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DE Intro to Discrete Structures and Object-Oriented Programming

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<div align="center">222.03 Description</div>

For the 222.03 Conditionals assignment, I made a teacher grading simulator that implements a graphical user interface (GUI) with swing graphics and file writing. The GUI has improved since the last project; the use of images for buttons and labels enhances the appearance of the program. Additionally, I used an external layout manager to simplify the appearance of the program; the JavaDocs of my code cite the source. My program contains an assignment addition page, an assignment grading page, and a student report page. The assignment adder allows users to add a set of assignments to be graded, along with point values and weights if necessary. The assignment grader allows users to select one of the assignments and grade a set of students for that assignment. Lastly, the student report page allows users to select a student in the database and create a grading report with the student's average grade based on the previous assignments graded from the previous page. The report is in the form of a .txt file created in a program-created directory within the C: drive. This project contains features I will implement in my semester and final projects for this course.

My project meets the assignment's requirements, specifically the implementation of various forms of conditionals and repetition. Two of the control statements required are if statements and for loops, which are found frequently throughout the code. The assignment also requires while loops, which are used occasionally when going through a list of objects and performing the same operation on them. Additionally, the assignment requires switch statements,

which are used to determine how assignment grades are added in the student report .txt file.

Lastly, the assignment requires ternary operators. These are used to change the coordinates of the

animated title screen graphics. The demonstration of these skills is crucial to demonstrating my

proficiency in Java.