

Test Plan

Group 2:

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Author Note:

Document Version TP004

Date: 2018-10-12

Version Control

<u>Document</u>	<u>Date</u>	<u>Action</u>	<u>Name</u>	<u>Email</u>
TP001	2018-09-16	Created	Michael Lancaster	lancastermc@gmail.com
TP001.2	2018-09-22	Added test cases.	William Rios Crespo	william.rioscrespo19@gmail.com
TP001.3	2018-09-23	Modified Test Case 2 and 3 / Added What If Test Case	Joshua Kerley	jkillakerlz@gmail.com
TP001.4	2018-09-23	Revised	John Abueg	j.abueg13@gmail.com
TP002	2018-09-23	Reviewed	John Abueg Josh Kerley Michael Lancaster William Rios Crespo	lancastermc@gmail.com william.rioscrespo19@gmail.com jkillakerlz@gmail.com j.abueg13@gmail.com
TP003	2018-10-08	Tested all cases.	Joshua Kerley	jkillakerlz@gmail.com
TP004	2018-10-12	Added Test Runs with Screen Shots	William Rios Crespo	william.rioscrespo19@gmail.com

Test Plan

Test Case Number	Requirement Number	Test Description	Expected Result	Actual result	Pass/Fail
1	1, 2, 3, 4, 7	<p>The user inputs the following data into a file:</p> <p>Assignment name: HomeWork1 Weight: 20 Grade: 100</p> <p>Assignment name: HomeWork2 Weight: 20 Grade: 80</p> <p>Assignment name: HomeWork3 Weight: 20 Grade: 80</p> <p>Assignment name: HomeWork4 Weight: 20 Grade: 70</p> <p>Assignment name: HomeWork5 Weight: 20 Grade: 95</p> <p>The system shall load saved data to calculate final grade, maximum, minimum, mean, median, and standard deviation scores.</p>	<p>This system shall save and display:</p> <p>maximum: 100.00 minimum: 70.00 mean: 85.00 median: 80.00</p> <p>Standard deviation: 10.95</p> <p>Final Grade: B</p>	<p>Maximum: 100.0 Minimum: 70.0 Mean: 85.0 Median: 1600.0 Standard Deviation: 10.954451150103322 Final Grade: B</p>	Pass
2	1, 3, 5	The user opens the	The app will	Invalid format,	Pass

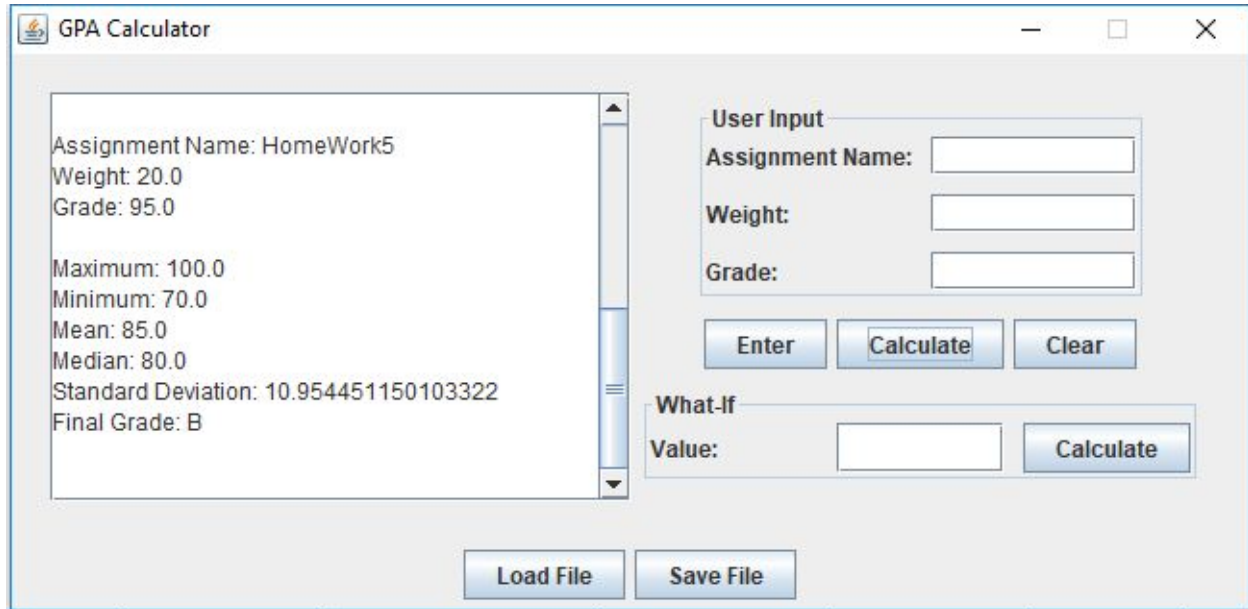
		<p>application and tries to load a file that contains letter grades instead of percentage grades.</p>	<p>throw and catch an exception that will open a dialog window that will notify that the user entered an invalid input.</p> <p>Display: Error - Invalid format, must only enter numbers for a grade.</p>	<p>must only enter numbers for a grade.</p>	
3	1, 6	<p>The user opens the application and enters special characters on the GUI as the assignment names.</p>	<p>The app will throw and catch an exception that will open a dialog window that will notify that the user entered an invalid input.</p> <p>Display: Error - Must only enter numbers and letters for assignment name. Special characters are not allowed.</p>	<p>Must only enter numbers and letters for assignment name. Special characters are not allowed.</p>	Pass
4	1, 4, 7	<p>The user opens the application and enters the following information in the graphic user interface:</p> <p>Assignment name: Project1 Weight: 12.5</p>	<p>This system shall display:</p> <p>maximum: 100.00 minimum: 0.00 mean: 48.75</p>	<p>Maximum: 100.0 Minimum: 0.0 Mean: 48.75 Median: 50.0 Standard Deviation: 33.703671906781906 Final Grade: F</p>	pass

