Main.Java

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Coder Tester lab  
29 September 2020 -  
\*/  
  
  
//Status update for 7 October 2020  
/\*  
Coder sorting is complete, just got to do testing and then let user pick choice  
 \*/  
  
import* java.io.BufferedReader;  
*import* java.io.File;  
*import* java.io.FileReader;  
*import* java.io.IOException;  
*import* java.util.ArrayList;  
*import* java.util.*Comparator*;  
*import* java.util.*List*;  
*import* java.util.Scanner;  
  
*public class* Main {  
 *// Arrays to see if the randomindex has already been used  
 static boolean*[] *usedCoder* = *new boolean*[33];  
 *static boolean*[] *usedTester* = *new boolean*[33];  
  
 *public static void* main(String[] args) {  
 *//printing out to make sure the values are starting out as false  
 // initialize variables and creating array list* File file;  
 *//String TempeoryStorage is for coders first* String tempeoryStorage = *null*;  
 *//String testersTemperory is for testers first* String testersTempeory = *null*;  
  
 *List* <String> studentPairsCodersFirst = *new* ArrayList<>();  
 *List* <String> studentPairsTestersFirst = *new* ArrayList<>();  
 Scanner in = *new* Scanner(System.*in*);  
 *List*<String> allStudents = *new* ArrayList<>();  
  
  
  
  
 BufferedReader br;  
 *int* numOfStudents;  
  
  
 *//Reading file into an array using bufferreader  
  
 try* {  
 file = *new* File("C:\\Users\\mpari\\Documents\\coding projects\\Java\\Coder Tester Software Design Program\\src\\SD\_ClassList.txt");  
 br = *new* BufferedReader(*new* FileReader(String.*valueOf*(file)));  
 *while* (br.ready()) {  
 allStudents.add(br.readLine());  
 }  
 } *catch* (IOException e) {  
 System.*out*.println(e.getMessage());  
 }  
  
  
 *//Asking user for how many students do they want* System.*out*.println("How many students should be in pairs?");  
 numOfStudents = in.nextInt();  
 *if* (numOfStudents > allStudents.size() || numOfStudents <= 0) {  
 System.*out*.println("Sorry, the amount of students you inputted is larger than the students" +  
 " in the file. Input a different number.");  
 numOfStudents = in.nextInt();  
 }  
  
 System.*out*.println("Do you want your list to be sorted coders first or testers first? Note: Choose" +  
 " Testers first if you want it sorted by testers. And vice versa.");  
  
 String codersOrTesters = in.next();  
  
 *//This if statement is coders first  
 if* (codersOrTesters.toLowerCase().equals("coders")) {  
  
 *int* i = 0;  
 *while* (i != numOfStudents) {  
 i++;  
  
 *// method for coders first* tempeoryStorage = ((*studentsAllCoders*(allStudents, numOfStudents)));  
 studentPairsCodersFirst.add(tempeoryStorage);  
 }  
  
 studentPairsCodersFirst.sort(*Comparator*.*comparing*(String::toString));  
 *//Formatting output* String firstLine = String.*format*("%20S %20S ", " Coders", "Testers");  
 System.*out*.println(firstLine);  
 String secondLine = String.*format*("%20S %20S ", " Last Name", " Last Name");  
 System.*out*.println(secondLine);  
 System.*out*.println("-----------------------------------------------");  
 *//for loop to run for amount of coders and then also to split the string and output  
 for* (*int* P = 0; P < studentPairsCodersFirst.size(); P++) {  
 String value = studentPairsCodersFirst.get(P);  
 String[] split = value.split(",");  
 String names = String.*format*("%20S %20S ", split[0], split[1]);  
 System.*out*.println(names);  
 }  
 }  
 *else* {  
 *int* i = 0;  
 *while* (i != numOfStudents) {  
 i++;  
  
 *// method for testers first* testersTempeory = ((*studentsAllTesters*(allStudents, numOfStudents)));  
 studentPairsTestersFirst.add(testersTempeory);  
 }  
  
 studentPairsTestersFirst.sort(*Comparator*.*comparing*(String::toString));  
 *//Formatting output but this time testers first* String firstLine = String.*format*("%20S %20S ", " Coders", "Testers");  
 System.*out*.println(firstLine);  
 String secondLine = String.*format*("%20S %20S ", " Last Name", " Last Name");  
 System.*out*.println(secondLine);  
 System.*out*.println("-----------------------------------------------");  
 *//for loop to run for amount of coders and then also to split the string and output  
 for* (*int* P = 0; P < studentPairsTestersFirst.size(); P++) {  
 String value = studentPairsTestersFirst.get(P);  
 String[] split = value.split(",");  
 String names = String.*format*("%20S %20S ", split[0], split[1]);  
 System.*out*.println(names);  
 }  
  
