

Test Cases Report - 65 Test Cases (Separated Steps & Data)

Total Test Cases	65
Categories	Security, Performance, Usability, Boundary, Functional, Error Handling, Integration
Priority Levels	Low, Critical, Medium, High
Generated On	2025-08-03 16:03:35

Test Case 1: Successful Corporate User Registration

Test ID	TC_001
Module	User Management > User Registration
Category	Functional
Priority	Critical
Test Type	Positive
Risk Level	High
Estimated Time	5 minutes
Description	Validate that a new corporate user can be registered with valid details and assigned to the correct role
Objective	Ensure user registration works as expected and user is mapped to the correct role/group.
Preconditions	Admin user is logged in; Corporate customer profile exists
Expected Result	User account is created, user is assigned to the selected role and group, and a registration confirmation

Test Steps (Actions Only):

Step Number	1
Action	Navigate to user registration page
Step Number	2
Action	Enter full name
Step Number	3
Action	Enter email address
Step Number	4
Action	Enter mobile number
Step Number	5

Action	Select user role
Step Number	6
Action	Assign user to group
Step Number	7
Action	Click register button

Test Data (Values Only):

full_name	Ahmed Youssef
email	ahmed.youssef@company.com
mobile	01012345678
role	Initiator
group	Tax Payment Group

Validation Criteria	User appears in user list; Assigned role and group are correct; Confirmation email is received
Dependencies	Corporate customer profile setup
Notes	Covers basic registration flow for new users.

Test Case 2: Registration Fails with Invalid Email Format

Test ID	TC_002
Module	User Management > User Registration
Category	Functional
Priority	High
Test Type	Negative
Risk Level	Medium
Estimated Time	3 minutes
Description	Ensure the system rejects registration attempts with an invalid email address format.
Objective	Verify email format validation works and error is displayed.
Preconditions	Admin user is logged in
Expected Result	Registration is blocked, and a clear error message is displayed indicating invalid email format.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to user registration page
Step Number	2

Action	Enter full name
Step Number	3
Action	Enter invalid email address
Step Number	4
Action	Enter mobile number
Step Number	5
Action	Select user role
Step Number	6
Action	Assign user to group
Step Number	7
Action	Click register button

Test Data (Values Only):

full_name	Mona Khaled
email	mona.khaled@company
mobile	01234567890
role	Approver
group	Universal Collection Group

Validation Criteria	Error message is displayed; User is not created
Dependencies	User registration page available
Notes	Tests input validation for email field.

Test Case 3: Session Timeout After Inactivity

Test ID	TC_003
Module	Authentication > Session Management
Category	Security
Priority	Critical
Test Type	Positive
Risk Level	High
Estimated Time	20 minutes
Description	Check that user session is terminated after the configured period of inactivity.
Objective	Ensure session timeout is enforced for security.
Preconditions	User is logged in; Session timeout is set to 15 minutes

Expected Result	User is logged out automatically after 15 minutes of inactivity and prompted to log in again.
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Test Steps (Actions Only):

Step Number	1
Action	Login to the portal
Step Number	2
Action	Remain inactive for the session timeout period
Step Number	3
Action	Attempt to perform any action

Test Data (Values Only):

username	corporate.user@company.com
password	StrongPass!2024
timeout	15 minutes
Validation Criteria	Session expires after inactivity; User is redirected to login page
Dependencies	Session timeout configuration
Notes	Validates session management and security compliance.

Test Case 4: 2FA Required on Login

Test ID	TC_004
Module	Authentication > Login
Category	Security
Priority	Critical
Test Type	Positive
Risk Level	High
Estimated Time	4 minutes
Description	Ensure that users are required to complete two-factor authentication during login.
Objective	Verify 2FA is enforced and login is blocked without successful 2FA.
Preconditions	User account with 2FA enabled exists
Expected Result	User is granted access only after successful 2FA; login is blocked if 2FA fails.

Test Steps (Actions Only):

Step Number	1
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Action	Navigate to login page
Step Number	2
Action	Enter username
Step Number	3
Action	Enter password
Step Number	4
Action	Click login button
Step Number	5
Action	Enter 2FA code
Step Number	6
Action	Submit 2FA code

Test Data (Values Only):

username	fatma.ali@company.com
password	SecurePass2024!
2fa_code	123456
Validation Criteria	2FA prompt appears after password entry; Access is denied if 2FA is incorrect
Dependencies	2FA system operational
Notes	Covers mandatory 2FA enforcement.

Test Case 5: Reject Registration with Duplicate Email

Test ID	TC_005
Module	User Management > User Registration
Category	Functional
Priority	High
Test Type	Negative
Risk Level	Medium
Estimated Time	3 minutes
Description	Ensure the system does not allow registration with an email address already in use.
Objective	Verify uniqueness constraint on email during registration.
Preconditions	User with the test email already exists
Expected Result	Registration is blocked with an error message indicating the email is already in use.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to user registration page
Step Number	2
Action	Enter full name
Step Number	3
Action	Enter duplicate email address
Step Number	4
Action	Enter mobile number
Step Number	5
Action	Select user role
Step Number	6
Action	Assign user to group
Step Number	7
Action	Click register button

Test Data (Values Only):

full_name	Sara Adel
email	ahmed.youssef@company.com
mobile	01122334455
role	Verifier
group	Custom Collection Group

Validation Criteria	Error message is displayed; No duplicate user is created
Dependencies	Existing user with same email
Notes	Prevents duplicate user accounts.

Test Case 6: Boundary Test for Mobile Number Length

Test ID	TC_006
Module	User Management > User Registration
Category	Boundary
Priority	Medium
Test Type	Boundary
Risk Level	Low

Estimated Time	4 minutes
Description	Test the mobile number field with minimum and maximum allowed lengths.
Objective	Ensure mobile number field enforces length constraints.
Preconditions	Admin user is logged in
Expected Result	Registration is blocked with an error if the mobile number is shorter than required; accepted if at minimum

Test Steps (Actions Only):

Step Number	1
Action	Navigate to user registration page
Step Number	2
Action	Enter full name
Step Number	3
Action	Enter mobile number at minimum allowed length
Step Number	4
Action	Enter email address
Step Number	5
Action	Select user role
Step Number	6
Action	Assign user to group
Step Number	7
Action	Click register button

Test Data (Values Only):

full_name	Khaled Samir
mobile	0101234567
email	khaled.samir@company.com
role	Releaser
group	Tax Payment Group

Validation Criteria	Error for too short mobile number; Acceptance at minimum valid length
Dependencies	Mobile number field validation rules
Notes	Test with both valid and invalid lengths as separate runs.

Test Case 7: Usability: Clear Button Resets Registration Form

Test ID	TC_007
Module	User Management > User Registration
Category	Usability
Priority	Low
Test Type	Positive
Risk Level	Low
Estimated Time	2 minutes
Description	Verify that clicking the clear button resets all fields in the user registration form.
Objective	Ensure clear button works as expected for usability.
Preconditions	Admin user is logged in
Expected Result	All fields in the registration form are cleared and reset to default values.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to user registration page

Step Number	2
Action	Enter full name

Step Number	3
Action	Enter email address

Step Number	4
Action	Enter mobile number

Step Number	5
Action	Select user role

Step Number	6
Action	Assign user to group

Step Number	7
Action	Click clear button

Test Data (Values Only):

full_name	Laila Hassan
email	laila.hassan@company.com
mobile	01299887766
role	Initiator

group	Universal Collection Group
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Validation Criteria	All fields are empty after clear; No residual data remains
Dependencies	Registration form available
Notes	Improves user experience for data entry.

Test Case 8: Error Message for Missing Mandatory Fields

Test ID	TC_008
Module	User Management > User Registration
Category	Error Handling
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	3 minutes
Description	Ensure that registration cannot proceed if mandatory fields are left blank.
Objective	Verify that all mandatory fields are enforced with appropriate error messages.
Preconditions	Admin user is logged in
Expected Result	Registration is blocked with a clear error message indicating that full name is mandatory.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to user registration page
Step Number	2
Action	Leave full name blank
Step Number	3
Action	Enter email address
Step Number	4
Action	Enter mobile number
Step Number	5
Action	Select user role
Step Number	6
Action	Assign user to group
Step Number	7

Action	Click register button
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Test Data (Values Only):

full_name	
email	test.user@company.com
mobile	01111222333
role	Verifier
group	Tax Payment Group

Validation Criteria	Error message for missing full name; No user is created
Dependencies	Mandatory field validation rules
Notes	Repeat for other mandatory fields as needed.

