

# Java Object-Oriented Concepts Unit

## Lesson 3 Lab 3: Student Quiz Scores

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The Learning House

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## Lesson 3 Lab 3: Student Quiz Scores

### Requirements

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In this lab, you will write a program that stores quiz scores for each student in a class and that calculates the average quiz score for each student on request. The user should be able to do the following:

- View a list of students in the system
- Add a student to the system
- Remove a student from the system
- View a list of quiz scores for a given student
- View the average quiz score for a given student

It is up to you to design and implement a reasonable UI menu system. Design the UI and program flow chart before coding — you must review both with the instructor before proceeding.

Your program must have the following features:

1. This program will be a Java Console Application called StudentQuizGrades.
2. The program must use the ConsoleIO class created previously for all console input and output.
3. The program must store student quiz data in a HashMap that has the student name as the key and an ArrayList of integers as the values (will this affect your ability to calculate average scores?).

Extension:

1. Calculate the average quiz score for the entire class.
2. Find and list the student(s) with the highest quiz score.
3. Find and list the student(s) with the lowest quiz score.