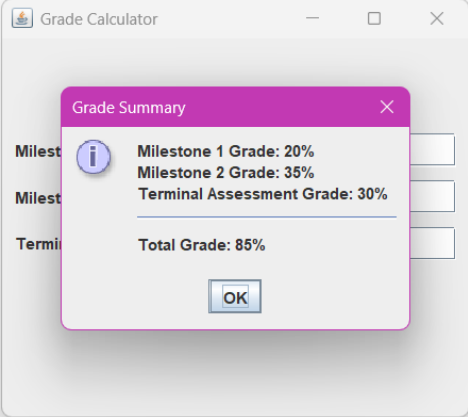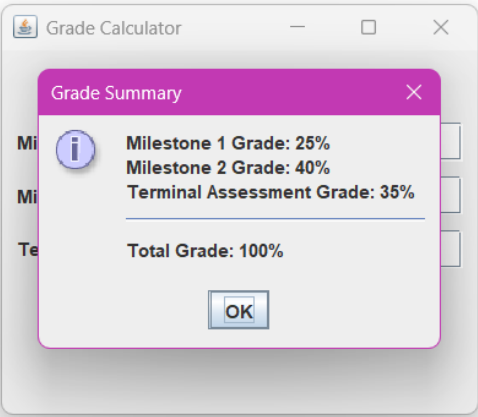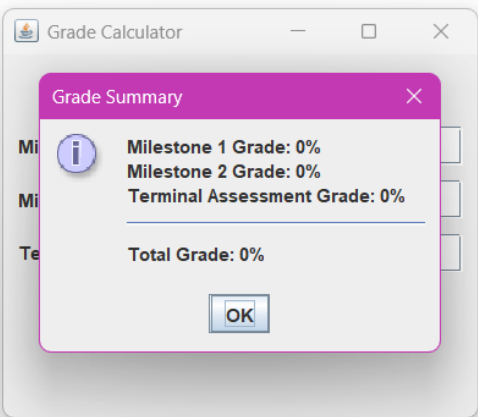| Test Scenario ID	Test Scenario Description	Test Case ID	Test Case Description	Test Steps	Test Data	Pre Conditions	Post Conditions	Expected Result	Actual Result
TS01	Valid grade calculation	TC01	User inputs valid scores for all fields	1. Open the application 2. Enter the following: (20 in Milestone 1); (35 in Milestone 2); (30 in Terminal Assessment) 3. Click "Calculate"	Milestone 1: 20 Milestone 2: 35 Terminal Assessment: 30	The user is ready to input values into the fields.	Final grade is displayed	Total grade is calculated and displayed as 85	Grade Calculator / Grade Summary — Milestone 1 Grade: 20% Milestone 2 Grade: 35% Terminal Assessment Grade: 30% Total Grade: 85% OK
TS02	Negative value handling in Milestone 1	TC02	User enters a negative value in Milestone 1	1. Open the application 2. Enter the following: (-5 in Milestone 1); (35 in Milestone 2); (30 in Terminal Assessment) 3. Click "Calculate"	Milestone 1: -5 Milestone 2: 35 Terminal Assessment: 30	The user is ready to input values into the fields.	Error dialog is shown	Error message: "Please enter valid numbers between 0 and the maximum allowed points for each grading category."	Grade Calculator — Milestone 1 (25%) : -5 Milestone 2 (40%) : 35 Terminal Assessment (35%) : 30 Clear Calculate — Input Error: Please enter valid numbers between 0 and the maximum allowed points for each grading category. OK

TS03	Negative value handling in Milestone 2	TC03	User enters a negative value in Milestone 2	1. Open the application 2. Enter the following: (5 in Milestone 1); (-35 in Milestone 2); (30 in Terminal Assessment) 3. Click "Calculate"	Milestone 1: 5 Milestone 2: -35 Terminal Assessment: 30	The user is ready to input values into the fields.	Error dialog is shown	Error message: "Please enter valid numbers between 0 and the maximum allowed points for each grading category."	
TS04	Negative value handling in Terminal Assessment	TC04	User enters a negative value in Terminal Assessment	1. Open the application 2. Enter the following: (5 in Milestone 1); (35 in Milestone 2); (-30 in Terminal Assessment) 3. Click "Calculate"	Milestone 1: 5 Milestone 2: 35 Terminal Assessment: -30	The user is ready to input values into the fields.	Error dialog is shown	Error message: "Please enter valid numbers between 0 and the maximum allowed points for each grading category."	