Test Case 9: Performance: Registration Under Load

Test ID	TC_009
Module	User Management > User Registration
Category	Performance
Priority	High
Test Type	Positive
Risk Level	Medium
Estimated Time	10 minutes
Description	Assess system performance when multiple users are registered simultaneously.
Objective	Ensure registration process remains responsive under load.
Preconditions	Test environment supports concurrent sessions
Expected Result	All users are registered successfully within acceptable response time (e.g., <2 seconds per registration)

Test Steps (Actions Only):

Step Number	1
Action	Open multiple registration forms in parallel sessions

Step Number	2
Action	Enter user details in each session

Step Number	3
Action	Submit registration in all sessions concurrently

Test Data (Values Only):

users	{'full_name': 'User One', 'email': 'user.one@company.com', 'mobile': '01000000001', 'role': 'Initiator', 'gro
Validation Criteria	All registrations succeed; Response time is within threshold
Dependencies	Load testing tools; Test environment capacity
Notes	Simulate at least 3 concurrent registrations.

Test Case 10: Integration: Profile Update Reflected in Authorization Matrix

Test ID	TC_010
Module	User Management > Profile Management
Category	Integration
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	6 minutes
Description	Ensure that changes to user role/group in profile are reflected in the authorization matrix for workflow
Objective	Validate integration between profile management and authorization matrix.
Preconditions	User exists and is assigned to a workflow
Expected Result	User's updated role and group are reflected in the authorization matrix, and the user is eligible for ne

Test Steps (Actions Only):

Step Number	1
Action	Login as admin user
Step Number	2
Action	Navigate to user management
Step Number	3
Action	Select user to update
Step Number	4
Action	Change user role
Step Number	5
Action	Change user group
Step Number	6
Action	Save profile changes

Step Number	7
Action	Navigate to authorization matrix

Step Number	8
Action	Verify updated user role/group in workflow

Test Data (Values Only):

username	mohamed.saeed@company.com
new_role	Approver
new_group	Universal Collection Group

Validation Criteria	Profile updates are reflected in matrix; User can approve relevant workflows
Dependencies	Authorization matrix integration
Notes	Ensures profile changes impact workflow as expected.

Test Case 11: Successful Tax Payment File Upload and Processing

Test ID	TC_011
Module	Tax Collection > File Upload
Category	Functional
Priority	Critical
Test Type	Positive
Risk Level	High
Estimated Time	5 minutes
Description	Validate that a corporate user can successfully upload a valid tax payment file and the system processes it correctly.
Objective	Ensure correct file upload, parsing, and transaction creation for valid files.
Preconditions	User is logged in with tax payment initiation entitlement; Tax Collection module is accessible; Valid payment file is available.
Expected Result	File is uploaded successfully, parsed without errors, transactions are created and listed for verification.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to Tax Collection module

Step Number	2
Action	Select file upload option

Step Number	3
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Action	Click upload button
Step Number	4
Action	Select payment file from local system
Step Number	5
Action	Submit file for processing
Step Number	6
Action	Review uploaded file summary
Step Number	7
Action	Confirm file processing

Test Data (Values Only):

username	corpuser1@company.com
file_path	/files/valid_tax_payments.csv
file_type	csv
file_size	1MB
browser	Chrome
module	Tax Collection

Validation Criteria	File is accepted; Transactions are created; No parsing errors; User receives confirmation
Dependencies	Tax Collection module enabled; Valid file format definition
Notes	Covers standard file upload and processing scenario.

Test Case 12: File Upload with Invalid Format

Test ID	TC_012
Module	Custom Collection > File Upload
Category	Error Handling
Priority	High
Test Type	Negative
Risk Level	Medium
Estimated Time	3 minutes
Description	Verify that the system rejects files with unsupported formats during custom collection payment initiation.
Objective	Ensure robust validation and error messages for invalid file formats.
Preconditions	User is logged in with custom collection initiation entitlement; Custom Collection module is accessible.
Expected Result	System rejects the file upload, displays a clear error message indicating unsupported file format, and logs the attempt.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to Custom Collection module
Step Number	2
Action	Select file upload option
Step Number	3
Action	Click upload button
Step Number	4
Action	Select unsupported file from local system
Step Number	5
Action	Submit file for processing

Test Data (Values Only):

username	corpuser2@company.com
file_path	/files/invalid_format_payments.txt
file_type	txt
file_size	500KB
browser	Firefox
module	Custom Collection

Validation Criteria	File is not accepted; Appropriate error message displayed; No transactions created
Dependencies	File format validation implemented
Notes	Tests error handling for invalid file types.

Test Case 13: API Integration - Fee Retrieval from eFinance

Test ID	TC_013
Module	Universal Collection > API Integration
Category	Integration
Priority	Critical
Test Type	Positive
Risk Level	High
Estimated Time	4 minutes
Description	Validate that the system correctly retrieves and displays transaction fees from the eFinance API base
Objective	Ensure accurate fee calculation via external API.
Preconditions	User is logged in with universal collection initiation entitlement; eFinance API is available

Expected Result	Fee is retrieved from eFinance API, displayed accurately on the UI, and matches the expected value
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Test Steps (Actions Only):

Step Number	1
Action	Navigate to Universal Collection module

Step Number	2
Action	Enter payment amount

Step Number	3
Action	Trigger fee calculation

Step Number	4
Action	Review displayed fee

Test Data (Values Only):

username	corpuser3@company.com
amount	15000
currency	EGP
api_endpoint	https://api.efinance.com/fees
browser	Edge

Validation Criteria	Fee is displayed; Value matches API response; No errors during API call
Dependencies	eFinance API operational; Correct API credentials
Notes	Validates fee calculation integration.

Test Case 14: API Integration Failure Handling

Test ID	TC_014
Module	Universal Collection > API Integration
Category	Error Handling
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	3 minutes
Description	Verify that the system gracefully handles eFinance API downtime and informs the user appropriately.
Objective	Ensure proper error handling and user notification when external API is unavailable.
Preconditions	User is logged in with universal collection initiation entitlement; eFinance API is unavailable

Expected Result	System displays a clear error message indicating fee retrieval failure due to API downtime, and prevents further actions.
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Test Steps (Actions Only):

Step Number	1
Action	Navigate to Universal Collection module

Step Number	2
Action	Enter payment amount

Step Number	3
Action	Trigger fee calculation

Test Data (Values Only):

username	corpuser4@company.com
amount	20000
currency	EGP
api_endpoint	https://api.efinance.com/fees
api_status	down
browser	Chrome

Validation Criteria	Error message displayed; No payment initiated; User is informed of the issue
Dependencies	API error simulation capability
Notes	Tests system resilience to external API failures.

Test Case 15: Role-Based Access Control - Unauthorized File Upload Attempt

Test ID	TC_015
Module	Tax Collection > Access Control
Category	Security
Priority	Critical
Test Type	Negative
Risk Level	Critical
Estimated Time	2 minutes
Description	Ensure that users without the required entitlement cannot upload payment files.
Objective	Validate RBAC enforcement for file upload actions.
Preconditions	User is logged in without tax payment initiation entitlement; Tax Collection module is accessible
Expected Result	File upload option is disabled or hidden, and user cannot proceed with uploading files.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to Tax Collection module

Step Number	2
Action	Attempt to access file upload option

Test Data (Values Only):

username	unauthorizeduser@company.com
role	Viewer
browser	Safari
module	Tax Collection

Validation Criteria	Upload option not accessible; No unauthorized uploads possible
Dependencies	RBAC configuration
Notes	Validates strict access control for sensitive actions.

Test Case 16: 2FA Enforcement on Payment Approval

Test ID	TC_016
Module	Universal Collection > Security Validation
Category	Security
Priority	Critical
Test Type	Positive
Risk Level	High
Estimated Time	4 minutes
Description	Verify that 2FA is enforced during payment approval and only users with valid 2FA can approve transactions.
Objective	Ensure strong authentication for critical actions.
Preconditions	User is logged in with payment approval entitlement; Pending payment is available for approval
Expected Result	2FA code is validated, payment is approved, and audit log is updated with approval and authentication details.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to Universal Collection module

Step Number	2
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Action	Access pending payments
Step Number	3
Action	Select payment for approval
Step Number	4
Action	Initiate approval process
Step Number	5
Action	Enter 2FA code
Step Number	6
Action	Submit approval

Test Data (Values Only):

username	approver1@company.com
payment_id	UC-20240601-001
2fa_code	654321
browser	Chrome

Validation Criteria	2FA required; Approval succeeds only with valid 2FA; Audit log updated
Dependencies	2FA service operational; Pending payment exists
Notes	Ensures compliance with strong authentication requirements.

Test Case 17: Bulk Verification of Uploaded Payments

Test ID	TC_017
Module	Custom Collection > Bulk Actions
Category	Functional
Priority	High
Test Type	Positive
Risk Level	Medium
Estimated Time	5 minutes
Description	Validate that users can select and verify multiple uploaded payment transactions in a single bulk action.
Objective	Ensure bulk verification functionality works as intended.
Preconditions	User is logged in with verification entitlement; Multiple uploaded payments are pending verification.
Expected Result	All selected payments are verified in bulk, status is updated, and user receives confirmation for each.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to Custom Collection module
Step Number	2
Action	Access pending payments list
Step Number	3
Action	Select multiple payments
Step Number	4
Action	Click bulk verify button
Step Number	5
Action	Confirm bulk verification

Test Data (Values Only):

username	verifier1@company.com
payment_ids	CC-20240601-101, CC-20240601-102, CC-20240601-103
browser	Edge
Validation Criteria	All selected payments verified; Status updated; User receives confirmation
Dependencies	Bulk verification feature enabled; Pending payments available
Notes	Tests efficiency of bulk actions for high-volume users.

