**TABLE ACCOUNT**

CREATE TYPE user\_role AS ENUM (

    'Admin',

    'DO',

    'AO',

    'IM'

);

CREATE TYPE Office\_Code AS ENUM (

'TE',

'TEC-1',

'TEA',

'TEA-1',

'TEA-2',

'TEA-3',

'TEA-4',

'TED',

'TED-1',

'TED-2',

'TED-3',

'TED-4',

'TER',

'TER-1',

'TER-2',

'TER-3',

'TER-4',

'TER-5',

'TEL',

'TEL-1',

'TEL-2',

'TEJ',

'TEJ-1',

'TEJ-2',

'TEJ-3',

'TEM',

'TEM-1',

'TEM-2',

'TEM-3'

);

CREATE TABLE Account (

    AccountID BIGINT PRIMARY KEY UNIQUE,

    Name VARCHAR(255),

    Unit Office\_Code,

    Password VARCHAR(255) DEFAULT 'admin',

    Role user\_role

);

;

**TABLE AUDITPLAN**

CREATE TYPE Audit\_Type AS ENUM (

    'Procedure Audit',

    'Product Audit'

);

CREATE TYPE Work\_Station AS ENUM (

'AO: Airworthiness Office',

'DO: Design Office',

'IM: Independent Monitoring',

'PR: Partner',

'SC: Subcontractor',

'BR: BRIN',

'GF: GMF AeroAsia',

'BA: BIFA Flying School',

'EL: Elang Lintas Indonesia'

);

CREATE TABLE AuditPlan (

    AccountID BIGSERIAL, -- Menambah kolom AccountID

    FOREIGN KEY (AccountID) REFERENCES Account(AccountID),

    DocNo BIGSERIAL PRIMARY KEY UNIQUE,

    DocDate DATE NOT NULL,

    Subject TEXT NOT NULL,

    AuditType Audit\_Type

);

CREATE TABLE APdetail (

    DocNo BIGSERIAL,

    AccountID BIGSERIAL, -- Menambah kolom AccountID

    FOREIGN KEY (AccountID) REFERENCES Account(AccountID),

    FOREIGN KEY (DocNo) REFERENCES AuditPlan(DocNo),

    NoItem BIGSERIAL UNIQUE,

    Requirement TEXT NOT NULL,

    Description TEXT NOT NULL,

    AuditType Audit\_Type,

    SubDescription TEXT NOT NULL,

    WorkStation Work\_Station,

    PlannedWeek DATE NOT NULL,

    ActualVisitDate DATE NOT NULL,

**AuditReportEvidenceNbr VARCHAR(255) NOT NULL**

);

CREATE TABLE Issuence (

    DocNo BIGSERIAL,

    AccountID BIGSERIAL, -- Menambah kolom AccountID

    FOREIGN KEY (AccountID) REFERENCES Account(AccountID),

    FOREIGN KEY (DocNo) REFERENCES AuditPlan(DocNo),

    IssueNbr BIGSERIAL UNIQUE,

    IssueDate DATE NOT NULL,

    IssueDesc TEXT NOT NULL,

    IssuedBy TEXT NOT NULL,

    HDOapprove TEXT

);

**TABLE FindingIdentification**

CREATE TABLE FindingIdentification (

    OrganisationName VARCHAR(60),

    DOANo VARCHAR(7),

    DOACoreProcess VARCHAR(30),

    KeySubject VARCHAR(60),

    HandbookProcedure VARCHAR(80),

    FindingNo VARCHAR(4),

    Part21 VARCHAR(30),

    InitialDeadline DATE,

    CurrentDeadline DATE,

    Level VARCHAR(15),

    Status VARCHAR(6),

    Finding TEXT,

    Notes TEXT,

    Evidences TEXT,

    Name VARCHAR(20),

    Position VARCHAR(20),

    DateOfNotification DATE,

    DOAHolderFocalPointEmail TEXT

);

CREATE TABLE FindingClosureLogEvents (

    DateLog DATE,

    DescriptionType VARCHAR(60),

    DescriptionText TEXT

);

CREATE TABLE FindingClosureRootCauseExtensions (

    ItemNumber VARCHAR(2),

    DOAHolderDateComment DATE,

    DOAHolderDescribe TEXT,

    EASAResponseDate DATE,

    EASAResponse TEXT

);

CREATE TABLE FindingClosureCorrectiveActionPlan (

    ItemNumber VARCHAR(2),

    DOAHolderDateComment DATE,

    DOAHolderDescribe TEXT,

    EASAResponseDate DATE,

    EASAResponseFeedback TEXT

);