		Grade: 100 Assignment name: Project2 Weight: 12.5 Grade: 90 Assignment name: Midterm Weight: 25 Grade: 0 Assignment name: Final Weight: 50 Grade: 50	median: 50.00 Standard deviation: 33.70 Final Grade: F		
5	1, 4, 7, 8	The user enters a "What-if" scenario and enters the following information in the graphic user interface: Assignment name: Project1 Weight: 25 Grade: 80 Assignment name: Project2 Weight: 25 Grade: 100 Assignment name: Project3 Weight: 25 Grade: 75 Assignment name: FinalProject4 Weight: 25 Grade: 85 "What-if" desired grade: 90	This system shall display: maximum: 100.00 minimum: 75.00 mean: 85.00 median: 82.50 Standard deviation: 9.35 Final Grade: B Grade (1-100) needed to reach "what-if": 100 Weight needed to reach "what-if": 50	Maximum: 100.0 Minimum: 75.0 Mean: 85.0 Median: 82.5 Standard Deviation: 9.354143466934854 Final Grade: B Grade (1 - 100) needed to reach what-if scenario: 99.98 Weight needed to reach what-if scenario: 50.0	pass

Note: Mean, median and standard deviation values are calculated after they have been adjusted with their respective weight.

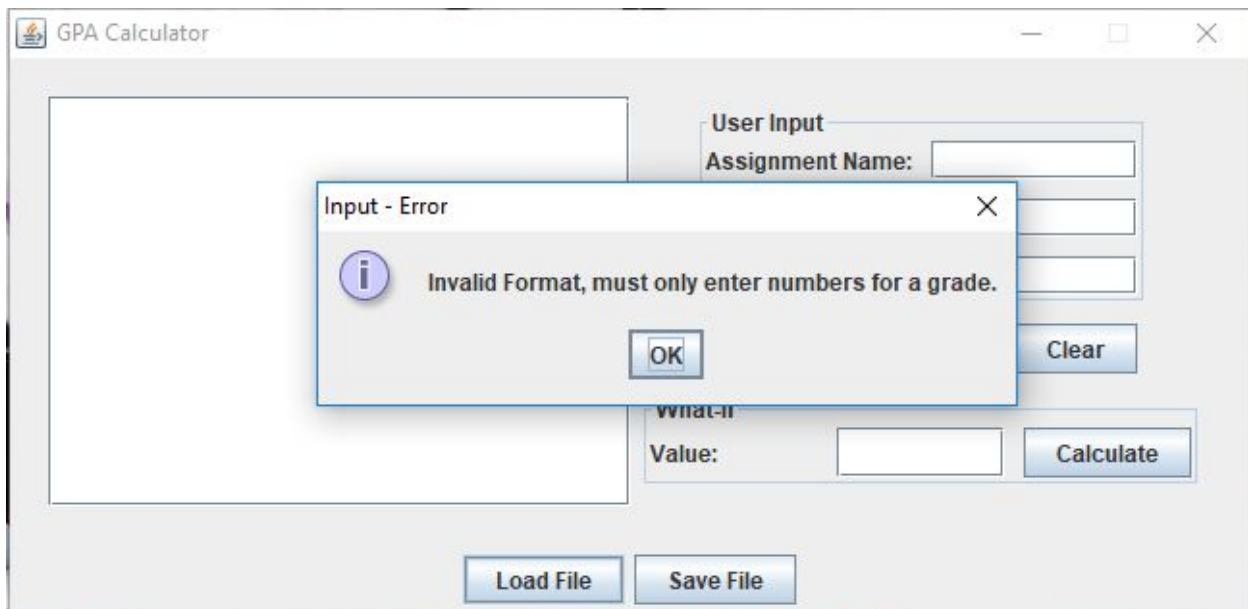
Test Runs with Screen Shots

Test Case #1



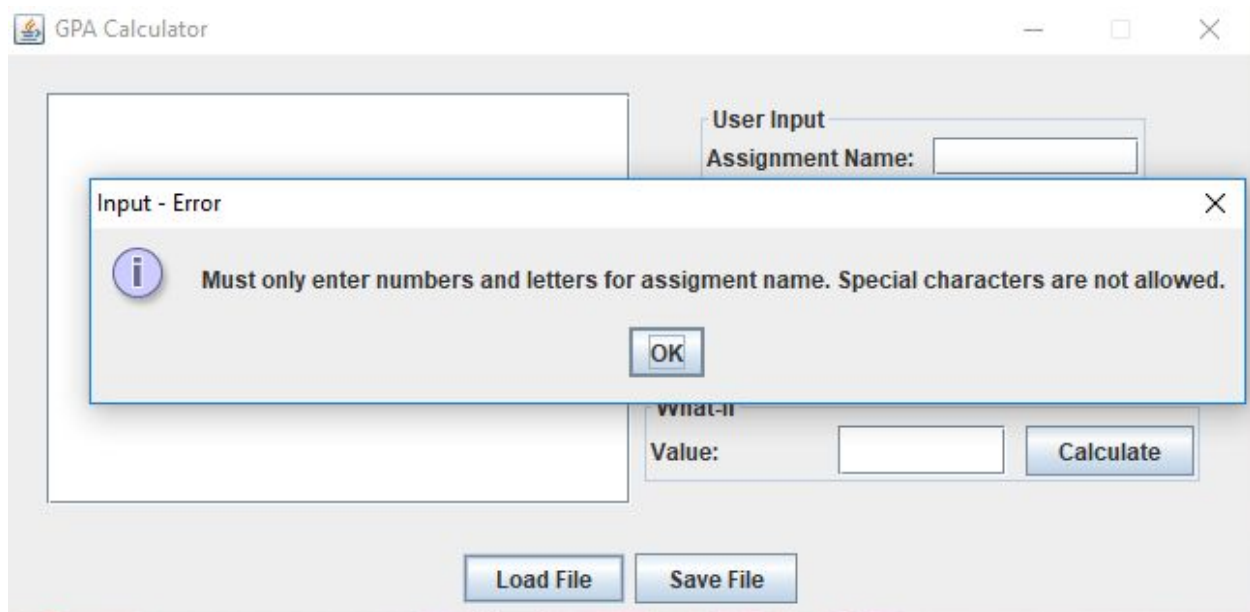
The screenshot shows the 'GPA Calculator' application window. On the left, a text area displays the following results: Assignment Name: HomeWork5, Weight: 20.0, Grade: 95.0, Maximum: 100.0, Minimum: 70.0, Mean: 85.0, Median: 80.0, Standard Deviation: 10.954451150103322, and Final Grade: B. On the right, the 'User Input' section has three empty text boxes for 'Assignment Name:', 'Weight:', and 'Grade:'. Below these are three buttons: 'Enter', 'Calculate', and 'Clear'. The 'What-If' section has a 'Value:' text box and a 'Calculate' button. At the bottom are 'Load File' and 'Save File' buttons.

