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The foundations of the rigorous study of *analysis* were laid in the nineteenth century, notably by the mathematicians Cauchy and Weierstrass. Central to the study of this subject are the formal definitions of *limits* and *continuity*.

Let D be a subset of \mathbf{R} and let $f: D \rightarrow \mathbf{R}$ be a real-valued function on D . The function f is said to be *continuous* on D if, for all $\epsilon > 0$ and for all $x \in D$, there exists some $\delta > 0$ (which may depend on x) such that if $y \in D$ satisfies

Table 1: Acceptance Tests And Values

Acceptance Test			
T	Test Case	V	Test Value
T1	boolean: isAdmin	V1	“Tim” - Is a member of staff, Not a keeper.
	boolean: isMemberStaff	V2	“Jack” - Is a member of staff, A keeper.
	boolean: isKeeper	V3	“Chris” - Is not a member of staff.
T2	boolean: searchforbook	V4	“Software Engineering” - In central library.
		V5	“Programming With C” - Not in the central library.
		V6	“Professional Software Development” - In branch library.
T3	boolean: processRequest	V7	“Software Engineering” - Approved request.
		V8	“Programming With C” - Denied request.
T4	boolean: requestStatus	V9	“Software Engineering” - Acknowledged receipt.

Table 2: 6.2 Keeper Administration

6.2.1 Add Keeper				
Step	Description	Test	Value	Expected Results
1	Login As Admin	T1	V1	V1 privilege is changed to keeper. After system restart, V1 maintains keeper privilege.
2	Login As Admin	T1	V2	A notification that V2 is a registered keeper. V2 Is already a registered Keeper.
3	Login As Admin	T1	V3	A notification that V2 is already a registered keeper. The System maintains the same functionality. V3 Is not a member of staff.
4	Login As Not Admin	T1	V1	A notification that V3 is not a staff member. User not found attempt another search. The system maintains the same functionality. Unsuccessful Login.
6.2.2 Remove Keeper				
Step	Description	Test	Value	Expected Results
1	Login As Admin	T1	V1	V1 Is not registered as a keeper. A notification that V2 is not a registered keeper. The System maintains the same functionality.
2	Login As Admin	T1	V2	V2 privilege is changed to borrower. After system restart V2 maintains borrower privilege.
3	Login As Admin	T1	V3	A notification that V2 is a registered Borrower. V3 Is not a member of staff. A notification that V3 is not a member of staff.
4	Login As Not Admin	T1	-	User not found attempt another search. The system maintains the same functionality. Unsuccessful Login.

Table 3: 6.3 Transferring Books From Central Library To The Branch

6.3.1 Request book for branch				
Step	Description	Test	Value	Expected Results
1	Login As Keeper	T2	V4	V4 Is requested to be transferred into branch library. Request is stored for processing.
2	Login As Keeper	T2	V5	V5 Not in central library. A notification that V5 is not available in central library.
3	Login As Keeper	T2	V6	V6 is in branch library. A notification that V6 is in the branch library.
4	Login As Not Keeper	T2	-	The system maintains the same functionality. Unsuccessful Login.
6.3.2 Process Request				
Step	Description	Test	Value	Expected Results
1	Login As Librarian	T3	V7	V7 Is approved to be transferred to branch library. V7 status is updated to being in TransitToBranch.
2	Login As Librarian	T3	V8	Keeper is notified of the librarian decision. V8 Is denied to be transferred to branch library. Denied decision is recorded.
4	Login As Not Librarian	T3	-	Unsuccessful Login.
6.3.3 Record receipt of book				
Step	Description	Test	Value	Expected Results
1	Login As keeper	T4	V9	V9 status is changed to received . The book is recorded as in possession of the keeper. After system restart, V9 maintains status received in possession of the associated keeper.
4	Login As Not keeper	T3	-	Unsuccessful Login.