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## Module 9 - Traceability Matrix for Library Management System

### System Requirements

No.	Priority Weight (1-5)	Description
REQ1	5	Library Patrons can log in and log out from their accounts.
REQ2	5	Library Staff can log in and log out from their accounts.
REQ3	5	Library Patrons can search for media (books, movies, etc.) in the catalog.
REQ4	4	Library Patrons can check the availability of media items.
REQ5	5	Library Patrons can borrow and return media through the system.
REQ6	4	Library Patrons can renew borrowed media through the system.
REQ7	5	Library Staff can issue and return media for patrons.
REQ8	4	Library Staff can update the catalog by adding, modifying, or removing media items.
REQ9	3	The system should support overdue notifications and manage overdue procedures automatically.
REQ10	4	Library Management can generate reports on library usage and performance.
REQ11	4	Library Management can manage staff accounts and roles.
REQ12	3	System Admins can configure and update system settings.

### Use Case

No.	Description
UC1	Login: To log in to a Library Patron or Library Staff account.
UC2	Search: To search for media items in the catalog.
UC3	Check Availability: To check if specific media items are available for borrowing.

UC4	Borrow: To borrow media items through the system.
UC5	Return: To return borrowed media items through the system.
UC6	Renew: To renew borrowed media items.
UC7	Issue: To issue media items to Library Patrons.
UC8	Update Catalog: To add, modify, or remove media items in the catalog.
UC9	Overdue Management: To notify patrons of overdue media and handle overdue procedures.
UC10	Generate Reports: To generate reports on library activity and performance.
UC11	Manage Accounts: To manage staff and patron accounts, including permissions and roles.
UC12	Configure System: To configure and update system settings for optimal operation.
UC13	Logout: To log out of a Library Patron or Library Staff account.

#### Traceability Matrix

System Requirement (REQ)	Related Use Cases (UC)
REQ1	UC1, UC13
REQ2	UC1, UC13
REQ3	UC2
REQ4	UC3
REQ5	UC4, UC5
REQ6	UC6
REQ7	UC7
REQ8	UC8
REQ9	UC9
REQ10	UC10
REQ11	UC11
REQ12	UC12