Test Case 18: Boundary Test - Maximum File Size for Upload

Test ID	TC_018
Module	Tax Collection > File Upload
Category	Boundary
Priority	Medium
Test Type	Boundary
Risk Level	Medium
Estimated Time	4 minutes
Description	Verify that the system accepts a file upload at the maximum allowed file size and rejects files exceed
Objective	Ensure file size validation works at boundary conditions.
Preconditions	User is logged in with tax payment initiation entitlement; Tax Collection module is accessible
Expected Result	File at maximum allowed size is accepted and processed successfully; files exceeding the limit are re

Test Steps (Actions Only):

Step Number	1
Action	Navigate to Tax Collection module
Step Number	2
Action	Select file upload option
Step Number	3
Action	Click upload button
Step Number	4
Action	Select file at maximum allowed size
Step Number	5
Action	Submit file for processing

Test Data (Values Only):

username	corpuser5@company.com
file_path	/files/max_size_tax_payments.csv
file_type	csv
file_size	10MB
max_file_size	10MB
browser	Chrome

Validation Criteria	File at limit accepted; Oversized files rejected; Clear error messages
Dependencies	File size validation implemented
Notes	Validates system behavior at file size boundaries.

Test Case 19: Performance Test - Bulk File Upload Processing Time

Test ID	TC_019
Module	Universal Collection > File Upload
Category	Performance
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	7 minutes
Description	Measure the time taken to upload and process a large bulk payment file and ensure it meets perform
Objective	Ensure system can handle large file uploads within acceptable time limits.
Preconditions	User is logged in with universal collection initiation entitlement; Universal Collection module is access

Expected Result	File is uploaded and processed within 60 seconds, all records are created, and no timeouts or errors
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Test Steps (Actions Only):

Step Number	1
Action	Navigate to Universal Collection module
Step Number	2
Action	Select file upload option
Step Number	3
Action	Click upload button
Step Number	4
Action	Select large bulk payment file
Step Number	5
Action	Submit file for processing
Step Number	6
Action	Measure processing time until completion

Test Data (Values Only):

username	corpuser6@company.com
file_path	/files/large_bulk_payments.csv
file_type	csv
file_size	9MB
number_of_records	5000
browser	Firefox
performance_threshold	60 seconds

Validation Criteria	Processing time within threshold; No errors or timeouts; All records created
Dependencies	Performance monitoring tools available
Notes	Assesses system scalability for large uploads.

Test Case 20: Usability - Download and Print Receipt in Arabic

Test ID	TC_020
Module	Universal Collection > Receipt Management
Category	Usability
Priority	Low

Test Type	Positive
Risk Level	Low
Estimated Time	3 minutes
Description	Verify that users can download and print payment receipts in Arabic and the content is correctly localized.
Objective	Ensure multilingual support and correct formatting for receipts.
Preconditions	User is logged in with receipt access entitlement; Payment transaction is completed
Expected Result	Receipt is downloaded and printed in Arabic, all content is correctly localized, and formatting is preserved.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to Universal Collection module

Step Number	2
Action	Access completed payments

Step Number	3
Action	Select payment for receipt

Step Number	4
Action	Choose Arabic language option

Step Number	5
Action	Download receipt

Step Number	6
Action	Print receipt

Test Data (Values Only):

username	corpuser7@company.com
payment_id	UC-20240601-201
language	Arabic
browser	Chrome

Validation Criteria	Receipt in Arabic; Correct localization; Proper formatting
Dependencies	Arabic localization enabled; Printer configured
Notes	Validates multilingual support for end-users.

Test Case 21: Initiate and Approve Tax Payment with Valid Workflow

Test ID	TC_021
Module	Tax Collection > Payment Workflow
Category	Functional
Priority	Critical
Test Type	Positive
Risk Level	Critical
Estimated Time	8 minutes
Description	Tests the end-to-end process of initiating and approving a tax payment, ensuring workflow steps and
Objective	Validate that tax payment workflow executes correctly with proper entitlements and approvals.
Preconditions	User is onboarded and assigned to the correct authorization group; Workflow is configured with initial
Expected Result	Tax payment is successfully initiated, verified, and approved; transaction status updates to 'Approved'

Test Steps (Actions Only):

Step Number	1
Action	Navigate to tax collection module
Step Number	2
Action	Select payment initiation option
Step Number	3
Action	Enter payment details
Step Number	4
Action	Submit payment for verification
Step Number	5
Action	Verify payment as authorized verifier
Step Number	6
Action	Approve payment as authorized approver
Step Number	7
Action	Check transaction status in dashboard

Test Data (Values Only):

tax_type	Income Tax
amount	25000.00
account_number	EG1234567890123456
initiator_username	corp_user1
verifier_username	corp_verifier1

approver_username	corp_approver1
2fa_code	123456

Validation Criteria	All workflow steps completed; Correct entitlements enforced; Audit logs generated
Dependencies	User roles and entitlements configured; Workflow engine operational
Notes	Covers standard workflow for tax payment with multi-level approval.

Test Case 22: Error Handling for Invalid Amount in Custom Collection

Test ID	TC_022
Module	Custom Collection > Payment Initiation
Category	Error Handling
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	3 minutes
Description	Verifies system validation and error messaging when a non-numeric or negative amount is entered.
Objective	Ensure the system rejects invalid payment amounts and provides clear error messages.
Preconditions	User is logged in with payment initiation privileges; Custom collection module is accessible
Expected Result	System displays validation error indicating invalid amount; payment is not submitted; no transaction i

Test Steps (Actions Only):

Step Number	1
Action	Navigate to custom collection module
Step Number	2
Action	Select payment initiation option
Step Number	3
Action	Enter invalid amount in payment form
Step Number	4
Action	Attempt to submit payment

Test Data (Values Only):

custom_type	Import Duty
amount	-5000AB

account_number	EG9876543210987654
initiator_username	corp_user2

Validation Criteria	Error message is clear and accurate; No invalid transaction is created
Dependencies	Validation logic implemented for amount fields
Notes	Tests numeric and format validation for payment amount.

Test Case 23: Performance Test for Bulk Approval in Universal Collection

Test ID	TC_023
Module	Universal Collection > Bulk Approval
Category	Performance
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	10 minutes
Description	Measures system response time and success rate when approving a large batch of transactions.
Objective	Validate system performance and stability during bulk approval operations.
Preconditions	User has bulk approval privileges; At least 100 pending transactions exist
Expected Result	All selected transactions are approved within 60 seconds; system remains responsive; no errors or ti

Test Steps (Actions Only):

Step Number	1
Action	Navigate to universal collection module
Step Number	2
Action	Access pending transactions grid
Step Number	3
Action	Select all transactions for bulk approval
Step Number	4
Action	Initiate bulk approval action
Step Number	5
Action	Monitor system response and completion time

Test Data (Values Only):

approver_username	bulk_approver1
transaction_count	100
browser	Chrome
timeout	60 seconds

Validation Criteria	All transactions approved; Operation completes within timeout; No system errors
Dependencies	Bulk approval feature enabled; Sufficient test data in pending state
Notes	Focuses on system scalability and responsiveness under load.

Test Case 24: Database Integrity after Payment Rejection

Test ID	TC_024
Module	Tax Collection > Payment Workflow
Category	Integration
Priority	Critical
Test Type	Negative
Risk Level	Critical
Estimated Time	7 minutes
Description	Ensures that rejecting a payment updates all related database records correctly and no orphaned data is created.
Objective	Validate data integrity and status updates after payment rejection.
Preconditions	User is assigned as verifier or approver; At least one payment is pending verification/approval
Expected Result	Payment status is updated to 'Rejected' in the database; all related audit and workflow records reflect the rejection.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to tax collection module

Step Number	2
Action	Access pending payments list

Step Number	3
Action	Select a pending payment

Step Number	4
Action	Reject the selected payment

Step Number	5
Action	Query database for payment and related audit records

Test Data (Values Only):

payment_id	TXP123456
verifier_username	corp_verifier2
Validation Criteria	Database reflects correct status; Audit trail is complete; No orphaned records
Dependencies	Database access for validation; Audit logging enabled
Notes	Validates backend data integrity after workflow action.

