



Software Engineering
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Black Box Testing

1. Sign-up Page

- Equivalence Class Partitioning

No.	Field	Equivalence Class	Validity
E1	Username	Field is filled	Valid
E2	Username	Field is empty	Invalid
E3	Email	Contains '@' with characters before and after	Valid
E4	Email	Field is empty	Invalid
E5	Email	Contains spaces in the entire email address	Invalid
E6	Email	Does not contain exactly one '@'	Invalid
E7	Email	No characters before or after '@'	Invalid
E8	Email	Email already used	Invalid
E9	Email	Domain does not contain a dot (.)	Invalid
E10	Email	TLD (top-level domain) has no characters after the dot (.)	Invalid
E11	Password	Length between 6-12, contains one uppercase, lowercase, number, special character (@, #, \$, or &)	Valid
E12	Password	Field is empty	Invalid
E13	Password	Length is less than 6 or greater than 12	Invalid
E14	Password	Does not contain at least one special character (@, #, \$, or &)	Invalid
E15	Password	Does not contain at least one uppercase letter	Invalid
E16	Password	Does not contain at least one lowercase letter	Invalid
E17	Password	Does not contain at least one numeric character (0-9)	Invalid
E18	Confirm Password	Matches with password	Valid
E19	Confirm Password	Field is empty	Invalid
E20	Confirm Password	Does not match with password	Invalid

- **Boundary Value Analysis**

No.	Username	Email	Password	Confirm Password	Expected Output	Actual Output	Reason
T1	"user123"	"user@example.com"	"Abc@123"	"Abc@123"	Success	Success	Valid input for all fields
T2	""	"user@example.com"	"Abc@123"	"Abc@123"	Fail	Fail	Username is empty
T3	"user123"	"user @example.com"	"Abc@123"	"Abc@123"	Fail	Fail	Email contains spaces
T4	"user123"	"userexample.com"	"Abc@123"	"Abc@123"	Fail	Fail	Missing '@' in email
T5	"user123"	"@example.com"	"Abc@123"	"Abc@123"	Fail	Fail	No characters before '@' in email
T6	"user123"	"user@"	"Abc@123"	"Abc@123"	Fail	Fail	No characters after '@' in email
T7	"user123"	"user@example"	"Abc@123"	"Abc@123"	Fail	Fail	Missing '.' in email domain
T8	"user123"	"user@example."	"Abc@123"	"Abc@123"	Fail	Fail	No characters after '.' in email domain
T9	"user123"	"user@example.com"	"abc123"	"abc123"	Fail	Fail	Password does not contain uppercase letter
T10	"user123"	"user@example.com"	"ABC@123"	"ABC@123"	Fail	Fail	Password does not contain lowercase letter
T11	"user123"	"user@example.com"	"abc@123"	"abc@123"	Fail	Fail	Password does not contain uppercase letter
T12	"user123"	"user@example.com"	"Abc123"	"Abc123"	Fail	Fail	Password does not contain special character (@, #, \$, &)
T13	"user123"	"user@example.com"	"Abc@12"	"Abc@12"	Fail	Fail	Password length less than 6 characters
T14	"user123"	"user@example.com"	"Abc@1234"	"Abc@1234"	Success	Success	Valid password within length limit
T15	"user123"	"user@example.com"	"Abc@12345"	"Abc@12345"	Fail	Fail	Password exceeds 12 characters
T16	"user123"	"user@example.com"	"123456"	"123456"	Fail	Fail	Password lacks uppercase and special char
T17	"user123"	"user@example.com"	"Abc123"	"Abc1234"	Fail	Fail	Confirm password does not match password

T18	"user123"	"user@example.com"	"Abc@123"	"Abc@123"	Success	Success	Valid confirm password
T19	"user123"	"user@example.com"	""	""	Fail	Fail	Both password fields are empty
T20	""	"user@example.com"	"Abc@123"	"Abc@123"	Fail	Fail	Username is empty

