Test Plan

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Version Control

Document	Date	Action	Name	Email
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	The user inputs the following data into a file: Assignment name: HomeWork1 Weight: 20 Grade: 100 Assignment name: HomeWork2 Weight: 20 Grade: 80 Assignment name: HomeWork3 Weight: 20 Grade: 80 Assignment name: HomeWork4 Weight: 20 Grade: 70 Assignment name: HomeWork5 Weight: 20 Grade: 95 The system shall load saved data to calculate final grade, maximum, minimum, mean, median, and standard deviation scores.	This system shall save and display: maximum: 100.00 minimum: 70.00 mean: 85.00 median: 80.00 Standard deviation: 10.95 Final Grade: B	Maximum: 100.0 Minimum: 70.0 Mean: 85.0 Median: 1600.0 Standard Deviation: 10.954451150103322 Final Grade: B	Pass
2	1, 3, 5	The user opens the	The app will	Invalid format,	Pass

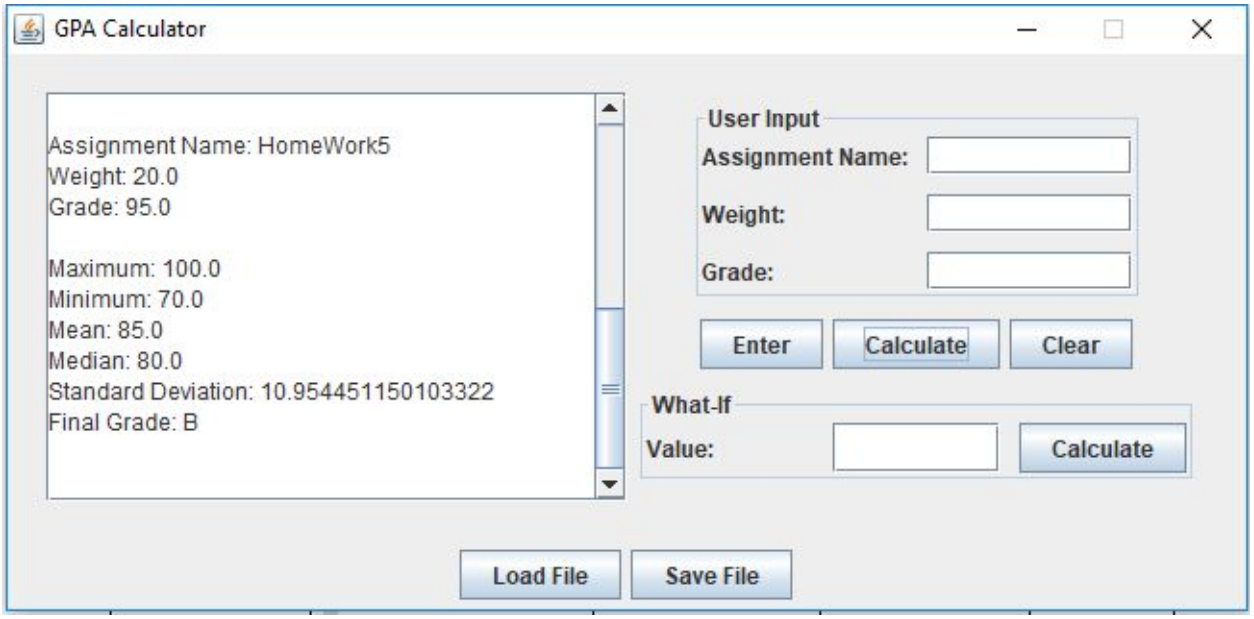
		application and tries to load a file that contains letter grades instead of percentage grades.	throw and catch an exception that will open a dialog window that will notify that the user entered an invalid input. Display: Error - Invalid format, must only enter numbers for a grade.	must only enter numbers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

