

Requirement Traceability Matrix (RTM)

| ID | Name | Description | Type | Priority (MoSCoW) | Potential Risks | API Testing ID | System Testing ID | User Acceptance Testing ID | User Story ID | User Story | Bug ID | Bug Description | Exploratory Reference (Planned) |
|---------|-----------------------------|--|------|-------------------|-------------------------------------|----------------|-------------------|----------------------------|--|------------|--------|-----------------|---------------------------------|
| REQ-001 | Homepage Access | The system shall load the homepage successfully when accessed via the official URL. | F | Must-Have | Page load or routing failure | - | - | TC-UAT-001 | US-V1 As a Visitor, I want to access the home page so that I can start browsing products. | - | - | - | |
| REQ-002 | Logo Redirect | The system shall redirect the user to the homepage when the UniStyle logo is clicked. | F | Must-Have | Broken navigation link | - | - | TC-UAT-002 | | - | - | - | |
| REQ-003 | Anonymous Access | The system shall allow visitors to access the homepage without requiring authentication. | F | Must-Have | Incorrect access restriction | - | - | TC-UAT-003 | | - | - | - | |
| REQ-004 | Category Filtering | The system shall display only products belonging to the selected category. | F | Must-Have | Incorrect filtering logic | - | - | TC-UAT-004 | US-V2 As a Visitor, I want to browse products by category so that I can find relevant items. | - | - | - | |
| REQ-005 | Clear Category Filter | The system shall display all products when category filters are cleared. | F | Must-Have | Filter state not reset | - | - | TC-UAT-005 | | - | - | - | |
| REQ-006 | Empty Category Result | The system shall display a message when no products match the selected category. | F | Must-Have | User confusion due to empty results | - | - | TC-UAT-006 | | - | - | - | |
| REQ-007 | Product Details Access | The system shall display the product details page when a product is selected. | F | Must-Have | Broken product link | - | - | TC-UAT-007 | US-V3 As a Visitor, I want to see product details so that I can decide whether to purchase. | - | - | - | |
| REQ-008 | Product Information Display | The system shall display product name, price, and description on the product details page. | F | Must-Have | Missing or incorrect product data | - | - | TC-UAT-008 | | - | - | - | |
| REQ-009 | Product Data Accuracy | The system shall display product details that match stored product records. | F | Must-Have | Data inconsistency | - | - | TC-UAT-009 | | - | - | - | |
| REQ-010 | Temporary Cart Storage | The system shall store selected products in a temporary cart for visitors. | F | Should-Have | Session persistence failure | - | - | TC-UAT-010 | US-V5 As a Visitor, I want to temporarily store products so that I can compare them before registering. | - | - | - | |
| REQ-011 | Temporary Cart Retention | The system shall retain temporary cart items during the active browser session. | F | Should-Have | Session handling issues | - | - | TC-UAT-011 | | - | - | - | |
| REQ-012 | Customer Home Access | The system shall display the homepage for customers when accessed. | F | Must-Have | Homepage rendering issues | - | - | TC-UAT-012 | US-RC1 As a Customer, I want to access the home page so that I can begin managing my account. | - | - | - | |
| REQ-013 | Login Redirect | The system shall redirect customers to the login page when login is selected. | F | Must-Have | Broken redirect | - | - | TC-UAT-013 | | - | - | - | |

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| REQ-014 | Valid Login | The system shall authenticate customers when valid credentials are provided. | F | Must-Have | Authentication failure | - | - | TC-UAT-014 | US-RC2 | As a Customer, I want to log into my account so that I can access personalized features. | - | - | - |
| REQ-015 | Invalid Login Handling | The system shall display an error message and deny access when invalid credentials are entered. | F | Must-Have | Improper error handling | - | - | TC-UAT-015 | | | - | - | - |
| REQ-016 | Protected Page Redirect | The system shall redirect unauthenticated users to the login page when accessing protected pages. | F | Must-Have | Broken access flow | - | - | TC-UAT-016 | | | - | - | - |
| REQ-017 | Cart Persistence | The system shall save cart contents to the customer profile upon logout. | F | Should-Have | Data persistence failure | - | - | TC-UAT-017 | US-RC3 | As a Customer, I want my cart to be saved so that I can continue shopping later. | - | - | - |
| REQ-018 | Cart Restore | The system shall restore saved cart contents when the customer logs back in. | F | Should-Have | Session sync issues | - | - | TC-UAT-018 | | | - | - | - |
| REQ-019 | Checkout Processing | The system shall process the order and display a confirmation when valid payment details are submitted. | F | Must-Have | Payment processing failure | - | - | TC-UAT-019 | US-RC4 | As a Customer, I want to complete purchases so that I can receive products. | - | - | - |
| REQ-020 | Order Confirmation | The system shall display order confirmation details after a successful checkout. | F | Must-Have | Missing confirmation | - | - | TC-UAT-020 | | | - | - | - |
| REQ-021 | Order Tracking View | The system shall display current and past orders for the customer. | F | Should-Have | Missing order records | - | - | TC-UAT-021 | US-RC5 | As a Customer, I want to track my orders so that I know when to expect delivery. | - | - | - |
| REQ-022 | Admin Portal Access | The system shall display the admin home page when valid admin credentials are provided. | F | Must-Have | Authentication failure | - | - | TC-UAT-022 | | | - | - | - |
| REQ-023 | Admin Access Restriction | The system shall deny access to the admin portal when a non-admin user attempts to access it. | F | Must-Have | Unauthorized access | - | - | TC-UAT-023 | US-BA1 | As an Admin, I want to access the admin home so that I can manage system features. | - | - | - |
| REQ-024 | Product Creation | The system shall allow admins to create new products. | F | Must-Have | Invalid data creation | - | - | TC-UAT-024 | | | - | - | - |
| REQ-025 | Product Update | The system shall persist updates made to product information. | F | Must-Have | Data inconsistency | - | - | TC-UAT-025 | US-BA2 | As an Admin, I want to manage product catalog so that data remains accurate. | - | - | - |
| REQ-026 | Product Deletion | The system shall remove deleted products from the storefront. | F | Must-Have | Residual data exposure | - | - | TC-UAT-026 | | | - | - | - |
| REQ-027 | User Account Management | The system shall allow admins to update user | F | Should-Have | Incorrect role assignment | - | - | TC-UAT-027 | US-BA3 | As an Admin, I want to manage user accounts so | - | - | - |

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| | | account status and roles. | | | | | | | | that I can maintain integrity. | | | |
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