2. Login page

- **Equivalence Class Partitioning**

Sr. No.	Field	Equivalence Class	Validity
E1	Email	already registered email and exist in database	Valid
E2	Email	Field is empty	Invalid
E3	Email	Not registered email	Invalid
E4	Password	Matches the registered password	Valid
E5	Password	Field is empty	Invalid
E6	Password	Does not match the registered password	Invalid

- **Boundary Value Analysis**

No.	Email	Password	Expected Output	Actual Output	Reason
1	user@example.com	ValidPass1@	Success	Success	Valid email and password (E1, E4).
2	(empty)	ValidPass1@	Fail	Fail	Email field is empty (E2).
3	notregistered@xyz.com	ValidPass1@	Fail	Fail	Email is not registered in the database (E3).
4	user@example.com	(empty)	Fail	Fail	Password field is empty (E5).
5	user@example.com	WrongPass	Fail	Fail	Password does not match with registered password(E6).

6	notregistered@xyz.com	WrongPassword123!	Fail	Fail	Invalid email and invalid password combination.
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3. Forgot Password Page

- **Equivalence Class Partitioning**

No.	Field	Equivalence Class	Validity
E1	Email	Email is valid and exists in the database	Valid
E2	Email	Email does not exist in the database	Invalid
E3	Email	Field is empty	Invalid

- **Boundary Value Analysis**

No.	Field	Boundary Value	Expected Result	Actual Output	Reason
1	Email	Valid email, exists in the database	Success	Success	Email is valid and exists in the database.
2	Email	Invalid email (does not exist)	Fail	Fail	Email does not exist in the database.
3	Email	Empty email field	Fail	Fail	Email field is empty.
4	Email	Email with invalid format (missing '@')	Fail	Fail	Email format is incorrect (missing '@').
5	Email	Email with extra spaces	Fail	Fail	Email contains invalid spaces.

4. Code Verification Page

- **Equivalence Class Partitioning**

No.	Field	Equivalence Class	Validity
E1	Verification Code	Code is correct and matches the sent code (valid for 10 minutes)	Valid
E2	Verification	Code is correct but expired (older than	Invalid

	Code	10 minutes)	
E3	Verification Code	Code is incorrect (does not match the sent code)	Invalid
E4	Verification Code	Field is empty	Invalid

- **Boundary Value Analysis**

No.	Field	Boundary Value	Expected Result	Actual Output	Reason
B1	Verification Code	Code is valid and matches (within 10 minutes)	Pass	Pass	Code is correct, within 10 minutes
B2	Verification Code	Code is valid but expired (older than 10 minutes)	Fail	Fail	Code is correct but expired
B3	Verification Code	Code is incorrect (does not match the sent code)	Fail	Fail	Code does not match the sent code
B4	Verification Code	Field is empty	Fail	Fail	Code field is empty

5. Reset Password Page

- **Equivalence Class Partitioning**

No.	Field	Equivalence Class	Validity
E1	Password	Length between 6-12, contains one uppercase, lowercase, number, special character (@, #, \$, or &)	Valid
E2	Password	Field is empty	Invalid
E3	Password	Length is less than 6 or greater than 12	Invalid
E4	Password	Does not contain at least one special character (@, #, \$, or &)	Invalid
E5	Password	Does not contain at least one	Invalid

		uppercase letter	
E6	Password	Does not contain at least one lowercase letter	Invalid
E7	Password	Does not contain at least one numeric character (0-9)	Invalid
E8	Confirm Password	Matches with password	Valid
E9	Confirm Password	Field is empty	Invalid
E10	Confirm Password	Does not match with password	Invalid

- **Boundary Value Analysis**

No.	Password	Confirm Password	Expected Result	Actual Output	Reason
1	"abc123"	"abc123"	Fail	Fail	Password does not contain uppercase letter
2	"ABC@123"	"ABC@123"	Fail	Fail	Password does not contain lowercase letter
3	"abc@123"	"abc@123"	Fail	Fail	Password does not contain uppercase letter
4	"Abc123"	"Abc123"	Fail	Fail	Password does not contain special character (@, #, \$, &)
5	"Abc@12"	"Abc@12"	Fail	Fail	Password length less than 6 characters
6	"Abc@1234"	"Abc@1234"	Success	Success	Valid password within length limit
7	"Abc@12345"	"Abc@12345"	Fail	Fail	Password exceeds 12 characters
8	"123456"	"123456"	Fail	Fail	Password lacks uppercase and special char

