Sorts

Instance Variables

- + Object[][] array
- Methods
- + mergeSort()
- + sortAlphabetically()
- + sortNumerically()

Stats

Instance Variables

+ Object[][] array

Methods

- + min()
- + max() + mode()
- + stanDev()
- + mean()
- + median()

Searches

Instance Variables

- + Object[][] array
- + Object inputValue

Methods

+ searchArray(Object inputValue)

Woo

Main Method

Assignment

Instance Variables

- + String name
- + int grade

Methods

+ toString()

Test

Instance Variables

- + String name
- + int grade

Methods

- + test()
- + tes(String name)
- + test(String name, int grade)
- + toString()

Quiz

Instance Variables

- + String name
- + int grade

Methods

- + quiz()
- + quiz(String name)
- + quiz(String name, int grade)
- + toString()

Homework

Instance Variables

- + String name
- + int grade

Methods

- + homework()
- + homework(String name) + homework(String name, int grade)
- + toString()

Project

Instance Variables

- + String name
- + int grade

Methods

- + project()
- + project(String name)
- + project(String name, int grade)
- + toString()

Login

Interface

Student

Instance Variables

- + String firstName
- + String middleInitial
- + String lastName
- + int studentID
- + String sex
- + int birthMonth //two digits
- + int birthDate //two digits
- + int birthYear //four digits

+ printClassGrades(String

- + int graduatingYear //four digits
- + String email
- String password

Methods

- className) //prints a 2D arrayList of all assignments and grades for a single class + printAssignments(String sortingType) //assignments sorted alphabetically, lo-hi, hi-lo + desiredAverageCalculator(float average) // student inputs a desired average and the next test
- + assignmentComment(String assignmentName, String message)

grade the student must get is

+ logout()

returned

Teacher

Instance Variables

- + String firstName
- + String lastName
- + String email
- String password
- + String StudentSortType
- + String ClassSortType

Methods

- + newClass()
- + printClasses(String ClassSortType)
- + printStudents(String StudentSortType)
- + newAssignment(String assignmentName) // makes a new column in the 2D array of grades
- + gradeAssignment(Object[] student, Object[] assignment, float grade)
- + classStats(String assignment, String statType) // returns a mean, histogram, etc.
- + assignmentComment(String studentFirstName, String studentLastNamre, String assignmentName, String message)
- + logout()

Parent

Instance Variables

- + String childFirstName
- + String childLastName
- + String childStudentID
- + String firstName
- + String lastName
- + String email
- String password

Methods

- + printGrades() //prints a 2D arrayList of all assignments and grades
- + logOut() //logs out of account