Test Case 25: Unauthorized Access Attempt to Entitlement Management

Test ID	TC_025
Module	Admin > Entitlement Management
Category	Security
Priority	Critical
Test Type	Negative
Risk Level	Critical
Estimated Time	2 minutes
Description	Tests system security by attempting to access sensitive entitlement management screens as a non-admin user.
Objective	Ensure RBAC prevents unauthorized access to entitlement management.
Preconditions	User is logged in with standard (non-admin) privileges
Expected Result	Access is denied; user is shown an authorization error message; no entitlement data is exposed.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to admin section
Step Number	2
Action	Attempt to access entitlement management page

Test Data (Values Only):

username	corp_user3
Validation Criteria	Access is blocked; No sensitive data is leaked
Dependencies	RBAC implemented; Entitlement management UI available
Notes	Covers security enforcement for admin-only features.

Test Case 26: Boundary Test for Maximum Allowed Payment Amount

Test ID	TC_026
Module	Universal Collection > Payment Initiation
Category	Boundary
Priority	High
Test Type	Positive
Risk Level	Medium
Estimated Time	5 minutes
Description	Verifies system behavior when initiating a payment at the upper boundary of allowed amount.
Objective	Ensure system accepts payment at the maximum allowed limit and processes it correctly.
Preconditions	User is logged in with payment initiation privileges; Maximum allowed amount is defined in system configuration.
Expected Result	Payment is accepted and processed successfully; transaction status is 'Initiated'; no validation errors.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to universal collection module
Step Number	2
Action	Select payment initiation option
Step Number	3
Action	Enter maximum allowed amount
Step Number	4
Action	Submit payment
Step Number	5
Action	Verify transaction status

Test Data (Values Only):

payment_type	Service Fee
amount	1000000.00
account_number	EG1122334455667788
initiator_username	corp_user4
Validation Criteria	Payment is processed at boundary value; No errors or warnings
Dependencies	System configuration for amount limits
Notes	Tests upper boundary for payment amount field.

Test Case 27: API Failure Handling During Fee Retrieval

Test ID	TC_027
Module	Universal Collection > Fee Calculation
Category	Integration
Priority	High
Test Type	Error
Risk Level	High
Estimated Time	4 minutes
Description	Simulates an external API failure during fee retrieval and verifies system fallback and error messaging.
Objective	Ensure system gracefully handles API downtime and informs the user appropriately.
Preconditions	User is logged in with payment initiation privileges; eFinance API is intentionally made unavailable
Expected Result	System displays an error message indicating fee retrieval failure; payment is not submitted; user is p

Test Steps (Actions Only):

Step Number	1
Action	Navigate to universal collection module

Step Number	2
Action	Select payment initiation option

Step Number	3
Action	Enter payment details

Step Number	4
Action	Submit payment to trigger fee retrieval

Test Data (Values Only):

payment_type	License Renewal
amount	500.00
account_number	EG5566778899001122
initiator_username	corp_user5

Validation Criteria	User is informed of API failure; No incomplete transaction is created
Dependencies	eFinance API integration; API can be disabled for testing
Notes	Validates error handling for external service unavailability.

Test Case 28: Usability Test for Multilingual Receipt Download

Test ID	TC_028
Module	Universal Collection > Receipt Management
Category	Usability
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	6 minutes
Description	Checks the availability and correctness of downloadable receipts in multiple languages.
Objective	Ensure users can download receipts in their preferred language and content is accurate.
Preconditions	User has completed a successful payment transaction
Expected Result	Receipts are successfully downloaded in both English and Arabic; all transaction details are accurate

Test Steps (Actions Only):

Step Number	1
Action	Navigate to completed transactions list

Step Number	2
Action	Select a completed transaction

Step Number	3
Action	Download receipt in English

Step Number	4
Action	Download receipt in Arabic

Step Number	5
Action	Open and review downloaded receipts

Test Data (Values Only):

transaction_id	UCX987654
user_language_preferences	English, Arabic

Validation Criteria	Receipts available in both languages; Content is accurate and localized
Dependencies	Multilingual support enabled; Completed transaction available
Notes	Covers multilingual usability for receipt downloads.

Test Case 29: Audit Trail Verification for Entitlement Changes

Test ID	TC_029
Module	Admin > Entitlement Management
Category	Functional
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	7 minutes
Description	Ensures all changes to user entitlements are logged with complete details for compliance.
Objective	Validate that entitlement changes are fully auditable.
Preconditions	Admin user is logged in; Audit logging is enabled
Expected Result	All entitlement changes are recorded in the audit log with timestamps, admin user details, and before

Test Steps (Actions Only):

Step Number	1
Action	Navigate to entitlement management page
Step Number	2
Action	Select a user to modify entitlements
Step Number	3
Action	Change entitlements for the user
Step Number	4
Action	Save changes
Step Number	5
Action	Access audit log viewer
Step Number	6
Action	Search for recent entitlement change entries

Test Data (Values Only):

admin_username	sys_admin1
target_username	corp_user6
entitlement_changes	Add Universal Collection, Remove Custom Collection
Validation Criteria	Audit log contains complete details; All changes are traceable
Dependencies	Audit log feature operational
Notes	Ensures compliance and traceability for entitlement management.

Test Case 30: Session Timeout Handling During Payment Initiation

Test ID	TC_030
Module	Universal Collection > Payment Initiation
Category	Error Handling
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	8 minutes
Description	Tests system behavior when user session expires during payment initiation.
Objective	Ensure incomplete payment is not processed and user is prompted to re-authenticate.
Preconditions	User is logged in with payment initiation privileges; Session timeout is configured (e.g., 5 minutes for admin users)
Expected Result	User is logged out after timeout; payment is not submitted; user is redirected to login page and prompted to re-authenticate.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to universal collection module
Step Number	2
Action	Select payment initiation option
Step Number	3
Action	Enter payment details
Step Number	4
Action	Remain idle until session timeout occurs
Step Number	5
Action	Attempt to submit payment after timeout

Test Data (Values Only):

payment_type	Utility Bill
amount	750.00
account_number	EG3344556677889900
initiator_username	corp_user7
session_timeout	5 minutes
Validation Criteria	Session expires as configured; No incomplete transaction is processed
Dependencies	Session management configured

Notes	Validates session management and error handling for idle users.
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Test Case 31: Successful Tax Payment Initiation and Approval Workflow

Test ID	TC_031
Module	Customer Portal > Tax Collection
Category	Functional
Priority	Critical
Test Type	Positive
Risk Level	Critical
Estimated Time	10 minutes
Description	Validates that a corporate user can initiate a tax payment, and the transaction follows the configured
Objective	Ensure tax payment workflow operates as per configuration, including all required steps and status u
Preconditions	Corporate user is onboarded and entitled for Tax Collection; Authorization matrix is configured for se
Expected Result	Payment is initiated, verified, and approved in sequence; transaction status updates at each stage; a

Test Steps (Actions Only):

Step Number	1
Action	Login to the portal
Step Number	2
Action	Navigate to Tax Collection module
Step Number	3
Action	Select 'Initiate New Payment'
Step Number	4
Action	Enter payment details
Step Number	5
Action	Submit payment for verification
Step Number	6
Action	Login as verifier and verify payment
Step Number	7
Action	Login as approver and approve payment

Test Data (Values Only):

username_initiator	corpuser1@company.com
username_verifier	verifier1@company.com
username_approver	approver1@company.com
payment_type	Tax
tax_id	EG123456789
amount	50000
currency	EGP
payment_date	05-08-2024
workflow_type	Sequential

Validation Criteria	Transaction status changes at each step; Audit log entries for each action; Integration call to core banking after approval
Dependencies	User entitlement setup; Workflow configuration; Core banking API availability
Notes	Covers end-to-end workflow and integration

Test Case 32: Entitlement Misconfiguration - Unauthorized Access Prevention

Test ID	TC_032
Module	Admin Console > Entitlement Management
Category	Security
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	5 minutes
Description	Checks that a user without the required entitlement cannot access or initiate Custom Collection payments.
Objective	Validate RBAC enforcement for module access and actions.
Preconditions	User is onboarded but not entitled for Custom Collection; Admin has not assigned Custom Collection entitlement.
Expected Result	User is denied access to Custom Collection module and cannot initiate payments; appropriate error message is displayed.