9	"Abc123"	"Abc1234"	Fail	Fail	Confirm password does not match password
10	"Abc@123"	"Abc@123"	Success	Success	Valid confirm password
11	""	""	Fail	Fail	Both password fields are empty

6. Initform Page

- Equivalence Class Partitioning**

No.	Field	Equivalence Class	Validity
E1	Company Name	Field is filled	Valid
E2	Company Name	Field is empty	Invalid
E3	City	Field is filled	Valid
E4	City	Field is empty	Invalid
E5	Mobile Number	Length is 10 and contains only numeric values and first number is from 6 to 9	Valid
E6	Mobile Number	Length is less than 10 or greater than 10	Invalid
E7	Mobile Number	First number less than 6	Invalid
E8	Mobile Number	Field is empty	Invalid
E9	State	User selects a valid state from the dropdown	Valid
E10	State	User does not select any state from the dropdown	Invalid
E11	Categories	User selects at least one category	Valid
E12	Categories	User selects no categories	Invalid

- Boundary Value Analysis**

No.	Company Name	Mobile Number	State	City	Categories	Expected Result	Actual Output	Reason
1	(empty)	9234567890	Maharashtra	Mumbai	Beauty & Personal Care	Fail	Fail	Company name is empty
2	Gada Electronics	9234567890	(none selecte	Mumbai	Beauty & Personal Care	Fail	Fail	No state selected

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3	Gada Electronics	(empty)	Maharashtra	Mumbai	Beauty & Personal Care	Fail	Fail	Mobile number is empty
4	Gada Electronics	12345	Maharashtra	Mumbai	Beauty & Personal Care	Fail	Fail	Mobile number is less than 10 digits
5	Gada Electronics	123456789012	Maharashtra	Mumbai	Beauty & Personal Care	Fail	Fail	Mobile number is more than 10 digits
6	Gada Electronics	9234567890	(none selected)	Mumbai	Beauty & Personal Care	Fail	Fail	No categories selected
7	(empty)	8234567890	(none selected)	(empty)	(none selected)	Fail	Fail	Company name, City, and categories are empty
8	Gada Electronics	9856234175	Maharashtra	(empty)	Beauty & Personal Care	Fail	Fail	City is empty
9	Gada Electronics	9856234175	(none selected)	(empty)	Beauty & Personal Care	Fail	Fail	No state selected and City is empty
10	Gada Electronics	5465789823	Gujarat	Gandhinagar	Electronics	Fail	Fail	Mobile Number first character is less than 6
11	(empty)	(empty)	(none selected)	(empty)	(none selected)	Fail	Fail	All fields are empty
12	Gada Electronics	1234567890	Maharashtra	Mumbai	Beauty & Personal Care, Books	Success	Success	All fields valid with multiple categories selected
13	Gada Electronics	9876543210	Maharashtra	Pune	Clothes, Electronics	Success	Success	All fields valid with multiple categories selected
14	Gada Electronics	1234567890	Goa	Bangalore	Beauty & Personal Care, Footwear, Groceries	Success	Success	Valid input with multiple categories and different state
15	Tech Gadgets	5551234567	Tamil Nadu	Chennai	Furniture, Home Appliances	Success	Success	Valid input with selected categories
16	Gada Electronics	2345678901	Rajasthan	Jaipur	Stationery, Toys	Success	Success	Valid input with selected categories
17	Gada Electronics	1234567890	Maharashtra	Mumbai	Beauty & Personal Care,	Success	Success	Valid input with multiple categories select

					Books, Electronics, Furniture, Groceries			
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7. Trends Page

- **Equivalence Class Partitioning**

No.	Field	Equivalence Class	Validity
E1	Category	Category selected	Valid
E2	Category	Category not selected	Invalid
E3	State	State selected	Valid
E4	State	State not selected	Invalid