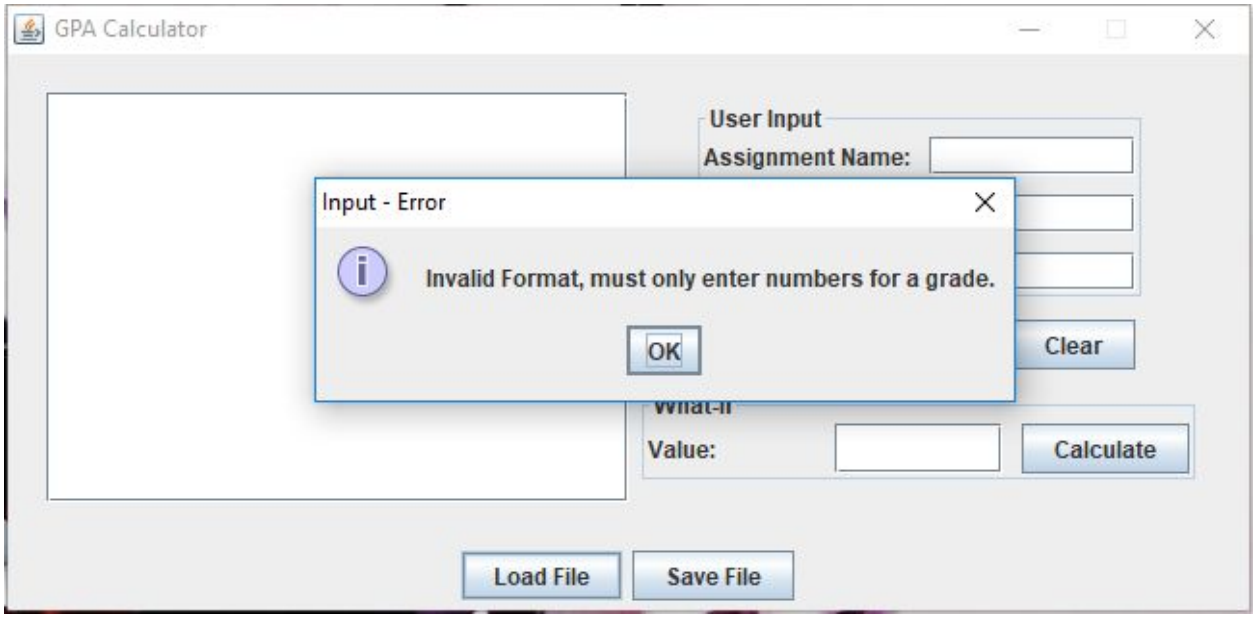
Note: Mean, median and standard deviation values are calculated after they have been adjusted with their respective weight.

