

Test Number	Test Case Type	Description	Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1	Functionality	This test is to verify that address validation works correctly when creating a customer. Testing both a valid and invalid address reference numbers.	Traverse to create customer Enter a valid name and national ID Complete photo ID section When reaching address verification, test various address inputs	Option “2” for sign up customer Option “1” continue sign up “Jane Doe” as name, “AB123456C” as National ID number For address testing: 1. Empty reference number 2. “12” (too short) 3. “A” repeated 51 times (too long) 4. “UTILITY-REF-12345” (valid) 5. “COUNCIL-TAX-2025 (valid)	The program should reject empty, too short, and too long address references with clear error messages. Valid references should be accepted and proceed to confirmation.	The program rejected empty inputs, short inputs below three characters and inputs longer than thirty characters. Each rejection provided a clear error message prompting the user to try again. Valid references were accepted and the program moved to confirmation screen	Pass

2	Functionality	Testing that address document type selection works correctly and validates user input	Reach address verification step in customer creation	Test invalid inputs Test help feature Test cancellation	<ul style="list-style-type: none"> - Invalid number “5” - Empty input - Non-numeric input “abc” - Option “3” for help - Option “0” to cancel - Valid option 1 or 2 	Invalid inputs should show error messages. Help should display context information. Cancel should return to previous menu. Valid selection should proceed to reference number input	The program denied the first two invalid inputs and accepted the non-numeric input. Help displayed contextual information in address menu and confirmation menu. Cancel operation aborted the process and edit details option restarted the customer creation process	Fail
3	Input Validation	Testing address reference number validation with special	Test various address reference formats	Test boundary conditions	<ol style="list-style-type: none"> 1. “123” 2. “A” repeated 30 times 3. “UTIL-2025-REF001” 4. “CTAX/2025/Q1/123 	Valid formats with hyphens, slashes, spaces should be accepted. Invalid characters should be rejected with an error message	The program accepted inputs with hyphens, slashes and spaced. The program	Fail

		characters and edge cases	Test special characters	5. "COUNCIL TAX 2025" 6. "REF@#\$^&123"		accepted special characters and did not reject it with an error message	
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Testing Notes:

This section here is to provide description that gives clarity to any glaring issues that needs addressing, information not applicable for the table and useful advice needed.

Test Number 1

Step 1 | Sign up customer:

```
= Acme Teller System =
== Main Menu ==
1. Find Customer
2. Sign Up Customer
3. Switch Customer
4. Help
0. Exit

Select option: 2
```

Step 2 | Continue with sign up:

≡ Sign Up Customer ≡

To create a new customer account, please provide the following information.

1. Continue with Sign Up
2. Help
0. Back to Main Menu

Select an option: 1

Step 3 | Insert name, national ID and passport number:

Creating new customer...

≡ Create New Customer≡

Please enter the following information:

Full Name: *Jane Doe*

National ID Number: AB123456C

Photo ID Number: 231321231

Step 4 | Address testing:

--- Address Information ---

Please select the address verification document provided:

1. Utility Bill (gas, electricity, water)
2. Council Tax Letter
3. Help
0. Cancel Operation

Select an option: 2

```
--- Council Tax Letter Details ---  
Council Tax Letter Reference Number:  
Error: Council Tax Letter reference number cannot be empty.  
Council Tax Letter Reference Number: 12  
Error: Reference number must be at least 3 characters long.  
Council Tax Letter Reference Number: AAAAAAAAAAAAAAAAAAAAAAAA  
Error: Reference number cannot exceed 30 characters.  
Council Tax Letter Reference Number: UTILITY-REF-12345
```

```
--- Council Tax Letter Details ---  
Council Tax Letter Reference Number: COUNCIL-TAX-2025
```

Test Number 2

Step 1 | Reach address verification:

```
==== Sign Up Customer ====  
To create a new customer account, please provide the following information.  
1. Continue with Sign Up  
2. Help  
0. Back to Main Menu  
  
Select an option: 1
```

```
Creating new customer...  
==== Create New Customer====  
Please enter the following information:  
  
Full Name: John Doe  
National ID Number: AB123456C
```

```
--- Photo Identification ---
1. Passport
2. Driving License
3. Help
0. Cancel Operation

Select an option:  1
Photo ID Number:  987654321
```

```
--- Address Information ---
Please select the address verification document provided:
1. Utility Bill (gas, electricity, water)
2. Council Tax Letter
3. Help
0. Cancel Operation

Select an option:  1
```

