// Yousif Al-Dhfeery

package Lesson\_3;

import java.io.File;

import java.io.FileWriter;

import java.io.IOException;

import java.nio.charset.StandardCharsets;

import java.nio.file.Paths;

import java.util.Collections;

import java.util.\*;

import java.nio.charset.StandardCharsets;

import java.nio.file.\*;

import java.io.\*;

public class p\_3\_16\_FileHandling {

// Create a file

public void CreateFile(String filename) throws IOException{

File file= new File(filename+".txt"); // path: in the project directory

if(file.createNewFile()) {

System.out.println("File ("+filename+") Created.");

}

else {

System.out.println("File alrasy exist !!");

}

}

// Read a file

public static List<String> readFileInList(String fileName)

{

List<String> lines = Collections.emptyList();

try {

lines = Files.readAllLines(Paths.get(fileName), StandardCharsets.UTF\_8); // Read all the lines

}

catch (IOException e) {

//e.printStackTrace();

System.out.println("\n Read file error !! \n");

}

return lines;

}

// Append to a file

public void appendToFile(String filePath, String appendedContent) {

File fileToBeModified = new File(filePath);

String oldContent = "";

BufferedReader reader = null;

FileWriter writer = null;

try

{

reader = new BufferedReader(new FileReader(fileToBeModified));

String line = reader.readLine(); // Read the line

while (line != null) // While loop to get the text line by line

{

oldContent = oldContent + line + System.lineSeparator();

line = reader.readLine();

}

String newContent = oldContent + appendedContent;

writer = new FileWriter(fileToBeModified);

writer.write(newContent);

}

catch (IOException e){

System.out.println("File append error");

}

finally

{

try

{

reader.close();

writer.close();

}

catch (IOException e)

{

e.printStackTrace();

}

}

}

public void mainMnue() {

System.out.print("\n-- Main Mnue --\n"

+" 1-Create a file\n"

+ " 2-Read a file\n"

+ " 3-Write to a file (Append)\n"

+ " 4-Exit\n"

+ "\n Select Option No: ");

// The scanner kb

Scanner kb = new Scanner(System.in);

int userInput=0;

try {

userInput=kb.nextInt();

if(userInput < 1 || userInput > 4) { // Range boundry

System.out.println("No out of range!!. Plese try agin");

mainMnue();

}

}

catch (Exception e) {

System.out.println("Wrong input !!. Plese try agin");

mainMnue();

}

// The options switch block

switch(userInput) {

// ------------------------------------

// To crate a file

case 1:

System.out.println("## Create a file");

System.out.print("Enter the file name: ");

try {

String filename = kb.next();

CreateFile(filename);

} catch (Exception e) {

System.out.println("Error!! try agin");

mainMnue();

}

mainMnue();

break;

// ------------------------------------

// To read a file

case 2:

System.out.println("## Read a file ##");

System.out.print("Enter the file name to read: ");

try {

String filename = kb.next();

List l = readFileInList(filename+".txt");

Iterator<String> itr = l.iterator(); // iterator to print the lines one by one

while (itr.hasNext())

System.out.println(itr.next());

} catch (Exception e) {

System.out.println("Error!! try agin");

mainMnue();

}

mainMnue();

break;

// ------------------------------------

// Write to a file (Append)

case 3:

System.out.println("## Append to a file ##");

System.out.print("Enter the file name: ");

try {

String filename = kb.next();

System.out.print("\nEnter text to append: ");

String newText = kb.next();

appendToFile(filename+".txt", newText);

}

catch (Exception e) {

System.out.println("Error!! try agin");

mainMnue();

}

mainMnue();

break;

// ------------------------------------

// To close to program

case 4:

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

System.exit(0);

break;

}

}

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

p\_3\_16\_FileHandling b1 = new p\_3\_16\_FileHandling();

b1.mainMnue();

}

}