- **Boundary Value Analysis**

No.	Category	State	Expected Output	Actual Output	Reason
1	Category selected	State selected	Success	Success	Both fields selected
2	Category not selected	State selected	Fail	Fail	Category not selected
3	Category selected	State not selected	Fail	Fail	State not selected
4	Category not selected	State not selected	Fail	Fail	Both fields not selected

8. Forecast Page

- **Equivalence Class Partitioning**

No.	Field	Equivalence Class	Validity
E1	State	State selected	Valid
E2	State	State not selected	Invalid
E3	Item's Category	Item's category selected	Valid
E4	Item's Category	Item's category not selected	Invalid
E5	Product Name	Product name selected	Valid
E6	Product Name	Product name not selected	Invalid
E7	Number of Months to Forecast	Number of months selected	Valid
E8	Number of Months to Forecast	Number of months not selected	Invalid
E9	Number of Sales (Last Months)	Field filled with numeric value ≥ 1	Valid
E10	Number of Sales (Last Months)	Field filled with non-numeric characters	Invalid
E11	Number of Sales (Last Months)	Field left empty	Invalid

- **Boundary Value Analysis**

No.	State	Item's Category	Product Name	Months	Prev Sales	Expected Output	Real Output	Reason
1	Selected	Selected	Selected	Selected	Numeric	Success	Success	All fields valid

					value ≥ 1			
2	Not Selected	Selected	Selected	Selected	Numeric value ≥ 1	Fail	Fail	State not selected
3	Selected	Not Selected	Selected	Selected	Numeric value ≥ 1	Fail	Fail	Item's category not selected
4	Selected	Selected	Not Selected	Selected	Numeric value ≥ 1	Fail	Fail	Product name not selected
5	Selected	Selected	Selected	Not Selected	Numeric value ≥ 1	Fail	Fail	Number of months not selected
6	Selected	Selected	Selected	Selected	Non-numeric value	Fail	Fail	Previous sales contains non-numeric input
7	Selected	Selected	Selected	Selected	Field left empty	Fail	Fail	Previous sales field is empty
8	Not Selected	Not Selected	Not Selected	Not Selected	Field left empty	Fail	Fail	No fields selected

9. Inventory Management Page

A. Add Functionality

- Equivalence class partitioning

No.	Field	Equivalence Class	Validity
E1	Item ID	Numeric and unique	Valid
E2	Item ID	Already used	Invalid
E3	Item ID	Field is empty	Invalid
E4	Item ID	Not a numeric value	Invalid
E5	Category	Category selected	Valid
E6	Category	Category not selected	Invalid
E7	Product Name	Product selected	Valid
E8	Product Name	Product not selected	Invalid
E9	Quantity	Numeric and ≥ 1	Valid
E10	Quantity	Not a number	Invalid
E11	Quantity	Numeric but < 1	Invalid
E12	Quantity	Field is empty	Invalid

E13	Cost Price	Numeric and ≥ 1	Valid
E14	Cost Price	Not a number	Invalid
E15	Cost Price	Numeric but < 1	Invalid
E16	Cost Price	Field is empty	Invalid
E17	Selling Price	Numeric and ≥ 1	Valid
E18	Selling Price	Not a number	Invalid
E19	Selling Price	Numeric but < 1	Invalid
E20	Selling Price	Field is empty	Invalid