Test Steps (Actions Only):

Step Number	1
Action	Login to the portal

Step Number	2
Action	Attempt to navigate to Custom Collection module

Step Number	3
Action	Attempt to initiate a new payment

Test Data (Values Only):

username	user2@company.com
password	UserPass456!
module	Custom Collection

Validation Criteria	Access is blocked; Error message is clear; Audit log records unauthorized attempt
Dependencies	Entitlement configuration
Notes	Tests RBAC and audit trail for unauthorized access

Test Case 33: Custom Collection Payment - API Fee Retrieval Integration

Test ID	TC_033
Module	Customer Portal > Custom Collection
Category	Integration
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	7 minutes
Description	Validates that the fee is correctly retrieved from the eFinance API based on the transaction amount d
Objective	Ensure fee calculation is accurate and integration is functional.
Preconditions	User is entitled for Custom Collection; eFinance API is available
Expected Result	Fee is retrieved from eFinance API based on amount; fee is displayed to user; payment cannot proce

Test Steps (Actions Only):

Step Number	1
Action	Login to the portal

Step Number	2
Action	Navigate to Custom Collection module

Step Number	3
Action	Select 'Initiate New Payment'

Step Number	4
Action	Enter payment details

Step Number	5
Action	Trigger fee retrieval

Step Number	6
Action	Review calculated fee

Test Data (Values Only):

username	customuser@company.com
payment_type	Custom
custom_code	CUST2024
amount	120000
currency	EGP

Validation Criteria	Fee matches API response; Error handling if API fails
Dependencies	eFinance API availability
Notes	Integration point with external system

Test Case 34: Universal Collection - Mandatory Field Validation

Test ID	TC_034
Module	Customer Portal > Universal Collection
Category	Functional
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	4 minutes
Description	Checks that the system enforces mandatory field validation and displays appropriate error messages
Objective	Ensure data integrity and user guidance for incomplete submissions.
Preconditions	User is entitled for Universal Collection
Expected Result	System prevents submission; clear error messages are displayed for each missing mandatory field; n

Test Steps (Actions Only):

Step Number	1
Action	Login to the portal

Step Number	2
Action	Navigate to Universal Collection module

Step Number	3
Action	Select 'Initiate New Payment'

Step Number	4
Action	Leave mandatory fields blank

Step Number	5
Action	Attempt to submit payment

Test Data (Values Only):

username	universaluser@company.com
fields_left_blank	amount, beneficiary_name

Validation Criteria	All mandatory fields are validated; Error messages are user-friendly
Dependencies	Field validation rules
Notes	Validates business rules for data entry

Test Case 35: Role Mapping and Authorization Matrix Configuration

Test ID	TC_035
Module	Admin Console > Role Management
Category	Functional
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	6 minutes
Description	Ensures that admin can create a new role, assign it to a group, and configure approval limits in the a
Objective	Validate admin's ability to manage roles and workflow configurations.
Preconditions	Admin user is logged into the console
Expected Result	Role is created and mapped to group; approval limits are set and saved; changes are reflected in aut

Test Steps (Actions Only):

Step Number	1
Action	Navigate to Role Management section

Step Number	2
Action	Create new role

Step Number	3
Action	Assign role to user group

Step Number	4
Action	Set approval limits in authorization matrix

Step Number	5
Action	Save configuration

Test Data (Values Only):

role_name	HighValueApprover
group_name	FinanceManagers
approval_limit	250000
currency	EGP

Validation Criteria	Role appears in group mapping; Approval limits are enforced; Audit log entry for configuration
Dependencies	Admin permissions
Notes	Critical for workflow and security configuration

Test Case 36: UI Usability - Navigation and Contextual Help

Test ID	TC_036
Module	Customer Portal > Navigation
Category	Usability
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	5 minutes
Description	Validates the intuitiveness of navigation and the availability of contextual help within the portal.
Objective	Ensure users can easily access modules and receive guidance.
Preconditions	User is onboarded and entitled for all modules
Expected Result	Navigation is smooth and intuitive; contextual help is available and relevant in each module; no naviga

Test Steps (Actions Only):

Step Number	1
Action	Login to the portal

Step Number	2
Action	Navigate to Tax Collection module

Step Number	3
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Action	Access contextual help
Step Number	4
Action	Navigate to Custom Collection module
Step Number	5
Action	Access contextual help

Test Data (Values Only):

username	usabilityuser@company.com
modules	Tax Collection, Custom Collection

Validation Criteria	Modules are easily accessible; Help content is relevant and available
Dependencies	Contextual help content
Notes	Focus on user experience and guidance

Test Case 37: Boundary Test - Maximum Payment Amount

Test ID	TC_037
Module	Customer Portal > Tax Collection
Category	Boundary
Priority	Medium
Test Type	Boundary
Risk Level	Medium
Estimated Time	4 minutes
Description	Tests system behavior when a user attempts to initiate a payment at the maximum allowed limit.
Objective	Ensure system enforces upper boundary for payment amount.
Preconditions	User is entitled for Tax Collection; Maximum amount is defined in system settings
Expected Result	Payment is accepted and processed if amount equals maximum limit; error is shown if amount exceeds

Test Steps (Actions Only):

Step Number	1
Action	Login to the portal
Step Number	2
Action	Navigate to Tax Collection module
Step Number	3
Action	Select 'Initiate New Payment'

Step Number	4
Action	Enter maximum allowed amount

Step Number	5
Action	Submit payment

Test Data (Values Only):

username	boundaryuser@company.com
amount	1000000
currency	EGP
tax_id	EG987654321

Validation Criteria	Boundary is enforced; No off-by-one errors
Dependencies	System configuration for max amount
Notes	Validates upper limit enforcement

Test Case 38: Error Handling - External API Downtime During Fee Retrieval

Test ID	TC_038
Module	Customer Portal > Custom Collection
Category	Error Handling
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	5 minutes
Description	Checks system response and error handling when the external fee calculation API is down.
Objective	Ensure graceful error handling and user notification for integration failures.
Preconditions	User is entitled for Custom Collection; eFinance API is intentionally made unavailable
Expected Result	System displays clear error message about API unavailability; payment cannot proceed; error is logged

Test Steps (Actions Only):

Step Number	1
Action	Login to the portal

Step Number	2
Action	Navigate to Custom Collection module

Step Number	3
Action	Select 'Initiate New Payment'
Step Number	4
Action	Enter payment details
Step Number	5
Action	Trigger fee retrieval

Test Data (Values Only):

username	erroruser@company.com
amount	50000
currency	EGP
custom_code	CUSTERR2024
Validation Criteria	Error message is user-friendly; No incomplete transaction is created; Error is logged
Dependencies	eFinance API downtime simulation
Notes	Critical for integration robustness

Test Case 39: Performance Test - Bulk Verification of Pending Transactions

Test ID	TC_039
Module	Customer Portal > Pending Transactions
Category	Performance
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	8 minutes
Description	Assesses system performance and responsiveness during bulk verification operations.
Objective	Ensure system can handle bulk actions efficiently without errors or timeouts.
Preconditions	User is entitled for verification; Multiple payments are pending verification
Expected Result	All selected transactions are verified in bulk within acceptable response time; no errors or timeouts o

Test Steps (Actions Only):

Step Number	1
Action	Login to the portal

Step Number	2
Action	Navigate to Pending Transactions
Step Number	3
Action	Select multiple pending payments
Step Number	4
Action	Initiate bulk verification
Step Number	5
Action	Monitor system response time

Test Data (Values Only):

username	bulkverifier@company.com
pending_payments	TXN1001, TXN1002, TXN1003, TXN1004, TXN1005

Validation Criteria	Bulk action completes successfully; Response time is within SLA; Audit log entry for bulk verification
Dependencies	Bulk verification feature; Sufficient pending transactions
Notes	Performance and scalability focus

Test Case 40: Receipt Download and Multilingual Support

Test ID	TC_040
Module	Customer Portal > Transaction History
Category	Usability
Priority	Low
Test Type	Positive
Risk Level	Low
Estimated Time	3 minutes
Description	Validates that users can download or print transaction receipts in both supported languages.
Objective	Ensure multilingual support and correct receipt formatting.
Preconditions	User has completed at least one payment transaction
Expected Result	Receipts are downloaded in both English and Arabic; all details are correctly displayed and formatted

Test Steps (Actions Only):

Step Number	1
Action	Login to the portal
Step Number	2

Action	Navigate to Transaction History
Step Number	3
Action	Select a completed transaction
Step Number	4
Action	Download receipt in English
Step Number	5
Action	Download receipt in Arabic

Test Data (Values Only):

username	multilingualuser@company.com
transaction_id	TXN20240805
languages	English, Arabic
Validation Criteria	Receipts are accurate and readable; Language switch is functional
Dependencies	Multilingual receipt templates
Notes	Covers multilingual and print/download features

Test Case 41: Export Tax Collection Report in English as PDF

Test ID	TC_041
Module	Reporting > Tax Collection Reports
Category	Functional
Priority	High
Test Type	Positive
Risk Level	Medium
Estimated Time	5 minutes
Description	Verify that a corporate user can export a tax collection report in English as a PDF file.
Objective	Ensure correct report generation and export functionality for tax collection in English PDF format.
Preconditions	User is logged in with reporting entitlements; Tax collection transactions exist for the selected period
Expected Result	A PDF file containing the tax collection summary for the specified date range is downloaded in English

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the Tax Collection Reports section
Step Number	2

Action	Select report type
Step Number	3
Action	Set date range for report
Step Number	4
Action	Choose language option
Step Number	5
Action	Select export format
Step Number	6
Action	Click export button

Test Data (Values Only):

report_type	Tax Collection Summary
date_from	01-06-2024
date_to	30-06-2024
language	English
export_format	PDF

Validation Criteria	Report content matches selected criteria; File is downloadable and opens correctly; Language is English
Dependencies	Tax collection transactions available; User has export permissions
Notes	Verify PDF formatting and data accuracy.