Test Case #2

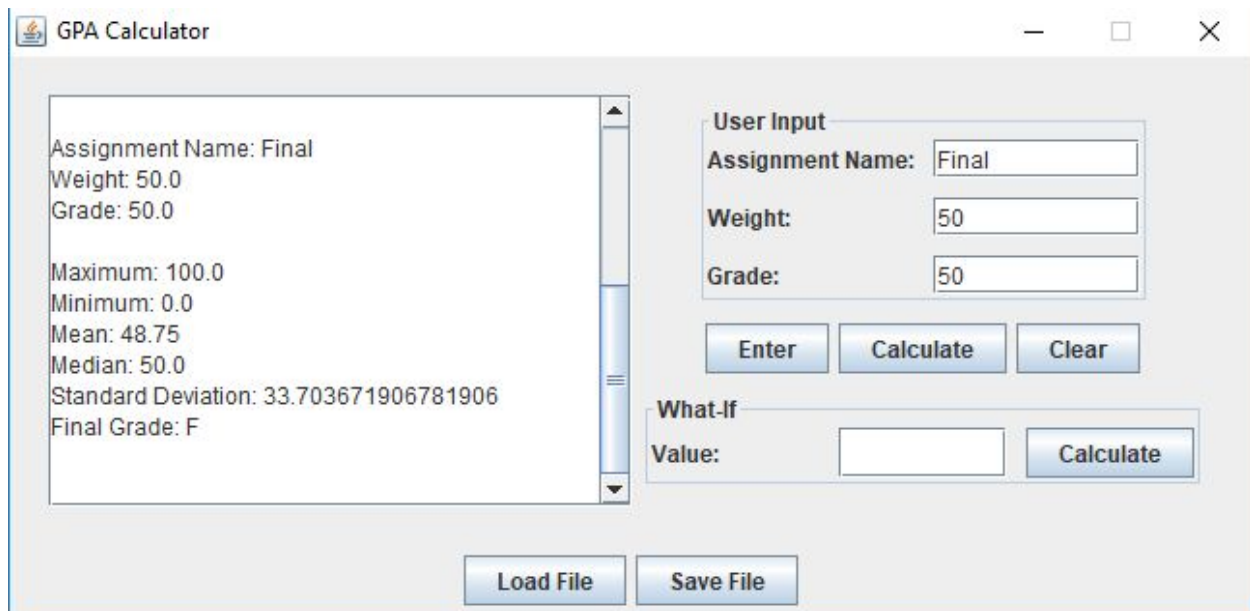


The screenshot shows the 'GPA Calculator' application window with an error dialog box open. The dialog box is titled 'Input - Error' and contains an information icon and the message: 'Invalid Format, must only enter numbers for a grade.' with an 'OK' button. The background application window shows the 'User Input' section with the 'Assignment Name' field filled with 'HomeWork5' and the 'Weight' and 'Grade' fields empty. The 'What-If' section and bottom buttons are also visible.

Test Case #3



Test Case #4



Test Case #5

The screenshot shows a window titled "GPA Calculator". On the left is a text area displaying the following statistics: Maximum: 100.0, Minimum: 75.0, Mean: 85.0, Median: 82.5, Standard Deviation: 9.354143466934854, and Final Grade: B. Below these are two lines of text: "Grade (1 - 100) needed to reach what-if scenario: 99" and "Weight needed to reach what-if scenario: 50.0". On the right, the "User Input" section contains three text boxes: "Assignment Name:" with the value "Project4", "Weight:" with the value "25", and "Grade:" with the value "85". Below these are three buttons: "Enter", "Calculate", and "Clear". Further down is a "What-If" section with a "Value:" text box containing "90" and a "Calculate" button. At the bottom of the window are two buttons: "Load File" and "Save File".

GPA Calculator

Maximum: 100.0
Minimum: 75.0
Mean: 85.0
Median: 82.5
Standard Deviation: 9.354143466934854
Final Grade: B

Grade (1 - 100) needed to reach what-if scenario: 99
Weight needed to reach what-if scenario: 50.0

User Input

Assignment Name: Project4
Weight: 25
Grade: 85

Enter Calculate Clear

What-If

Value: 90 Calculate

Load File Save File