- Boundary Value Analysis**

No.	Item ID	Category	Product Name	Quantity	Cost Price	Selling Price	Expected Value	Actual Value	Reason
1	Numeric & Unique	Selected	Selected	Numeric ≥ 1	Numeric ≥ 1	Numeric ≥ 1	Success	Success	All fields valid
2	Already Used	Selected	Selected	Numeric ≥ 1	Numeric ≥ 1	Numeric ≥ 1	Fail	Fail	Item ID already used
3	Empty	Selected	Selected	Numeric ≥ 1	Numeric ≥ 1	Numeric ≥ 1	Fail	Fail	Item ID field is empty
4	Not Numeric	Selected	Selected	Numeric ≥ 1	Numeric ≥ 1	Numeric ≥ 1	Fail	Fail	Item ID is not a numeric value
5	Numeric & Unique	Not Selected	Selected	Numeric ≥ 1	Numeric ≥ 1	Numeric ≥ 1	Fail	Fail	Category not selected
6	Numeric & Unique	Selected	Not Selected	Numeric ≥ 1	Numeric ≥ 1	Numeric ≥ 1	Fail	Fail	Product Name not selected
7	Numeric & Unique	Selected	Selected	Not Numeric	Numeric ≥ 1	Numeric ≥ 1	Fail	Fail	Quantity is not a number
8	Numeric & Unique	Selected	Selected	Numeric < 1	Numeric ≥ 1	Numeric ≥ 1	Fail	Fail	Quantity is less than 1
9	Numeric & Unique	Selected	Selected	Field Empty	Numeric ≥ 1	Numeric ≥ 1	Fail	Fail	Quantity field is empty
10	Numeric & Unique	Selected	Selected	Numeric ≥ 1	Not Numeric	Numeric ≥ 1	Fail	Fail	Cost Price is not a number
11	Numeric & Unique	Selected	Selected	Numeric ≥ 1	Numeric < 1	Numeric ≥ 1	Fail	Fail	Cost Price is less than 1

12	Numeric & Unique	Selecte d	Selected	Numeri c \geq 1	Field Empty	Numeric \geq 1	Fail	Fail	Cost Price field is empty
13	Numeric & Unique	Selecte d	Selected	Numeri c \geq 1	Numeri c \geq 1	Not Numeric	Fail	Fail	Selling Price is not a number
14	Numeric & Unique	Selecte d	Selected	Numeri c \geq 1	Numeri c \geq 1	Numeric < 1	Fail	Fail	Selling Price is less than 1
15	Numeric & Unique	Selecte d	Selected	Numeri c \geq 1	Numeri c \geq 1	Field Empty	Fail	Fail	Selling Price field is empty

B. Inventory List for selected category

- Equivalence Class Partitioning

No.	Field	Equivalence Class	Validity
E1	Category Selection	Any category is selected	Valid
E2	Category Selection	No category is selected	Invalid

- Boundary Value Analysis

No.	Category Selected	Expected Output	Actual Output	Reason
1	Selected	Success	Success	Valid category selected
2	Not Selected	Fail	Fail	No category selected, cannot display items

C. For Inventory Modify Functionality

- Equivalence Class Partitioning

No.	Field	Equivalence Class	Validity
E1	Category	Category selected	Valid
E2	Category	Category not selected	Invalid
E3	Product Name	Product Name selected	Valid
E4	Product Name	Product Name not selected	Invalid
E5	Quantity	Numeric value and greater than or equal to 1	Valid
E6	Quantity	Not a number	Invalid

E7	Quantity	Numeric value less than 1	Invalid
E8	Quantity	Field is empty	Invalid
E9	Cost Price	Numeric value and greater than or equal to 1	Valid
E10	Cost Price	Not a number	Invalid
E11	Cost Price	Numeric value less than 1	Invalid
E12	Cost Price	Field is empty	Invalid
E13	Selling Price	Numeric value and greater than or equal to 1	Valid
E14	Selling Price	Not a number	Invalid
E15	Selling Price	Numeric value less than 1	Invalid
E16	Selling Price	Field is empty	Invalid

- **Boundary Value Analysis**

No.	Category	Product Name	Quantity	Cost Price	Selling Price	Expected Output	Actual Output	Reason
1	Selected	Selected	≥ 1	≥ 1	≥ 1	Success	Success	All fields are valid and correctly filled
2	Selected	Selected	Empty	≥ 1	≥ 1	Fail	Fail	Quantity is not filled
3	Selected	Selected	Not a number	≥ 1	≥ 1	Fail	Fail	Quantity contains non-numeric input
4	Selected	Selected	< 1	≥ 1	≥ 1	Fail	Fail	Quantity is less than 1
5	Selected	Not Selected	≥ 1	≥ 1	≥ 1	Fail	Fail	Product name is not selected
6	Not Selected	Selected	≥ 1	≥ 1	≥ 1	Fail	Fail	Category is not selected
7	Selected	Selected	≥ 1	Empty	≥ 1	Fail	Fail	Cost Price is not filled
8	Selected	Selected	≥ 1	Not a number	≥ 1	Fail	Fail	Cost Price contains non-numeric input
9	Selected	Selected	≥ 1	< 1	≥ 1	Fail	Fail	Cost Price is less than 1
10	Selected	Selected	≥ 1	≥ 1	Empty	Fail	Fail	Selling Price is not filled