 }  
 }  
  
 *private static* String studentsAllTesters(*List*<String> allStudents, *int* numOfStudents) {  
 *while* (*true*) {  
 *//common variable for randomindex  
 int* studentsAllLength = allStudents.size();  
 *//random index and inputting arraylist value into a string  
 int* randomIndex = (*int*) (Math.*random*() \* studentsAllLength);  
 *// String randomElement = allStudents.get(randomIndex); Trying to see if using array directly instead of array will work better  
 int* randomIndex2 = (*int*) (Math.*random*() \* studentsAllLength);  
 *//String randomElement2 = allStudents.get(randomIndex2);  
 if* ((!*usedTester*[randomIndex2] && !*usedCoder*[randomIndex]) && randomIndex != randomIndex2) {  
 *// System.out.println(randomIndex);  
 // System.out.println(randomIndex2);  
 // System.out.println(Arrays.toString(usedCoder));  
 // System.out.println(Arrays.toString(usedTester));* String last = allStudents.get(randomIndex2) + "," + allStudents.get(randomIndex);  
 *usedCoder*[randomIndex2] = *true*;  
 *usedTester*[randomIndex] = *true*;  
 *return* last;  
 }  
 }  
 }  
  
 *public static* String studentsAllCoders(*List*<String> allStudents, *int* numOfStudents) {  
 *while* (*true*) {  
 *//common variable for randomindex  
 int* studentsAllLength = allStudents.size();  
 *//random index and inputting arraylist value into a string  
 int* randomIndex = (*int*) (Math.*random*() \* studentsAllLength);  
 *// String randomElement = allStudents.get(randomIndex); Trying to see if using array directly instead of array will work better  
 int* randomIndex2 = (*int*) (Math.*random*() \* studentsAllLength);  
 *//String randomElement2 = allStudents.get(randomIndex2);  
 if* ((!*usedTester*[randomIndex] && !*usedCoder*[randomIndex2]) && randomIndex != randomIndex2)  
 {  
 *// System.out.println(randomIndex);  
 // System.out.println(randomIndex2);  
 // System.out.println(Arrays.toString(usedCoder));  
 // System.out.println(Arrays.toString(usedTester));* String last = allStudents.get(randomIndex) + "," + allStudents.get(randomIndex2);  
 *usedCoder*[randomIndex2] = *true*;  
 *usedTester*[randomIndex] = *true*;  
 *return* last;  
 }  
 }  
 }  
}

Output

Output might not be formatted correctly because of copy paste and different text formats

C:\Users\mpari\.jdks\liberica-14.0.2\bin\java.exe -javaagent:C:\Users\mpari\AppData\Local\JetBrains\Toolbox\apps\IDEA-U\ch-0\202.7660.26\lib\idea\_rt.jar=58207:C:\Users\mpari\AppData\Local\JetBrains\Toolbox\apps\IDEA-U\ch-0\202.7660.26\bin -Dfile.encoding=UTF-8 -classpath "C:\Users\mpari\Documents\coding projects\Java\Coder Tester Software Design Program\out\production\Coder Tester Software Design Program" Main

How many students should be in pairs?

30

Do you want your list to be sorted coders first or testers first? Note: Choose Testers first if you want it sorted by testers. And vice versa.

testers

CODERS TESTERS

LAST NAME LAST NAME

-----------------------------------------------

BORKAR BALUSAMY

BORKAR CRIMI

BORKAR SZACILLO

CHITNEEDI ELIAS

CHITNEEDI ELIAS

CHITNEEDI LUCIANO

CHITNEEDI PARIKH

CHITNEEDI SONI

CHITNEEDI SZACILLO

COUTTS PARRISH-LEWIS

COUTTS SONI

FAVA KOROLEV

GLADSTONE GANDHI

GUPTA DALAL

GUPTA KIM

GUPTA PRZESTRZELSKI

GUPTA PRZESTRZELSKI

IBRAHIM MUNOT

KUMARAN HUANG

MUZYKA BLANKE

MUZYKA HUANG

PAGLINGAYEN CRIMI

PARK HUANG

PARK PARRISH-LEWIS

PARK PATEL

PARK SZACILLO

RABTZOW ELIAS

REVANKAR LUCIANO

REVANKAR PARIKH

REVANKAR SZACILLO

Process finished with exit code 0