Database Design Document (DBDD)

Development Team

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# Database Design Document (DBDD)

## 1. Scope

### 1.1 Identification

**DBDD-001: Document Identification** - The document **shall** be identified by the following information: - **Document Name**: [Document Name] - **Document Identifier**: [DBDD-001] - **Version**: 1.0 - **Classification**: [Unclassified/Classified Level]

### 1.2 Document Overview

**DBDD-002: Document Purpose** - The document **shall** describe the database design and structure - The document **shall** define data models and relationships - The document **shall** specify database schema and constraints

## 2. Referenced Documents

**DBDD-003: Referenced Standards** - MIL-STD-498: Software Development and Documentation - [Other applicable standards]

## 3. Database Overview

**DBDD-004: System Description** - The document **shall** provide an overview of the database system - The document **shall** describe the database management system (DBMS) - The document **shall** specify database version and configuration

## 4. Data Model

### 4.1 Conceptual Data Model

**DBDD-005: Conceptual Design** - The document **shall** describe the conceptual data model - The document **shall** define entities and their relationships - The document **shall** include entity-relationship diagrams

### 4.2 Logical Data Model

**DBDD-006: Logical Design** - The document **shall** describe the logical data model - The document **shall** define tables, columns, and data types - The document **shall** specify primary and foreign keys

### 4.3 Physical Data Model

**DBDD-007: Physical Design** - The document **shall** describe the physical data model - The document **shall** specify storage and indexing strategies - The document **shall** define partitioning and clustering

## 5. Database Schema

**DBDD-008: Schema Definition** - The document **shall** provide complete database schema - The document **shall** include table definitions and constraints - The document **shall** specify data validation rules

## 6. Data Dictionary

**DBDD-009: Data Definitions** - The document **shall** provide a comprehensive data dictionary - The document **shall** define all data elements and their meanings - The document **shall** specify data formats and constraints

## 7. Security and Access Control

**DBDD-010: Security Measures** - The document **shall** describe database security measures - The document **shall** define user roles and permissions - The document **shall** specify data encryption requirements

## 8. Performance Considerations

**DBDD-011: Performance Optimization** - The document **shall** describe performance optimization strategies - The document **shall** specify indexing requirements - The document **shall** include query optimization guidelines

## 9. Notes

* **DBDD**: Database Design Document
* **DBMS**: Database Management System