11	Selected	Selected	≥ 1	≥ 1	Not a number	Fail	Fail	Selling Price contains non-numeric input
12	Selected	Selected	≥ 1	≥ 1	< 1	Fail	Fail	Selling Price is less than 1

7. Edit Profile Page

- **Equivalence Class Partitioning**

No.	Field	Equivalence Class	Validity
E1	Name	Field is filled	Valid
E2	Name	Field is empty	Invalid
E3	Mobile Number	Length is 10, numeric, and starts with 6–9	Valid
E4	Mobile Number	First character is less than 6	Invalid
E5	Mobile Number	Length is not 10	Invalid
E6	Mobile Number	Field is empty	Invalid
E7	Company Name	Field is filled	Valid
E8	Company Name	Field is empty	Invalid
E9	City	Field is filled	Valid
E10	City	Field is empty	Invalid
E11	State	State is selected	Valid
E12	State	State is not selected	Invalid
E13	Categories Sold	At least one category is selected	Valid
E14	Categories Sold	No category is selected	Invalid
E15	Email	Contains '@' with characters before and after	Valid
E16	Email	Field is empty	Invalid
E17	Email	Contains spaces in the entire email address	Invalid
E18	Email	Does not contain exactly one '@'	Invalid
E19	Email	No characters before or after '@'	Invalid
E20	Email	Email already used	Invalid
E21	Email	Domain does not contain a dot (.)	Invalid
E22	Email	TLD (top-level domain) has no characters after the dot (.)	Invalid

- **Boundary Value Analysis**

No.	Name	Mobile Number	Company Name	City	State	Categories Sold	Email	Expected Output	Actual Output	Reason
1	Filled	Valid	Filled	Filled	Selected	At least one selected	Valid (contains '@', domain)	Success	Success	All fields are valid
2	Empty	Valid	Filled	Filled	Selected	At least one selected	Valid	Fail	Fail	Name is empty
3	Filled	Empty	Filled	Filled	Selected	At least one selected	Valid	Fail	Fail	Mobile number is empty
4	Filled	First character < 6	Filled	Filled	Selected	At least one selected	Valid	Fail	Fail	Mobile number starts with < 6
5	Filled	Length less than 10	Filled	Filled	Selected	At least one selected	Valid	Fail	Fail	Mobile number length < 10
6	Filled	Length greater than 10	Filled	Filled	Selected	At least one selected	Valid	Fail	Fail	Mobile number length > 10
7	Filled	Valid	Empty	Filled	Selected	At least one selected	Valid	Fail	Fail	Company name is empty
8	Filled	Valid	Filled	Empty	Selected	At least one selected	Valid	Fail	Fail	City is empty
9	Filled	Valid	Filled	Filled	Not selected	At least one selected	Valid	Fail	Fail	State is not selected
10	Filled	Valid	Filled	Filled	Selected	None selected	Valid	Fail	Fail	No categories are selected
11	Filled	Valid	Filled	Filled	Selected	At least one selected	Empty	Fail	Fail	Email is empty
12	Filled	Valid	Filled	Filled	Selected	At least one selected	Contains spaces in email	Fail	Fail	Email contains spaces

13	Filled	Valid	Filled	Filled	Selecte d	At least one selected	Invalid (missing '@')	Fail	Fail	Email does not contain '@'
14	Filled	Valid	Filled	Filled	Selecte d	At least one selected	Invalid (missing domain dot)	Fail	Fail	Email domain does not have a dot
15	Filled	Valid	Filled	Filled	Selecte d	At least one selected	Invalid (no TLD after dot)	Fail	Fail	Email TLD has no characters after ''
16	Filled	Valid	Filled	Filled	Selecte d	At least one selected	Invalid (already used)	Fail	Fail	Email is already used