| TS05 | Input exceeds max in Milestone 1 | TC05 | User inputs more than 25 in Milestone 1 | 1. Open the application
2. Enter the following:
(30 in Milestone 1);
(35 in Milestone 2);
(30 in Terminal Assessment)
3. Click "Calculate" | Milestone 1: 30
Milestone 2: 35
Terminal Assessment: 30 | The user is ready to input values into the fields. | Error dialog is shown | Error message: "Please enter valid numbers between 0 and the maximum allowed points for each grading category." | |
| TS06 | Input exceeds max in Milestone 2 | TC06 | User inputs more than 40 in Milestone 2 | 1. Open the application
2. Enter the following:
(25 in Milestone 1);
(50 in Milestone 2);
(30 in Terminal Assessment)
3. Click "Calculate" | Milestone 1: 25
Milestone 2: 50
Terminal Assessment: 30 | The user is ready to input values into the fields. | Error dialog is shown | Error message: "Please enter valid numbers between 0 and the maximum allowed points for each grading category." | |

TS07	Input exceeds max in Terminal Assessment	TC07	User inputs more than 35 in Terminal Assessment	1. Open the application 2. Enter 40 in Terminal Assessment 3. Click "Calculate"	Milestone 1: 25 Milestone 2: 35 Terminal Assessment: 40	The user is ready to input values into the fields.	Error dialog is shown	Error message: "Please enter valid numbers between 0 and the maximum allowed points for each grading category."	
TS08	Non-numeric input	TC08	User enters letters instead of numbers	1. Open the application 2. Enter "abc" in Milestone 1 3. Click "Calculate"	Milestone 1: "abc" Milestone 2: 35 Terminal Assessment: 40	The user is ready to input values into the fields.	Error dialog is shown	"Error message: ""Please enter valid numbers between 0 and the maximum allowed points for each grading category."""	

TS09	Empty input fields	TC09	User does not fill out any fields	1. Open the application 2. Leave all fields blank 3. Click "Calculate"	Milestone 1: (blank) Milestone 2: (blank) Terminal Assessment: (blank)	The user is ready to input values into the fields.	Error dialog is shown	Error message: "Please fill in all fields."	
TS10	Handling incomplete input	TC10	User leaves Milestone 1 blank	1. Open the application 2. Enter the following: (Leave Milestone 1 blank); (35 in Milestone 2); (29 in Terminal Assessment) 3. Click "Calculate"	Milestone 1: (blank) Milestone 2: 35 Terminal Assessment: 29	Milestone 2 & Terminal Assessment have valid values. Milestone 1 is left blank.	Error dialog is shown	Error message: "Please fill in all fields."	

TS11	Handling incomplete input	TC11	User leaves Milestone 2 blank	1. Open the application 2. Enter the following: (20 in Milestone 1); (Leave Milestone 2 blank); (29 in Terminal Assessment) 3. Click "Calculate"	Milestone 1: 20 Milestone 2: (blank) Terminal Assessment: 29	Milestone 1 & Terminal Assessment have valid values. Milestone 2 is left blank.	Error dialog is shown	Error message: "Please fill in all fields."	
TS12	Handling incomplete input	TC12	User leaves Terminal Assessment blank	1. Open the application 2. Enter the following: (20 in Milestone 1); (35 in Milestone 2); (Leave Terminal Assessment blank) 3. Click "Calculate"	Milestone 1: 20 Milestone 2: 35 Terminal Assessment: (blank)	Milestone 1 & Milestone 2 have valid values. Terminal Assessment is left blank.	Error dialog is shown	Error message: "Please fill in all fields."	

Test Suite	Description	Test Case	Test Case Description	Test Steps	Test Data	Precondition	Expected Result	Actual Result	Screenshot
TS13	Boundary test with maximum values	TC13	User inputs the highest valid values	1. Open the application 2. Enter 25 (M1), 40 (M2), 35 (TA) 3. Click "Calculate"	Milestone1: 25 Milestone 2: 40 Terminal Assessment: 35	The user is ready to input values into the fields.	Final grade is displayed	Final grade is calculated as 100	
TS14	Boundary test with minimum values	TC14	User inputs 0 for all milestone fields	1. Open the application 2. Enter 0 in Milestone1, Milestone2, and Terminal Assessment 3. Click "Calculate"	Milestone1: 0 Milestone 2: 0 Terminal Assessment:: 0	The user is ready to input values into the fields.	Final grade is displayed	Final grade is calculated as 0	

TS15	Clear button functionality	TC15	User uses the "Clear" button to clear the fields	1. Open the application 2. Enter values in all fields 3. Click the "Clear" button	Milestone 1: 15 Milestone 2: 20 Terminal Assessment: 25	Values have already been entered into all fields.	All input fields are cleared	All fields are emptied, ready for new input

Grade Calculator

Milestone 1 (25%) :

Milestone 2 (40%) :

Terminal Assessment (35%) :

Clear   Calculate