete, search, sort and end application through

\*user interaction in console/command line output

\*

\*Basically writing a java code, where operations are planned to be

\*completed in 3 sprints

\*

\* 1.Retrieve & set files in ascending order(sorting)

\* 2.Performing business level operations

\* A)add--creating a file

\* B)delete--delete an existing file

\* C)search--search an existing file

\* D)Go Back--just breaking the loop

\* 3.Close the application

\*/

//Creating business level operations

**public** **static** **void** add() {//method to add or create a file

//showing two ways to throw an exception either from operational method or in the main method

**try** {

System.***out***.println("Enter your file name (ex:abc.txt) to add in existing directory");

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

String takeFileName = sc.nextLine();

File addFile = **new** File("F:\\simplilearn\\Shazia\_files\\"+takeFileName);

**if**(addFile.createNewFile())

System.***out***.println("New File "+takeFileName +" is created");

**else**

System.***out***.println("File already exists");

}

**catch**(IOException e){

System.***out***.println("-------------EXCEPTION OCCURRED-------------");

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

}

}

//deletion method starts here

**public** **static** **void** delete()

{

System.***out***.println("Enter file name (ex:- abc.txt) to delete");

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

String takeFileName = sc.nextLine();

File deleteFile = **new** File("F:\\simplilearn\\Shazia\_files\\"+takeFileName);

**if**(deleteFile.delete())

System.***out***.println("Given file "+takeFileName+" is deleted successfully");

**else**

System.***out***.println("File is not deleted/ file not found(FNF)");

}

//searching method starts here

**public** **static** **void** search()

{

System.***out***.println("Enter your file name to search");

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

String takeFileName = **null**;

takeFileName = sc.nextLine();

File searchFileName = **new** File("F:\\simplilearn\\Shazia\_files\\"+takeFileName);

**if**( searchFileName.exists())

{

System.***out***.println("File "+takeFileName+" is available");

}

**else**

System.***out***.println("File is not available/File not found(FNF)");

}

//METHOD FOR SORTING OF FILES IN ASCENDING ORDER

**public** **static** **void** ascendingOrder()

{

System.***out***.println("ENTER PATH TO SHOW YOUR FILES IN ASCENDING ORDER (EX: path\\FileName.txt):\n");

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

String filePath = sc.nextLine();

File dir = **new** File(filePath);

**if** (dir.isDirectory())

{

File[] files = dir.listFiles();

System.***out***.println("THIS PATH CONTAINS FOLLOWING FILES:\n");

**for**(File file:files)//showing ascending order

{

System.***out***.println(file.getName());

}

*show*(files);//calling ascending order method

System.***out***.println("\nPRINTING THE FILE NAMES IN ASCENDING ORDER :\n");

**for**(File file:files)//showing ascending order

{

System.***out***.println(file.getName());

}

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

}

**else**

{

System.***out***.println("directory not found");

}

}

**private** **static** **void** show(File[] files)//sorting by name only

{

Arrays.*sort*(files, **new** Comparator<Object>()

{

**public** **int** compare(Object f1, Object f2)

{

**return** ((File)f1).getName().compareTo(((File)f2).getName());

}

});

}

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

System.***out***.println("WELCOME TO LOCKEDME.COM VIRTUAL KEY REPOSITORY\n");

String devName ="DEVELOPER NAME : S KHIZRATH SHAZIA";

String cadre= "DESIGNATION : JAVA DEVELOPER";

String date = "last updated on : 10th june 2022";

System.***out***.println(devName+"\n"+cadre+"\n"+date+"\n");

**while**(**true**)/\*creating an infinite loop which stops only when the user opts to close the application option\*/

{

System.***out***.println("\nSELECT THE OPERATION TO PERFORM");

System.***out***.println("Enter 1: Get file names in ascending order");

System.***out***.println("Enter 2: For Business Level Operation");

System.***out***.println("Enter 3: Close the Application");

System.***out***.println("Enter your choice :- \n");

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

**int** option= choice.nextInt();

**if**(option==1)

{

*ascendingOrder*();

}

**else** **if**(option ==2)

{

System.***out***.println("\nSELECT ANY ONE BUSINESS LEVEL OPERATION TO PERFORM");

System.***out***.println("Enter 1: Add file");

System.***out***.println("Enter 2: Delete file");

System.***out***.println("Enter 3: Search file");

System.***out***.println("Enter 4: Go Back to previous page\n");

System.***out***.println("Enter your choice :- \n");

**int** input = choice.nextInt();

**switch**(input)

{

**case** 1: { *add*(); **break**; }

**case** 2: { *delete*(); **break**; }

**case** 3: { *search*(); **break**; }

**case** 4: { System.***out***.println("Going back to previous page"); **break**; }

}

}

**else** **if**(option == 3 )

{ System.***out***.println(" Exited the Application \n Thank you for using LOCKEDME.COM \n ");

System.*exit*(option);

}

**else**

{

System.***out***.println("Kindly enter valid input");

}

}

}

}