CS 1301 Programming Assignment#11

11/7/2016

Fares

Write a java class named ProcessGrades11 whose UML diagram is shown below:

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| ProcessGrades11 | |
| -courseName : String  -instructorName : String  -semester: String  -year: int  -school: String  -numberOfStudents  -numberOfTests  -names: String []  -scores: int [][]  -studentTotals: int []  -grades: char[]  -testsAverages: double []  -lowestScoreIndex: int  -highestScoreIndex: int |  |
| +ProcessGrades11 (course : String, in :  String, semester: String,  year: int, school : String,  scan :Scanner,  numberOfStudents: int,  numberOfTests: int)  -computeStudentsTotals():void  -computeGrades ():void  -computeTestsAverages ():void  - findStudentWithLowestTotal ( ):void  -findStudentWithHighestTotal ():void  -printHeader():void  - displayStudentsRecords () : void  -printFooter () : void | Constructor receives the following:   1. course name 2. instructor’s name 3. semester 4. Year 5. schoolName 6. input file 7. number of students in class 8. number of tests given   The constructor uses the number of students and number of tests to create the following arrays:   1. names 2. scores 3. grades 4. studentTotals 5. testsAverages   The constructor invokes the following methods:   1. computeStudentsTotals 2. computeGrades 3. computeTestsAverages 4. findStudentWithHighestTotal; 5. findStudentWithLowestTotal; 6. displayHeader 7. displayStudentsRecords 8. displayFooter   Computes student totals and store them in a one-dimensional array.  Using the standard grading system to compute grades and stores them in the grades array.  Computes the test averages and stores them in testsAverages array  Finds the student with the lowest total and stores its index in lowestScoreIndex  Finds the student with the highest total and stores its index in highestScoreIndex  Prints report header with your name, current date, course name, instructor’s name, semester, year, and school name  Prints record numbers, names, scores, totals, grades  Prints Tests averages, student complete record with the lowest score  , and student complete record with the highest score |

The driver declares the name of the input files. Driver uses two data files. data11A.txt and data11B.txt.

Attach (do not turn in any hardcopy) via BlazeView the following items:

* 1. A single typed page with your name, class, date, and program title. The report should include what you learned from the programming assignment, problems faced, skills learned, and your observations.
  2. Simple output
  3. Do not modify or submit the driver and the data files.
  4. Submit only ProcessGrades11.java
  5. Zip and attach all your files
  6. Make sure that:
     1. The program is well documented and readable.
     2. The output is well labeled and aligned

Course Name: CS1301  
 Instructor's Name: Fares  
 Semester: Spring  
 Year: 2015  
 School: Valdosta State University  
  
NUMBER NAME TEST1 TEST2 TEST3 Total Grade  
1 Nicholas 20 30 40 90 F  
2 LeBron 90 95 100 285 A  
3 Justyn 15 25 55 95 F  
4 Bilal 60 65 69 194 D  
5 Jamel 75 76 79 230 C  
6 Brooks 82 85 88 255 B  
7 Matthew 62 62 62 186 D  
8 Jonathan 95 96 97 288 A  
9 Yalanda 87 86 85 258 B  
10 Raven 77 78 79 234 C  
11 Zachary 65 66 67 198 D  
12 Michael 81 84 86 251 B  
13 Charles 97 96 95 288 A  
14 Edward 88 87 81 256 B  
15 Zebedee 55 56 59 170 F  
16 Giovanni 73 75 77 225 C  
17 April 12 22 42 76 F  
18 Nicholas 100 100 100 300 A  
19 Joseph 84 85 86 255 B  
20 Giacomo 76 77 78 231 C  
21 Robert 83 84 89 256 B  
22 Patrick 71 76 79 226 C  
23 John 45 41 40 126 F  
24 Thomas 5 10 7 22 F  
25 Timothy 78 78 78 234 C  
26 Joseph 35 35 35 105 F  
27 William 70 70 70 210 D  
  
AVERAGES 65.96 68.15 71.22  
  
Student with lowest Average  
 Thomas 5 10 7 22 F  
  
Student with Highest Average  
 Nicholas 100 100 100 300 A