Test Case 42: Export Universal Collection Report with Invalid Date Range

Test ID	TC_042
Module	Reporting > Universal Collection Reports
Category	Error Handling
Priority	Medium
Test Type	Negative
Risk Level	Low
Estimated Time	3 minutes
Description	Test system response when a user attempts to export a report with an invalid date range.
Objective	Validate error handling for invalid date inputs during report export.
Preconditions	User is logged in with reporting access
Expected Result	System displays an error message indicating the end date cannot be before the start date, and export is blocked.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the Universal Collection Reports section
Step Number	2
Action	Select report type
Step Number	3
Action	Set date range for report
Step Number	4
Action	Choose export format
Step Number	5
Action	Click export button

Test Data (Values Only):

report_type	Universal Collection Detailed
date_from	15-07-2024
date_to	10-07-2024
export_format	Excel
Validation Criteria	Error message is clear and accurate; No file is exported
Dependencies	Date validation logic implemented
Notes	Test for both UI and backend validation.

Test Case 43: Verify Backup of Custom Collection Data

Test ID	TC_043
Module	Backup and Recovery > Data Backup
Category	Integration
Priority	Critical
Test Type	Positive
Risk Level	High
Estimated Time	10 minutes
Description	Ensure that a scheduled backup of custom collection data completes successfully and data is stored
Objective	Validate backup process for custom collection data.
Preconditions	Custom collection data exists; User has backup initiation privileges
Expected Result	Backup completes successfully, backup file is securely stored, and confirmation is logged in the audi

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the Backup Management section
Step Number	2
Action	Select data module for backup
Step Number	3
Action	Choose backup type
Step Number	4
Action	Set backup schedule
Step Number	5
Action	Initiate backup process

Test Data (Values Only):

data_module	Custom Collection
backup_type	Full
schedule	Immediate
Validation Criteria	Backup file is created and accessible; Audit log entry is generated
Dependencies	Backup service operational; Sufficient storage available
Notes	Test backup integrity in subsequent recovery test.

Test Case 44: Restore Tax Collection Data from Backup

Test ID	TC_044
Module	Backup and Recovery > Data Recovery
Category	Functional
Priority	Critical
Test Type	Positive
Risk Level	Critical
Estimated Time	15 minutes
Description	Test the ability to restore tax collection data from a previously created backup file.
Objective	Ensure data recovery process works and restores all records accurately.
Preconditions	Valid backup file exists for tax collection data; User has recovery permissions
Expected Result	Tax collection data is fully restored from the backup, all records are present and accurate, and a record is created for the restored data.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the Data Recovery section
Step Number	2
Action	Select backup file for restoration
Step Number	3
Action	Confirm restoration action
Step Number	4
Action	Monitor restoration progress
Step Number	5
Action	Verify completion notification

Test Data (Values Only):

backup_file	tax_collection_backup_20240630.zip
Validation Criteria	All records restored; No data loss or corruption; Recovery log entry created
Dependencies	Backup file integrity; Recovery module operational
Notes	Cross-verify restored data with backup contents.

Test Case 45: Cross-Platform Export of Custom Collection Report

Test ID	TC_045
Module	Reporting > Custom Collection Reports
Category	Performance
Priority	High
Test Type	Positive
Risk Level	Medium
Estimated Time	20 minutes
Description	Verify that the custom collection report export works correctly on multiple browsers and operating systems.
Objective	Ensure cross-platform compatibility of report export functionality.
Preconditions	User has access to custom collection reports; Custom collection data exists
Expected Result	Report is exported successfully in Excel format on all tested platforms and browsers, with consistent data.

Test Steps (Actions Only):

Step Number	1
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Action	Open the application on the selected platform and browser
Step Number	2
Action	Navigate to Custom Collection Reports section
Step Number	3
Action	Select report type
Step Number	4
Action	Set date range
Step Number	5
Action	Choose export format
Step Number	6
Action	Click export button

Test Data (Values Only):

platforms	Windows 11, macOS Ventura, Ubuntu 22.04
browsers	Chrome 125, Firefox 115, Edge 123
report_type	Custom Collection Summary
date_from	01-07-2024
date_to	10-07-2024
export_format	Excel
Validation Criteria	Export works on all platforms; File content and format are identical
Dependencies	Application supports all listed browsers and OS; Network connectivity
Notes	Compare exported files across platforms for discrepancies.

Test Case 46: Unauthorized User Attempts Data Backup

Test ID	TC_046
Module	Backup and Recovery > Data Backup
Category	Security
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	3 minutes
Description	Test that a user without backup privileges cannot initiate a backup operation.
Objective	Ensure proper enforcement of backup privileges.

Preconditions	User is logged in without backup permissions
Expected Result	User is denied access to backup functionality, and an appropriate error or access denied message is displayed

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the Backup Management section
Step Number	2
Action	Attempt to select data module for backup
Step Number	3
Action	Attempt to initiate backup process

Test Data (Values Only):

user_role	Standard Corporate User
data_module	Universal Collection
Validation Criteria	Access is denied; No backup is initiated; Error message is clear
Dependencies	RBAC implemented for backup operations
Notes	Check audit logs for unauthorized attempt.

Test Case 47: Performance of Bulk Report Export

Test ID	TC_047
Module	Reporting > Bulk Export
Category	Performance
Priority	Critical
Test Type	Positive
Risk Level	High
Estimated Time	15 minutes
Description	Measure the system's ability to handle bulk export of multiple governmental payment reports.
Objective	Validate system performance and stability during bulk export operations.
Preconditions	User has bulk export privileges; Multiple report types available
Expected Result	All selected reports are exported successfully within acceptable time limits, with no data loss or system crashes

Test Steps (Actions Only):

Step Number	1
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Action	Navigate to the Bulk Export section
Step Number	2
Action	Select multiple report types
Step Number	3
Action	Set date range for all reports
Step Number	4
Action	Choose export format
Step Number	5
Action	Initiate bulk export
Step Number	6
Action	Monitor export progress

Test Data (Values Only):

report_types	Tax Collection, Custom Collection, Universal Collection
date_from	01-06-2024
date_to	30-06-2024
export_format	PDF
Validation Criteria	All reports exported; Export completes within 2 minutes; No errors or timeouts
Dependencies	Bulk export feature enabled; Sufficient system resources
Notes	Monitor system resource usage during export.

Test Case 48: Usability of Data Export Interface for New Users

Test ID	TC_048
Module	Reporting > Export UI
Category	Usability
Priority	Medium
Test Type	Positive
Risk Level	Medium
Estimated Time	7 minutes
Description	Assess the usability of the report export interface for a first-time user.
Objective	Ensure the export UI is intuitive and user-friendly.
Preconditions	User account is newly created with reporting access
Expected Result	User is able to easily locate and use the export feature without confusion, and the report is exported

Test Steps (Actions Only):

Step Number	1
Action	Log in as a new user
Step Number	2
Action	Navigate to the Reports section
Step Number	3
Action	Attempt to locate export options
Step Number	4
Action	Select report type and date range
Step Number	5
Action	Export the report

Test Data (Values Only):

user_type	First-time Corporate User
report_type	Tax Collection
date_from	01-07-2024
date_to	07-07-2024
export_format	PDF
Validation Criteria	No user confusion or errors; Export completes successfully
Dependencies	Export UI is deployed; User onboarding completed
Notes	Observe user interaction for possible UI improvements.

Test Case 49: Boundary Test: Export Report with Maximum Date Range

Test ID	TC_049
Module	Reporting > Date Range Validation
Category	Boundary
Priority	High
Test Type	Boundary
Risk Level	Medium
Estimated Time	12 minutes
Description	Test system behavior when exporting a report with the maximum permitted date range.

Objective	Validate system's ability to handle large data exports within boundary limits.
Preconditions	User has reporting access; Sufficient data exists for the full date range
Expected Result	Report is exported successfully with all data for the maximum date range, no truncation or errors occur

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the Reports section

Step Number	2
Action	Select report type

Step Number	3
Action	Set date range to maximum allowed

Step Number	4
Action	Choose export format

Step Number	5
Action	Click export button

Test Data (Values Only):

report_type	Universal Collection
date_from	01-01-2023
date_to	31-12-2024
export_format	Excel

Validation Criteria	All data included; No export errors or timeouts
Dependencies	System supports large data exports; Export limits configured
Notes	Monitor system performance during export.

Test Case 50: Security Test: Export Attempt Without 2FA

Test ID	TC_050
Module	Reporting > Export Security
Category	Security
Priority	Critical
Test Type	Negative
Risk Level	Critical
Estimated Time	4 minutes

Description	Test that a user cannot export reports without completing two-factor authentication.
Objective	Ensure 2FA enforcement before allowing report export.
Preconditions	User account requires 2FA for sensitive actions; 2FA is not completed
Expected Result	Export is blocked and user is prompted to complete 2FA before proceeding.

