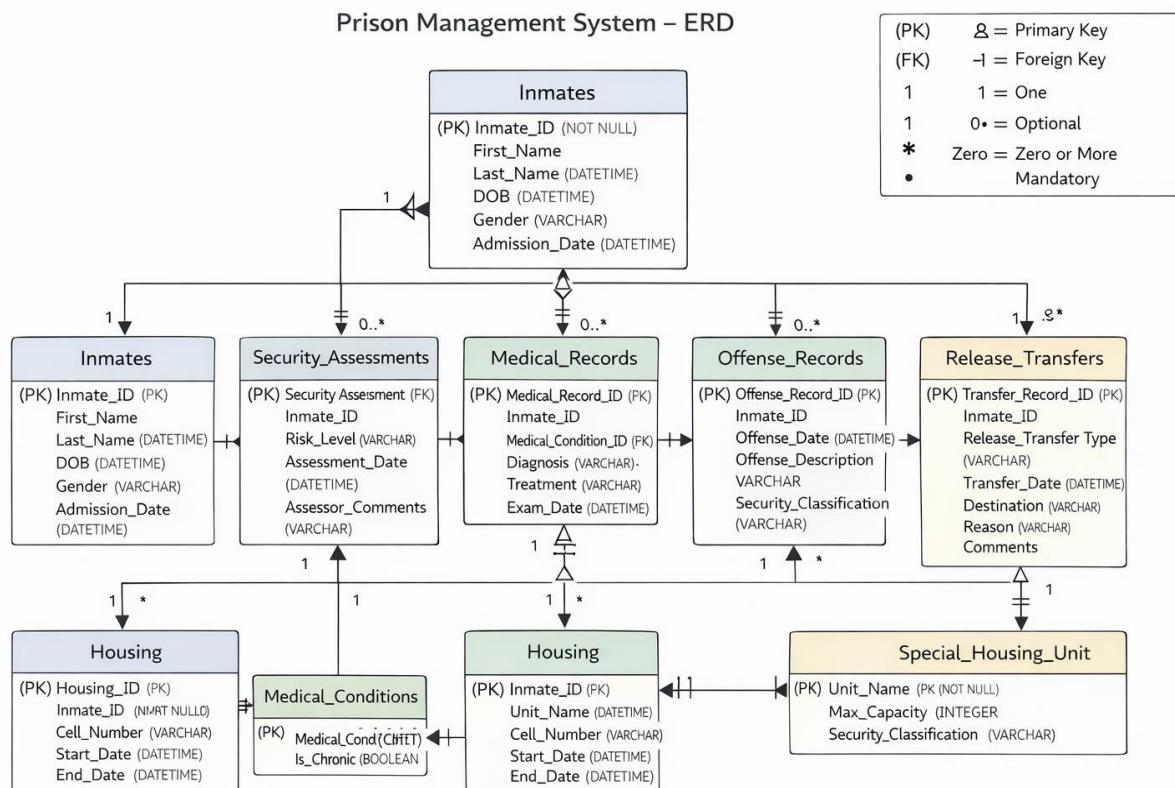


Prison Management System

Name: Irera Mukawera Jockebed 27453

Phase III: Logical Model Design

This document presents the Entity Relationship Design support documents for the Prison Management System, including the Data Dictionary and Assumptions. The ER Diagram is provided as a separate diagram file.



Data Dictionary

INMATE

Column	Data Type	Constraints	Description
inmate_id	NUMBER	PK, NOT NULL	Unique inmate identifier
national_id	VARCHAR2(20)	UNIQUE	National ID
first_name	VARCHAR2(50)	NOT NULL	First name
last_name	VARCHAR2(50)	NOT NULL	Last name
date_of_birth	DATE	NOT NULL	Date of birth
gender	VARCHAR2(10)	CHECK	Gender

admission_date	DATE	NOT NULL	Admission date
status	VARCHAR2(20)	CHECK	Inmate status

INTAKE_RECORD

Column	Data Type	Constraints	Description
intake_id	NUMBER	PK	Intake ID
inmate_id	NUMBER	FK	Linked inmate
court_document_no	VARCHAR2(30)	NOT NULL	Court document
intake_date	DATE	NOT NULL	Intake date
documentation_status	VARCHAR2(20)	CHECK	Documentation status

HOUSING_UNIT

Column Name	Data Type	Constraints	Description
unit_id	NUMBER	PK	Housing unit ID
unit_name	VARCHAR2(50)	UNIQUE	Unit name
security_level	VARCHAR2(20)	CHECK	Low / Medium / High

CELL

Column Name	Data Type	Constraints	Description
cell_id	NUMBER	PK	Cell identifier
unit_id	NUMBER	FK → HOUSING_UNIT	Housing unit
cell_number	VARCHAR2(10)	NOT NULL	Cell number
capacity	NUMBER	CHECK > 0	Maximum inmates
occupancy_status	VARCHAR2(20)	CHECK	Available / Occupied

MEDICAL_RECORD

Column Name	Data Type	Constraints	Description
medical_id	NUMBER	PK	Medical record ID
inmate_id	NUMBER	FK → INMATE	Related inmate
diagnosis	VARCHAR2(100)	NULL	Medical diagnosis
treatment_plan	VARCHAR2(200)	NULL	Treatment details
last_checkup_date	DATE	NOT NULL	Last medical check

SECURITY_CLASSIFICATION

Column Name	Data Type	Constraints	Description
security_id	NUMBER	PK	Security record ID
inmate_id	NUMBER	FK → INMATE	Related inmate

risk_level	VARCHAR2(20)	CHECK	Low / Medium / High
monitoring_required	CHAR(1)	CHECK (Y/N)	Enhanced monitoring

OFFENSE

Column Name	Data Type	Constraints	Description
offense_id	NUMBER	PK	Offense ID
inmate_id	NUMBER	FK → INMATE	Related inmate
offense_type	VARCHAR2(50)	NOT NULL	Type of offense
sentence_years	NUMBER	CHECK ≥ 0	Sentence length

RELEASE_TRANSFER

Column Name	Data Type	Constraints	Description
rt_id	NUMBER	PK	Action ID
inmate_id	NUMBER	FK → INMATE	Related inmate
action_type	VARCHAR2(20)	CHECK	Release / Transfer
action_date	DATE	NOT NULL	Date of action
destination	VARCHAR2(100)	NULL	Transfer location

AUDIT_LOG

Column Name	Data Type	Constraints	Description
audit_id	NUMBER	PK	Audit log ID
entity_name	VARCHAR2(50)	NOT NULL	Affected entity
action_performed	VARCHAR2(50)	NOT NULL	Insert / Update / Delete
performed_by	NUMBER	FK → STAFF	Staff member
action_timestamp	TIMESTAMP	NOT NULL	Time of action

Assumptions

- Each inmate has a unique identifier.
- An inmate must be registered before related records are created.
- Medical and security data are confidential.
- One active security classification per inmate.
- Housing and audit records are never deleted.
- Release and transfer records are permanent.