Database Documentation: ASSET\_MANAGEMENT

# 1. Database Overview

The ASSET\_MANAGEMENT database is designed to track company assets, employees, asset allocation, service requests, and audit logs. It ensures streamlined management and accountability of asset lifecycle and employee interactions.

# 2. Tables Summary

|  |  |
| --- | --- |
| Table Name | Description |
| EMPLOYEE | Stores information about employees. |
| ASSET | Holds asset records including model, status, and value. |
| ASSET\_ALLOCATION | Tracks the assignment of assets to employees. |
| SERVICE\_REQUEST | Logs employee-raised service requests for assets. |
| AUDIT\_REQUEST | Captures audit/verification requests on assets. |

# 3. Detailed Table Definitions

## Table: EMPLOYEE

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Constraints | Description |
| eid | INT | PRIMARY KEY, AUTO\_INCREMENT | Employee ID |
| ename | VARCHAR(100) | NOT NULL | Employee name |
| email | VARCHAR(100) | NOT NULL, UNIQUE | Employee email address |
| gender | ENUM('FEMALE', 'MALE') |  | Gender of the employee |
| contact\_number | VARCHAR(20) |  | Contact phone number |
| address | VARCHAR(255) |  | Residential address |
| role | ENUM('EMPLOYEE', 'ADMIN') | DEFAULT EMPLOYEE | Role of the employee |

## Table: ASSET

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Constraints | Description |
| aid | INT | PRIMARY KEY, AUTO\_INCREMENT | Asset ID |
| asset\_no | VARCHAR(50) | NOT NULL, UNIQUE | Unique asset number |
| aname | VARCHAR(100) | NOT NULL | Asset name |
| category | VARCHAR(50) |  | Category of the asset |
| model | VARCHAR(50) |  | Model name or number |
| manufacturing\_date | DATE |  | Manufacture date of the asset |
| expiry\_date | DATE |  | Expiry date of the asset |
| asset\_value | DECIMAL(10,2) |  | Monetary value of the asset |
| status | ENUM('AVAILABLE', 'ASSIGNED', 'UNDER\_SERVICE') | DEFAULT AVAILABLE | Current status |

## Table: ASSET\_ALLOCATION

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Constraints | Description |
| alloc\_id | INT | PRIMARY KEY, AUTO\_INCREMENT | Allocation ID |
| eid | INT | FOREIGN KEY → EMPLOYEE(eid) | Employee ID |
| aid | INT | FOREIGN KEY → ASSET(aid) | Asset ID |
| allocation\_date | DATE |  | Date of allocation |
| return\_date | DATE |  | Date of return (if any) |

## Table: SERVICE\_REQUEST

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Constraints | Description |
| srid | INT | PRIMARY KEY, AUTO\_INCREMENT | Service Request ID |
| eid | INT | FOREIGN KEY → EMPLOYEE(eid) | Employee ID |
| aid | INT | FOREIGN KEY → ASSET(aid) | Asset ID |
| description | TEXT |  | Issue description |
| issue\_type | ENUM('MALFUNCTION', 'REPAIR') | NOT NULL | Type of issue |
| status | ENUM('PENDING', 'IN\_PROGRESS', 'COMPLETED') |  | Current status |

## Table: AUDIT\_REQUEST

|  |  |  |  |
| --- | --- | --- | --- |
| Column Name | Data Type | Constraints | Description |
| arid | INT | PRIMARY KEY, AUTO\_INCREMENT | Audit Request ID |
| eid | INT | FOREIGN KEY → EMPLOYEE(eid) | Employee ID |
| aid | INT | FOREIGN KEY → ASSET(aid) | Asset ID |
| status | ENUM('PENDING', 'VERIFIED', 'REJECTED') |  | Audit status |