Test Steps (Actions Only):

Step Number	1
Action	Log in without completing 2FA
Step Number	2
Action	Navigate to the Reports section
Step Number	3
Action	Select report type and date range
Step Number	4
Action	Attempt to export report

Test Data (Values Only):

user_role	Corporate Admin
report_type	Tax Collection
date_from	01-06-2024
date_to	30-06-2024
export_format	PDF
2fa_status	Not Completed
Validation Criteria	Export is blocked; User receives 2FA prompt
Dependencies	2FA is enforced for report export
Notes	Test with both SMS and authenticator app 2FA methods.

Test Case 51: Successful Corporate User Registration

Test ID	TC_051
Module	User Management > User Registration
Category	Functional
Priority	Critical
Test Type	Positive
Risk Level	High

Estimated Time	5 minutes
Description	Verify that a corporate user can successfully register by providing all required information with valid o
Objective	Ensure that the registration process works as expected for valid input and creates a new user profile.
Preconditions	User is not already registered; Registration page is accessible
Expected Result	User account is created successfully, confirmation email is sent, and user is redirected to the login pa

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the registration page
Step Number	2
Action	Enter full name
Step Number	3
Action	Enter corporate email address
Step Number	4
Action	Enter mobile number
Step Number	5
Action	Select user role from dropdown
Step Number	6
Action	Set password
Step Number	7
Action	Confirm password
Step Number	8
Action	Click register button

Test Data (Values Only):

full_name	Ahmed Mostafa
email	ahmed.mostafa@company.com
mobile	01234567890
role	Corporate Initiator
password	StrongPass!2024
confirm_password	StrongPass!2024
browser	Chrome
url	https://vtransact.eg/register

Validation Criteria	User profile is created in the database; Confirmation email is received; Success message is shown
Dependencies	Email service operational; Registration page deployed
Notes	Covers standard registration workflow for new corporate users.

Test Case 52: Registration with Invalid Email Format

Test ID	TC_052
Module	User Management > User Registration
Category	Functional
Priority	High
Test Type	Negative
Risk Level	Medium
Estimated Time	3 minutes
Description	Check that the system validates email format and prevents registration with an invalid email.
Objective	Ensure email field validation is enforced during registration.
Preconditions	Registration page is accessible
Expected Result	Registration is blocked, and a clear error message is displayed indicating invalid email format. No ac

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the registration page
Step Number	2
Action	Enter full name
Step Number	3
Action	Enter invalid email address
Step Number	4
Action	Enter mobile number
Step Number	5
Action	Select user role from dropdown
Step Number	6
Action	Set password
Step Number	7
Action	Confirm password

Step Number	8
Action	Click register button

Test Data (Values Only):

full_name	Sara Khaled
email	sara.khaled@company
mobile	01122334455
role	Corporate Approver
password	Password@2024
confirm_password	Password@2024
browser	Firefox
url	https://vtransact.eg/register

Validation Criteria	Error message is shown for invalid email; No user account is created
Dependencies	Registration page deployed
Notes	Validates frontend and backend email format checks.

Test Case 53: Session Timeout After Inactivity

Test ID	TC_053
Module	Authentication > Session Management
Category	Security
Priority	Critical
Test Type	Positive
Risk Level	High
Estimated Time	18 minutes
Description	Check if the user is automatically logged out after the configured session timeout period due to inactivity.
Objective	Ensure session management enforces automatic logout for security compliance.
Preconditions	User is logged in; Session timeout is set to 15 minutes
Expected Result	User is automatically logged out after 15 minutes of inactivity. Any action prompts a login screen and re-authentication.

Test Steps (Actions Only):

Step Number	1
Action	Login to the portal

Step Number	2
Action	Remain inactive for the session timeout period

Step Number	3
Action	Attempt to perform any action after timeout

Test Data (Values Only):

username	mona.hassan@company.com
password	MonaPass#2024
browser	Edge
url	https://vtransact.eg/login
timeout	15 minutes

Validation Criteria	Session is terminated after timeout; User is redirected to login screen
Dependencies	Session management configured
Notes	Validates compliance with security requirements for session handling.

Test Case 54: Login Attempt with Incorrect Password

Test ID	TC_054
Module	Authentication > Login
Category	Security
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	2 minutes
Description	Verify that the system rejects login attempts with incorrect credentials and displays an appropriate error message.
Objective	Ensure login security by preventing unauthorized access.
Preconditions	User account exists
Expected Result	Login is denied, and a clear error message is displayed indicating incorrect credentials. No session is established.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to login page

Step Number	2
Action	Enter valid username

Step Number	3
Action	Enter incorrect password

Step Number	4
Action	Click login button

Test Data (Values Only):

username	youssef.ali@company.com
password	WrongPass123
browser	Chrome
url	https://vtransact.eg/login

Validation Criteria	Error message is shown for wrong password; No session is created
Dependencies	User account exists
Notes	Tests password validation and error messaging.

Test Case 55: Mandatory Field Validation During Registration

Test ID	TC_055
Module	User Management > User Registration
Category	Functional
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	3 minutes
Description	Verify that the system enforces mandatory field validation and prevents registration if required fields are missing.
Objective	Ensure data integrity by requiring all mandatory fields during registration.
Preconditions	Registration page is accessible
Expected Result	Registration is blocked, and an error message is displayed indicating that the full name is required. No session is created.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the registration page

Step Number	2
Action	Leave full name field blank

Step Number	3
Action	Enter email address

Step Number	4
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Action	Enter mobile number
Step Number	5
Action	Select user role from dropdown
Step Number	6
Action	Set password
Step Number	7
Action	Confirm password
Step Number	8
Action	Click register button

Test Data (Values Only):

full_name	
email	laila.samir@company.com
mobile	01099887766
role	Verifier
password	LailaPass!2024
confirm_password	LailaPass!2024
browser	Safari
url	https://vtransact.eg/register

Validation Criteria	Error message for missing mandatory field; No user account is created
Dependencies	Registration page deployed
Notes	Validates mandatory field enforcement.

Test Case 56: Password Complexity Enforcement During Registration

Test ID	TC_056
Module	User Management > User Registration
Category	Security
Priority	High
Test Type	Negative
Risk Level	High
Estimated Time	3 minutes
Description	Verify that the system enforces password complexity rules and prevents registration with a weak pas
Objective	Ensure strong password policies are enforced for user accounts.

Preconditions	Registration page is accessible
Expected Result	Registration is blocked, and an error message is displayed indicating password does not meet comp

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the registration page
Step Number	2
Action	Enter full name
Step Number	3
Action	Enter email address
Step Number	4
Action	Enter mobile number
Step Number	5
Action	Select user role from dropdown
Step Number	6
Action	Set weak password
Step Number	7
Action	Confirm password
Step Number	8
Action	Click register button

Test Data (Values Only):

full_name	Omar Fathy
email	omar.fathy@company.com
mobile	01211223344
role	Releaser
password	12345
confirm_password	12345
browser	Chrome
url	https://vtransact.eg/register

Validation Criteria	Error message for weak password; No user account is created
Dependencies	Password policy configured
Notes	Tests password policy enforcement.

Test Case 57: Profile Update with Valid Data

Test ID	TC_057
Module	User Management > Profile Management
Category	Functional
Priority	Medium
Test Type	Positive
Risk Level	Low
Estimated Time	2 minutes
Description	Verify that a user can successfully update their profile details with valid data.
Objective	Ensure profile update functionality works as expected for valid input.
Preconditions	User is logged in
Expected Result	Profile is updated successfully, and a confirmation message is displayed. Changes are reflected in the system.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to profile management page

Step Number	2
Action	Edit full name

Step Number	3
Action	Edit mobile number

Step Number	4
Action	Click save changes button

Test Data (Values Only):

full_name	Omar Fathy ElSayed
mobile	01233445566
browser	Edge
url	https://vtransact.eg/profile

Validation Criteria	Profile data is updated in the database; Success message is shown
Dependencies	User profile exists
Notes	Covers standard profile update scenario.

Test Case 58: Profile Update with Invalid Mobile Number

Test ID	TC_058
Module	User Management > Profile Management
Category	Functional
Priority	Medium
Test Type	Negative
Risk Level	Medium
Estimated Time	2 minutes
Description	Check that the system validates mobile number format and prevents profile update if the number is invalid.
Objective	Ensure data validation for profile fields.
Preconditions	User is logged in
Expected Result	Profile update is blocked, and an error message is displayed indicating invalid mobile number format.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to profile management page

Step Number	2
Action	Edit mobile number with invalid format

Step Number	3
Action	Click save changes button

Test Data (Values Only):

mobile	123abc
browser	Firefox
url	https://vtransact.eg/profile

Validation Criteria	Error message for invalid mobile number; No profile changes are saved
Dependencies	User profile exists
Notes	Validates input format for mobile number.