8. Inventory Optimization Page

- Equivalence Class Partitioning

No.	Field	Equivalence Class	Validity
E1	Budget	Value ≥ 1	Valid
E2	Budget	Value < 1	Invalid
E3	Budget	Not a number	Invalid
E4	Budget	Empty field	Invalid
E5	Months	Selected	Valid
E6	Months	Not selected	Invalid
E7	State	Selected	Valid
E8	State	Not selected	Invalid
E9	No. of Products	Value ≥ 1	Valid
E10	No. of Products	Value < 1	Invalid
E11	No. of Products	Not a number	Invalid
E12	No. of Products	Empty field	Invalid
E13	Category (per product)	Selected	Valid
E14	Category (per product)	Not selected	Invalid
E15	Product Name (per product)	Selected	Valid
E16	Product Name (per product)	Not selected	Invalid
E17	Previous Sale (per product)	Value ≥ 1	Valid

E18	Previous Sale (per product)	Value < 1	Invalid
E19	Previous Sale (per product)	Not a number	Invalid
E20	Previous Sale (per product)	Empty field	Invalid
E21	Cost of Product (per product)	Value ≥ 1	Valid
E22	Cost of Product (per product)	Value < 1	Invalid
E23	Cost of Product (per product)	Not a number	Invalid
E24	Cost of Product (per product)	Empty field	Invalid
E25	Profit of Product (per product)	Value ≥ 1	Valid
E26	Profit of Product (per product)	Value < 1	Invalid
E27	Profit of Product (per product)	Not a number	Invalid
E28	Profit of Product (per product)	Empty field	Invalid

● **Boundary Value Analysis**

N o.	Budget	Months	State	No. of Products	Category	Product Name	Previous Sale	Cost of Product	Profit of Product	Expected Output	Actual Output	Reason
1	1	Selected	Selected	1	Selected	Selected	1	1	1	Success	Success	All fields valid
2	0	Selected	Selected	1	Selected	Selected	1	1	1	Fail	Fail	Budget less than 1
3	Empty	Selected	Selected	1	Selected	Selected	1	1	1	Fail	Fail	Budget field is empty
4	Not a Number	Selected	Selected	1	Selected	Selected	1	1	1	Fail	Fail	Budget contains non-numeric value

5	1	Not Selected	Selected	1	Selected	Selected	1	1	1	Fail	Fail	Months not selected
6	1	Selected	Not Selected	1	Selected	Selected	1	1	1	Fail	Fail	State not selected
7	1	Selected	Selected	0	Selected	Selected	1	1	1	Fail	Fail	Number of products less than 1
8	1	Selected	Selected	Not a Number	Selected	Selected	1	1	1	Fail	Fail	Number of products not a number
9	1	Selected	Selected	Empty	Selected	Selected	1	1	1	Fail	Fail	Number of products field is empty
10	1	Selected	Selected	1	Not Selected	Selected	1	1	1	Fail	Fail	Category not selected
11	1	Selected	Selected	1	Selected	Not Selected	1	1	1	Fail	Fail	Product name not selected
12	1	Selected	Selected	1	Selected	Selected	0	1	1	Fail	Fail	Previous sale less than 1
13	1	Selected	Selected	1	Selected	Selected	Not a Number	1	1	Fail	Fail	Previous sale not a number
14	1	Selected	Selected	1	Selected	Selected	Empty	1	1	Fail	Fail	Previous sale field is empty
15	1	Selected	Selected	1	Selected	Selected	1	0	1	Fail	Fail	Cost of product less than 1
16	1	Selected	Selected	1	Selected	Selected	1	Not a Number	1	Fail	Fail	Cost of product not a number
17	1	Selected	Selected	1	Selected	Selected	1	Empty	1	Fail	Fail	Cost of product field is empty
18	1	Selected	Selected	1	Selected	Selected	1	1	0	Fail	Fail	Profit of product less than 1

19	1	Selecte d	Selected	1	Selected	Selected	1	1	Not a Nu mbe r	Fail	Fail	Profit of product not a number
20	1	Selecte d	Selected	1	Selected	Selected	1	1	Emp ty	Fail	Fail	Profit of product field is empty