# Detailed Manual Test Cases

## 1. Overview

This document provides a comprehensive set of manual test cases to validate the Payment Processing Module of Tanami Capital. It covers multi-currency transactions, edge cases, and authentication & authorization flows to ensure a secure and functional payment system.

## 2. Test Cases

### 2.1 Successful Multi-Currency Transactions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Scenario** | **Preconditions** | **Steps** | **Expected Result** | **Severity** |
| **TC-001** | Process Payment in USD | User is logged in | 1. Select USD 2. Enter valid payment details 3. Submit transaction | Payment is successful with confirmation message and correct USD amount | High |
| **TC-002** | Process Payment in EUR | User is logged in | 1. Select EUR 2. Enter valid payment details 3. Submit transaction | Payment is successful with confirmation message and correct EUR amount | High |
| **TC-003** | Currency Conversion Validation | User is logged in | 1. Select a different currency from default 2. Confirm exchange rate 3. Submit transaction | Payment processes with the correct conversion rate applied | Medium |

### 2.2 Handling Edge Cases (Invalid Payment Details, Network Failures)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Scenario** | **Preconditions** | **Steps** | **Expected Result** | | **Severity** |
| **TC-004** | Invalid Card Number | User is logged in | 1. Enter an incorrect card number 2. Submit payment | | System rejects transaction and displays an error message | High |
| **TC-005** | Expired Card | User is logged in | 1. Enter an expired card 2. Submit payment | | Payment fails with a "Card Expired" error | High |
| **TC-006** | Network Failure During Payment | User is logged in | 1. Start a transaction 2. Disconnect network 3. Submit payment | | System detects failure, prompts user to retry, and prevents duplicate transactions | High |
| **TC-007** | Duplicate Payment Attempt | User is logged in | 1. Submit a payment twice quickly 2. Check transaction history | | System prevents duplicate transactions and alerts the user | High |

### 2.3 Authentication & Authorization Flows

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Scenario** | **Preconditions** | **Steps** | **Expected Result** | **Severity** |
| **TC-008** | Unauthorized Payment Attempt | User is not logged in | 1. Try submitting a payment without authentication | System denies transaction and redirects user to login page | High |
| **TC-009** | Session Expiry During Transaction | User is logged in | 1. Start payment 2. Wait for session to expire 3. Submit payment | System forces user to re-authenticate before proceeding | Medium |
| **TC-010** | Role-Based Access Control | User is logged in as a non-admin | 1. Try accessing admin-only payment settings | System denies access with proper authorization error | High |

### 2.4 Security & Compliance Test Cases

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Scenario** | **Preconditions** | **Steps** | **Expected Result** | **Severity** |
| **TC-011** | Brute Force Login Attempt | User is not logged in | 1. Enter incorrect password 10 times 2. Check if account is locked | Account should lock for 15 minutes after multiple failed attempts | High |
| **TC-012** | Unauthorized API Access | None | 1. Try calling payment API without authentication | API should return a **401 Unauthorized** response | High |
| **TC-013** | Session Expiry During Payment | User is logged in | 1. Start payment 2. Wait for session to expire 3. Submit payment | System should force user to re-authenticate before proceeding | Medium |
| **TC-014** | Duplicate Payment Prevention | User is logged in | 1. Submit the same payment twice quickly 2. Check transaction history | The second transaction should be **blocked** | High |

## 3. Next Steps

* Validate these test cases with real test data.
* Ensure all test scenarios are executed and documented.
* Update test cases based on findings from exploratory testing.