Step 2 | Test invalid inputs:

```
--- Utility Bill Details ---
Utility Bill Reference Number:  5
Error: Reference number must be at least 3 characters long.
Utility Bill Reference Number:
Error: Utility Bill reference number cannot be empty.
Utility Bill Reference Number:  abc
```

Step 3 | Test help feature

--- Address Information ---

Please select the address verification document provided:

1. Utility Bill (gas, electricity, water)
2. Council Tax Letter
3. Help
0. Cancel Operation

Select an option: 3

≡ Help ≡

--- Address Verification Help ---

This process verifies the customer's address through documentation

Acceptable documents:

1. Utility Bill - Recent bill for gas, electricity or water services
(must be less than 3 months old and show customer's name and address)
2. Council Tax Letter - Official council tax statement or bill
(must be for the current tax year and show customer's name and address)
3. Help - Display this help information
0. Cancel Operation - Return to previous menu

Press Enter to continue...

```
==== Confirm Customer Details ====  
Name: John Doe  
National ID: AB123456C  
Photo ID Type: Passport  
Photo ID: 987654321  
Address Document Type: Utility Bill  
Address Reference Number: abc  
  
1. Confirm and Create Customer  
2. Edit Details  
3. Help  
0. Cancel Operation  
Select an option: 3
```

```
==== Help ===  
--- Confirm Customer Help ---  
Please review all customer details carefully before submission.  
  
1. Confirm and Create Customer - Save customer to database  
2. Edit Details - Make changes to customer information  
3. Help - Display this help information  
0. Cancel Operation - Abort customer creation  
  
Press Enter to continue...
```

```
1. Confirm and Create Customer
2. Edit Details
3. Help
0. Cancel Operation
Select an option:  0

Operation cancelled
```

```
1. Confirm and Create Customer
2. Edit Details
3. Help
0. Cancel Operation
Select an option:  2

Editing customer details...

===== Create New Customer =====
Please enter the following information:

Full Name:
```

Test Number 3

Step 1 | Test various address reference formats:

Created on 23/01/2025

Created by: Daniel Nkurunziza

```
--- Utility Bill Details ---
Utility Bill Reference Number: 123

==== Confirm Customer Details ====
Name: Jane Doe
National ID: AB123456C
Photo ID Type: Passport
Photo ID: 987654321
Address Document Type: Utility Bill
Address Reference Number: 123
```

```
--- Utility Bill Details ---
Utility Bill Reference Number: UTIL-2025-REF001

==== Confirm Customer Details ====
Name: JOHN DOE
National ID: AB123456T
Photo ID Type: Passport
Photo ID: 123456789
Address Document Type: Utility Bill
Address Reference Number: UTIL-2025-REF001
```

Created on 23/01/2025

Created by: Daniel Nkurunziza

```
--- Utility Bill Details ---
Utility Bill Reference Number: CTAX/2025/Q1/123

==== Confirm Customer Details ====
Name: JOHN DOE
National ID: AV123456E
Photo ID Type: Passport
Photo ID: 123456789
Address Document Type: Utility Bill
Address Reference Number: CTAX/2025/Q1/123
```

```
--- Utility Bill Details ---
Utility Bill Reference Number: COUNCIL TAX 2025

==== Confirm Customer Details ====
Name: JOHN DOE
National ID: AB1234560
Photo ID Type: Passport
Photo ID: 123456789
Address Document Type: Utility Bill
Address Reference Number: COUNCIL TAX 2025
```

Step 2 | Test boundary conditions:

```
--- Utility Bill Details ---  
Utility Bill Reference Number: AAAAAAAAAAAAAAAAAAAAAAAA  
Error: Reference number cannot exceed 30 characters.  
Utility Bill Reference Number: AAAAAAAAAAAAAAAAAAAAAAAA  
  
==== Confirm Customer Details ====  
Name: JOHN DOE  
National ID: AB123456R  
Photo ID Type: Passport  
Photo ID: 987654321  
Address Document Type: Utility Bill  
Address Reference Number: AAAAAAAAAAAAAAAAAAAAAAAA
```

Step 3 | Test special characters:

```
--- Utility Bill Details ---  
Utility Bill Reference Number: REF@#$^&123  
  
==== Confirm Customer Details ====  
Name: JOHN DOE  
National ID: DC123456E  
Photo ID Type: Passport  
Photo ID: 123456789  
Address Document Type: Utility Bill  
Address Reference Number: REF@#$^&123
```