**Requirements Traceability Matrix (RTM)** StockTrackPro

| **Requirement ID** | **Title** | **Description** | | **Source** | | **Business Need** | | **Design Ref** | | **Test Case ID** | | **Labels** | **Status** | **Iteration** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| FR-001 | Product Creation | The system shall allow users to create products with attributes such as name, SKU, unit price, quantity, supplier, and category. | | SRS Section 4.1 | | Product creation functionality | | UI-01, DB-01 | | TC-FR-001 | | feature, frontend | Backlog | Sprint 1 |
| FR-002 | Product Editing | The system shall allow users to edit existing products | | SRS Section 4.2 | | Update stock and product accuracy | | UI-02, DB-02 | | TC-FR-002 | | feature, backend | In Progress | Sprint 1 |
| FR-003 | Product Deletion | The system shall allow users to delete products | | SRS Section 4.3 | | Maintain clean inventory | | UI-03, DB-03 | | TC-FR-003 | | feature, backend | Backlog | Sprint 1 |
| FR-004 | Role-Based Access Control (RBAC) | The system shall support RBAC with user permissions | | SRS Section 5.1 | | Security and access control | | SEC-01 | | TC-FR-004 | | security, backend | Complete | Sprint 1 |
| FR-005 | Stock Proof Approval | The system shall require admin approval for stock proofs | | SRS Section 6.2 | | Maintain stock integrity | | UI-08 | | TC-FR-005 | | feature, stock-control | In Progress | Sprint 2 |
| FR-006 | Activity Logging | The system shall record every stock change in logs | | SRS Section 6.5 | | Transparency, audit trail | | LOG-01 | | TC-FR-006 | | audit, log, backend | Planned | Sprint 2 |
| FR-007 | Report Generation & Export | The system shall allow users to generate and export reports | | SRS Section 7.1 | | Decision-making and offline backup | | REP-01 | | TC-FR-007 | | reports, feature | Planned | Sprint 2 |
| FR-008 | Supplier Management | The system shall support supplier management (CRUD) | | SRS Section 4.4 | | Vendor/supply chain visibility | | UI-04, DB-04 | | TC-FR-008 | | feature, admin | Complete | Sprint 1 |
| FR-009 | Scoped Stock-Take Sessions | The system shall allow scoped stock-taking sessions, where scope can be defined by user role, department, product category, or other organizational units. | | SRS Section 6.3 | | Scheduled stock audits | | UI-07 | | TC-FR-009 | | feature, stock-control | In Progress | Sprint 2 |
| NFR-001 | Performance Benchmark | The application shall load in less than 2 seconds | SRS Section 8.1 | | Performance expectation | | NFR-UI-01 | | TC-NFR-001 | | performance, non-functional | | Planned | Sprint 2 |
| NFR-002 | Firebase Backend Sync | The application shall sync with Firebase backend in real-time where possible, and provide periodic sync capabilities to support offline-first functionality. | SRS Section 8.2 | | Offline-first and cloud integration | | SYNC-01 | | TC-NFR-002 | | integration, backend | | In Progress | Sprint 2 |