Test Case 59: 2FA Authentication During Login

Test ID	TC_059
Module	Authentication > 2FA Verification
Category	Security
Priority	Critical

Test Type	Positive
Risk Level	High
Estimated Time	4 minutes
Description	Verify that the system enforces two-factor authentication after successful credential entry.
Objective	Ensure enhanced security through 2FA during login.
Preconditions	User account is enabled for 2FA
Expected Result	User is authenticated and logged in successfully. Dashboard is displayed, and session is established.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to login page

Step Number	2
Action	Enter valid username

Step Number	3
Action	Enter valid password

Step Number	4
Action	Click login button

Step Number	5
Action	Enter 2FA code received via SMS

Step Number	6
Action	Click verify button

Test Data (Values Only):

username	fatma.hassan@company.com
password	FatmaPass2024!
2fa_code	856321
browser	Chrome
url	https://vtransact.eg/login

Validation Criteria	2FA code is required and validated; User is logged in after successful 2FA
Dependencies	2FA service operational
Notes	Validates 2FA enforcement for secure login.

Test Case 60: Performance of Registration Form Submission

Test ID	TC_060
Module	User Management > User Registration
Category	Performance
Priority	Medium
Test Type	Boundary
Risk Level	Medium
Estimated Time	3 minutes
Description	Assess the performance of the registration process to ensure it meets acceptable response time criteria.
Objective	Ensure registration form submission is performant and does not degrade user experience.
Preconditions	Registration page is accessible; Normal system load
Expected Result	Registration form submission completes within 2 seconds, and user receives confirmation of success.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the registration page
Step Number	2
Action	Enter full name
Step Number	3
Action	Enter email address
Step Number	4
Action	Enter mobile number
Step Number	5
Action	Select user role from dropdown
Step Number	6
Action	Set password
Step Number	7
Action	Confirm password
Step Number	8
Action	Click register button and measure response time

Test Data (Values Only):

full_name	Hossam Tarek
email	hossam.tarek@company.com
mobile	01055667788

role	Corporate Initiator
password	HossamPass@2024
confirm_password	HossamPass@2024
browser	Chrome
url	https://vtransact.eg/register

Validation Criteria	Form submission response time is ≤ 2 seconds; User is registered successfully
Dependencies	Performance monitoring tools available
Notes	Tests system responsiveness under normal conditions.

Test Case 61: Successful Upload and Processing of Bulk Payment File in Tax Collection Module

Test ID	TC_061
Module	Tax Collection > File Upload & Document Processing
Category	Functional
Priority	Critical
Test Type	Positive
Risk Level	Critical
Estimated Time	10 minutes
Description	Validate that a corporate user can successfully upload a valid bulk payment file, and the system processes it correctly.
Objective	Ensure file upload, parsing, and processing work as expected for valid files in the Tax Collection module.
Preconditions	User is logged in with appropriate entitlements for Tax Collection; Bulk payment file is prepared in the system.
Expected Result	File is uploaded successfully, all records are validated and processed, a summary of successful and failed records is displayed.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the Tax Collection module

Step Number	2
Action	Select the bulk payment upload option

Step Number	3
Action	Click the upload button

Step Number	4
Action	Select the bulk payment file from local storage

Step Number	5
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Action	Submit the file for processing
Step Number	6
Action	Review the processing summary displayed

Test Data (Values Only):

username	corp_user1@company.com
file_name	bulk_tax_payments_2024_07.csv
file_format	CSV
records	{'taxpayer_id': 'EG1234567890', 'amount': '15000.00', 'due_date': '15-07-2024'}, {'taxpayer_id': 'EG0987654321', 'amount': '8500.00', 'due_date': '15-07-2024'}
browser	Chrome
url	https://vtransact.eg/tax/bulk-upload

Validation Criteria	File accepted and parsed; All valid records processed; Processing summary displayed; Records visible in pending
Dependencies	Tax Collection module enabled; User has bulk upload entitlement
Notes	Test with a valid file containing multiple records to verify end-to-end processing.

Test Case 62: API Integration - Fee Retrieval via eFinance API for Custom Collection

Test ID	TC_062
Module	Custom Collection > API Integration
Category	Integration
Priority	High
Test Type	Positive
Risk Level	High
Estimated Time	5 minutes
Description	Verify that the system correctly retrieves and displays transaction fees from the eFinance API based on entered details.
Objective	Ensure external API integration for fee retrieval works and displays accurate fees.
Preconditions	User is logged in with access to Custom Collection; eFinance API is available
Expected Result	System sends a request to the eFinance API, receives the correct fee for the entered amount, and displays it accurately.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the Custom Collection module
Step Number	2
Action	Initiate a new payment transaction

Step Number	3
Action	Enter payment amount
Step Number	4
Action	Proceed to fee calculation step
Step Number	5
Action	Review the displayed transaction fee

Test Data (Values Only):

username	custom_user@company.com
amount	50000.00
currency	EGP
api_endpoint	https://api.efinance.eg/fees
browser	Firefox
url	https://vtransact.eg/custom/initiate

Validation Criteria	API call is made with correct parameters; Fee is retrieved and displayed accurately
Dependencies	eFinance API operational; User has payment initiation entitlement
Notes	Monitor API response time and correctness of fee calculation.

Test Case 63: Security Validation - Unauthorized Access Attempt to Admin Entitlement Management

Test ID	TC_063
Module	Admin > Entitlement Management
Category	Security
Priority	Critical
Test Type	Negative
Risk Level	Critical
Estimated Time	3 minutes
Description	Ensure that users without admin privileges cannot access or modify entitlement settings.
Objective	Validate RBAC implementation and prevent unauthorized access to sensitive admin functions.
Preconditions	User is logged in with non-admin role
Expected Result	Access is denied at both navigation and modification attempts, with a clear error message indicating

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the admin section
Step Number	2
Action	Attempt to access the Entitlement Management page
Step Number	3
Action	Try to modify an existing entitlement

Test Data (Values Only):

username	regular_user@company.com
role	CorporateUser
target_entitlement	TaxCollectionApproval
browser	Edge
url	https://vtransact.eg/admin/entitlements

Validation Criteria	Unauthorized access is blocked; No entitlement changes possible; Error message is clear and user-friendly
Dependencies	RBAC configured; Non-admin user exists
Notes	Test both UI and direct URL access to ensure robust access control.

Test Case 64: Performance - File Upload Timeout Handling in Universal Collection

Test ID	TC_064
Module	Universal Collection > File Upload
Category	Performance
Priority	Medium
Test Type	Boundary
Risk Level	Medium
Estimated Time	7 minutes
Description	Check system behavior when uploading a file that exceeds the processing timeout threshold.
Objective	Ensure the system gracefully handles file uploads that take too long and provides appropriate feedback
Preconditions	User is logged in with Universal Collection access
Expected Result	System detects the upload timeout, aborts the process, displays a timeout error message, and does

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the Universal Collection module

Step Number	2
Action	Select the file upload option
Step Number	3
Action	Click the upload button
Step Number	4
Action	Select a large file from local storage
Step Number	5
Action	Submit the file for upload

Test Data (Values Only):

username	uni_user@company.com
file_name	large_universal_collection_2024_07.csv
file_size	150MB
file_format	CSV
browser	Chrome
url	https://vtransact.eg/universal/upload
timeout_threshold	60 seconds

Validation Criteria	Timeout is enforced; User receives clear feedback; No partial processing occurs
Dependencies	Timeout threshold configured; Large test file available
Notes	Test with a file size intentionally above the threshold to trigger timeout.

Test Case 65: Usability - Error Handling for Invalid File Format During Payment Upload

Test ID	TC_065
Module	Tax Collection > File Upload & Document Processing
Category	Usability
Priority	Low
Test Type	Negative
Risk Level	Low
Estimated Time	3 minutes
Description	Verify that the system detects and handles uploads of unsupported file formats with clear error messages.
Objective	Ensure robust error handling and user guidance for invalid file uploads.
Preconditions	User is logged in with file upload permissions
Expected Result	System rejects the upload, displays a clear error message specifying the supported formats, and does not proceed with the payment process.

Test Steps (Actions Only):

Step Number	1
Action	Navigate to the Tax Collection module
Step Number	2
Action	Select the bulk payment upload option
Step Number	3
Action	Click the upload button
Step Number	4
Action	Select a file with an unsupported format from local storage
Step Number	5
Action	Submit the file for upload

Test Data (Values Only):

username	corp_user2@company.com
file_name	invalid_format_bulk_payments_2024_07.txt
file_format	TXT
browser	Safari
url	https://vtransact.eg/tax/bulk-upload

Validation Criteria	Invalid format is detected; User receives actionable error message; No processing of invalid files
Dependencies	File format validation implemented
Notes	Test with a .txt file to verify error handling and user guidance.