

Hospital Equipment Maintenance Management System (HEMMS)

Data Dictionary

Prepared By: HABANABASHAKA Philimi

Date: 21/11/ 2025

DEPARTMENTS TABLE

Column Name	Data Type	Length	Constraints & Description
DeptID	NUMBER	5	PK, Generated by sequence
DeptName	VARCHAR2	50	NOT NULL, UNIQUE
Location	VARCHAR2	100	
HeadOfDept	VARCHAR2	100	
Phone	VARCHAR2	20	

EQUIPMENT TABLE

Column Name	Data Type	Length	Constraints & Description
EquipmentID	NUMBER	10	PK, Generated by sequence
SerialNumber	VARCHAR2	50	UNIQUE, NOT NULL
Name	VARCHAR2	100	NOT NULL
Category	VARCHAR2	50	e.g., Computer, Printer, AC
Manufacturer	VARCHAR2	100	
Model	VARCHAR2	100	
PurchaseDate	DATE		
PurchaseCost	NUMBER	12,2	
WarrantyExpiry	DATE		
Status	VARCHAR2	20	CHECK (Active, Under Maintenance, OutOfService, Disposed)
DeptID	NUMBER	5	FK → DEPARTMENTS (ON DELETE SET NULL)

TECHNICIANS TABLE

Column Name	Data Type	Length	Constraints & Description
TechID	NUMBER	6	PK, Generated by sequence
FullName	VARCHAR2	100	NOT NULL
Contact	VARCHAR2	30	Phone or email
Specialty	VARCHAR2	100	e.g., Electrical, IT Hardware
HireDate	DATE		
IsActive	CHAR	1	DEFAULT 'Y', CHECK ('Y','N')

USERS TABLE

Column Name	Data Type	Length	Constraints & Description
UserID	NUMBER	6	PK, Generated by sequence
Username	VARCHAR2	30	UNIQUE, NOT NULL
FullName	VARCHAR2	100	
Role	VARCHAR2	20	CHECK ('Admin','Technician','DeptHead','RegularUser')
DeptID	NUMBER	5	FK → DEPARTMENTS (can be NULL for Admin)
PasswordHash	VARCHAR2	255	Stored as hashed value

ALERTS_ISSUES TABLE

Column Name	Data Type	Length	Constraints & Description
AlertID	NUMBER	10	PK, Generated by sequence
EquipmentID	NUMBER	10	FK → EQUIPMENT (ON DELETE CASCADE)
ReportedBy	NUMBER	6	FK → USERS
DateReported	DATE		DEFAULT SYSDATE
IssueDescription	VARCHAR2	1000	
Priority	VARCHAR2	20	CHECK ('Low','Medium','High','Critical')
Status	VARCHAR2	20	CHECK ('Open','Assigned','Resolved','Closed')

MAINTENANCE TABLE

Column Name	Data Type	Length	Constraints & Description
MaintenanceID	NUMBER	10	PK, Generated by sequence
EquipmentID	NUMBER	10	FK → EQUIPMENT (ON DELETE CASCADE)
TechID	NUMBER	6	FK → TECHNICIANS
MaintenanceDate	DATE		Actual date maintenance was performed
ScheduledDate	DATE		For preventive maintenance
MaintenanceType	VARCHAR2	20	CHECK ('Preventive','Corrective','Inspection')
Cost	NUMBER	10,2	
Description	VARCHAR2	2000	Detailed work done
Status	VARCHAR2	20	CHECK ('Scheduled','InProgress','Completed','Cancelled')
ApprovedBy	NUMBER	6	FK → USERS (NULL until approved)