



Since there are four input boxes so according to the formula 2^N , the number of test cases should be $2^4 = 16$ test cases.

Decision Table Chart

	Inputs					
	Customer ID	Customer Type	Quantity	Price	Expected Result	
Condition1	x	✓	x	✓	Error message	
Condition2	✓	Gold valid	x	x	Error message	
Condition3	✓	Gold valid	✓	x	Error message	
Condition4	✓	Gold valid	x	✓	Error message	
Condition5	✓	Gold valid		✓	Should display correct amount	
Condition6	✓	Silver valid	x	x	Error message	
Condition7	✓	Silver valid	✓	x	Error message	
Condition8	✓	Silver valid	x	✓	Error message	
Condition9	✓	Silver valid		✓	Should display correct amount	
Condition10	✓	Platinum valid	x	x	Error message	
Condition11	✓	Platinum valid	✓	x	Error message	
Condition12	✓	Platinum valid	x	✓	Error message	
Condition13	✓	Platinum valid		✓	Should display correct amount	
Condition14	x	✓	x	x	Error message	
Condition15	x	✓	✓	x	Error message	
Condition16	x	x	x	x	Error message	

Test case Diagram

TC1	Wrong customer ID with valid	Should display error message
TC2	Select Gold customer with invalid quantity and invalid price	Should display error message
TC3	Select Gold customer with valid quantity and invalid price	Should display error message
TC4	Select Gold customer with invalid quantity and valid price	Should display error message
TC5	Select Gold customer with valid quantity and valid price	Should display correct amount
TC6	Select Silver customer with invalid quantity and invalid price	Should display error message
TC7	Select Silver customer with valid quantity and invalid price	Should display error message
TC8	Select Silver customer with invalid quantity and valid price	Should display error message
TC9	Select Silver customer with valid quantity and valid price	Should display correct amount

	TC10	Select Platinum customer with invalid quantity and invalid price	Should display error message			
	TC11	Select Platinum customer with valid quantity and invalid price	Should display error message			
	TC12	Select Platinum customer with invalid quantity and valid price	Should display error message			
	TC13	Select Platinum customer with valid quantity and valid price	Should display correct amount			
	TC14	Invalid customer ID and invalid price and invalid quantity with valid customer type	Should display error message			
	TC15	Invalid customer ID and invalid price with all other entries correct	Should display error message			
	TC16	All Invalid entries	Should display error message			

4) State Transition Testing



FIGURE 4.2 State diagram for PIN entry

Test Case	Possibility	Result
Test Case 1	Check customer access inserting wrong card.	Error
Test Case 2	Check customer access inserting valid card and entering correct pin at first try.	Assess permitted
Test Case 3	Check customer access card inserting valid card entering invalid pin at first try and valid pin at second try	Assess permitted
Test Case 4	Check customer access card inserting valid card entering invalid pin at first try and second try and a valid pin at third try	Assess permitted
Test Case 5	Check customer access card inserting valid card entering invalid pin at first try ,second try and at third try	Error

Example of Gmail application login use case:

Use Case ID	Actor (End User) action	System Response
1)	Enters URL and click go	Displays login page
2)	Enter Username, Password and click submit	Displays Inbox page
3)	Clicks on logout	Redirects to login page

Test Case	Possibility	Result
Test Case 1	Invalid URL	Error
Test Case 2	Valid URL , Invalid User name , Invalid password	Error
Test Case 3	Valid URL , Valid User name , Invalid password	Error
Test Case 4	Valid URL , Valid User name , Valid password	Login page appears
Test Case 5	Valid URL , Invalid User name , Valid password	Error