Test Runs with Screen Shots

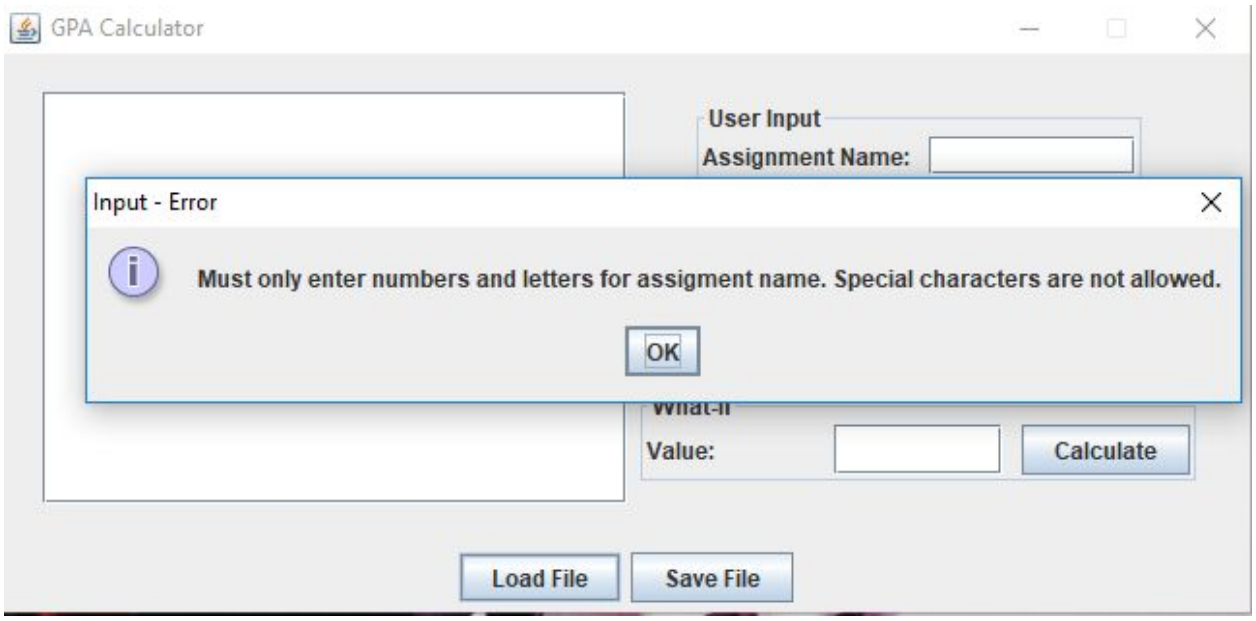
Test Case #1



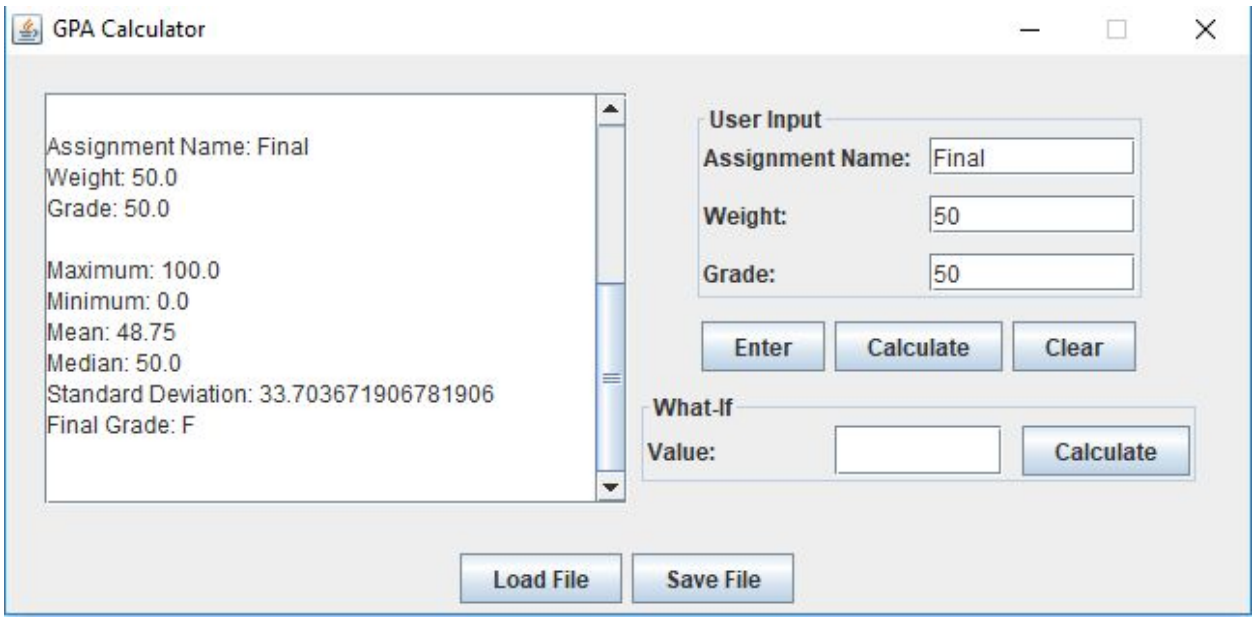
Test Case #2



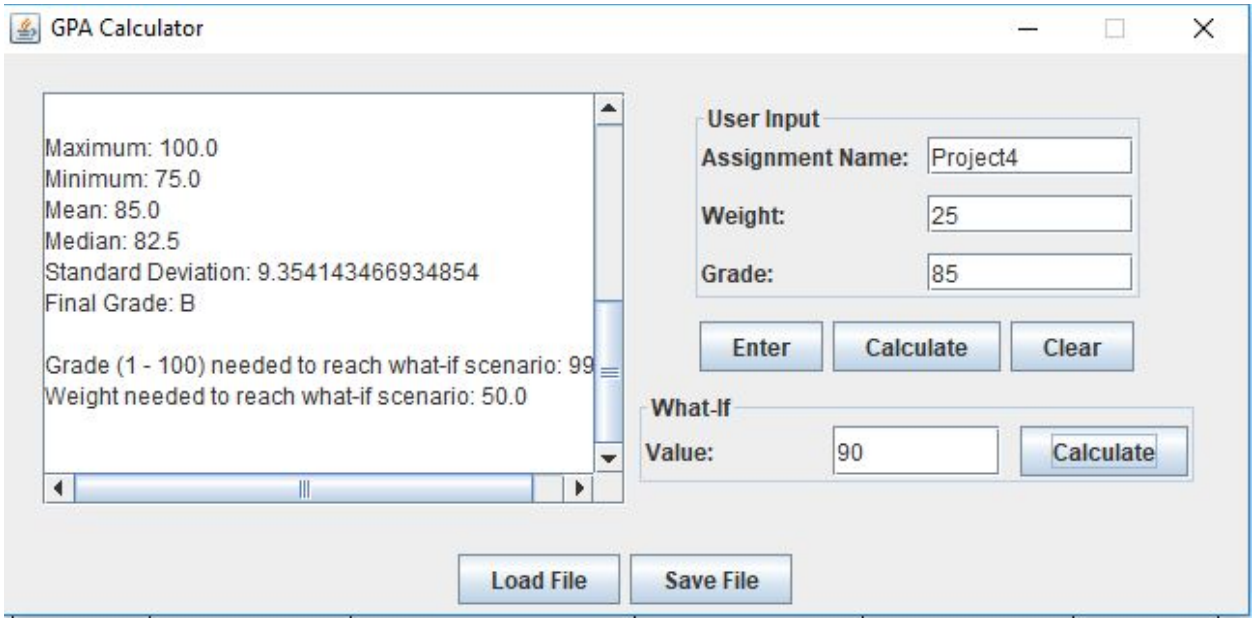
Test Case #3



Test Case #4



Test Case #5


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