CREATE TABLE FindingClosureClosingTheFinding (

    ItemNumber VARCHAR(2),

    DOAHolderDateComment DATE,

    DOAHolderDescribe TEXT,

    EASAResponseDate DATE,

    EASAResponse TEXT

);

CREATE TABLE ClosureAndPerformance (

    Closure TEXT,

    NumberOfExtension VARCHAR(1),

    WasFindingEverOverdue VARCHAR(30)

);

**TABLE NCR**

CREATE TYPE Reg\_Based AS ENUM(

     'DGCA ' , 'EASA'

);

CREATE TYPE ResponOffice AS ENUM(

    'AO: Airworthiness Office',

    'DO: Design Office',

    'IM: Independent Monitoring',

    'PR: Partner',

    'SC: Subcontractor',

    'BR: BRIN',

    'GF: GMF AeroAsia',

    'BA: BIFA Flying School',

    'EL: Elang Lintas Indonesia'

);

CREATE TYPE AuditType AS ENUM(

    'Procedure',

    'Product',

    'Surveillance'

);

CREATE TYPE AuditScope AS ENUM(

    'Authority',

    'Internal',

    'External',

    'Subcontractor'

);

CREATE TYPE UIC AS ENUM(

    'Chief Design Office',

    'Chief Airworthiness Office',

    'Chief Independent Monitoring',

    'Head of DOA'

);

CREATE TYPE level AS ENUM(

    '1', '2', '3'

);

CREATE TYPE ProbAnalis AS ENUM(

    'Required', 'Not Required'

);

CREATE TYPE enum\_Stat AS ENUM(

    'Open',

    'Monitor',

    'Closed'

);

CREATE TABLE NCR\_Initial(

    AccountID BIGSERIAL, -- Menambah kolom AccountID

    FOREIGN KEY (AccountID) REFERENCES Account(AccountID),

    NCR\_init\_ID BIGSERIAL PRIMARY KEY UNIQUE,

    RegulationBased Reg\_Based NOT NULL,

    Subject TEXT NOT NULL,

    Audit\_Plan\_No VARCHAR(10) NOT NULL,

    NCR\_No VARCHAR(11) NOT NULL,

    Issued\_Date DATE NOT NULL,

    Responsibility\_Office ResponOffice NOT NULL,

    Audit\_Type AuditType NOT NULL,

    Audit\_Scope AuditScope NOT NULL,

    To\_UIC UIC NOT NULL,

    Attention TEXT NOT NULL,

    Require\_Condition\_Reference TEXT NOT NULL,

    Level\_Finding level NOT NULL,

    Problem\_Analysis ProbAnalis NOT NULL,

    Answer\_Due\_Date DATE NOT NULL,

    Issue\_IAN BOOLEAN NOT NULL,

    IAN\_No TEXT NOT NULL,

    Encountered\_Condition TEXT NOT NULL,

    Audit\_by TEXT NOT NULL,

    Audit\_Date DATE NOT NULL,

    Acknowledge\_by TEXT NOT NULL,

    Acknowledge\_date DATE NOT NULL,

    Status enum\_Stat NOT NULL,

    TemporaryLink TEXT

);

CREATE TABLE NCR\_reply(

    AccountID BIGSERIAL, -- Menambah kolom AccountID

    FOREIGN KEY (AccountID) REFERENCES Account(AccountID),

    NCR\_init\_ID BIGSERIAL,

    FOREIGN KEY (NCR\_init\_ID) REFERENCES NCR\_Initial(NCR\_init\_ID),

    RCA\_problem TEXT NOT NULL,

    Corrective\_Action TEXT NOT NULL,

    Preventive\_Action TEXT NOT NULL,

    Identified\_by\_Auditee TEXT NOT NULL,

    Identified\_Date DATE NOT NULL,

    Accept\_by\_Auditor TEXT NOT NULL,

    Auditor\_Accept\_date DATE NOT NULL,

    TemporaryLink TEXT

);

CREATE TYPE effective AS ENUM(

    'Effective', 'Not Effective'

);

CREATE TABLE NCR\_FollowResult(

    AccountID BIGSERIAL, -- Menambah kolom AccountID

    FOREIGN KEY (AccountID) REFERENCES Account(AccountID),

    NCR\_init\_ID BIGSERIAL,

    FOREIGN KEY (NCR\_init\_ID) REFERENCES NCR\_Initial(NCR\_init\_ID),

    Close\_Corrective\_Actions TEXT,

    Proposed\_Close\_Auditee TEXT NOT NULL,

    Proposed\_Close\_Date DATE NOT NULL,

    Is\_close BOOLEAN NOT NULL,

    effectiveness effective NOT NULL,

    Refer\_Verification VARCHAR(10),

    Sheet\_No VARCHAR(50),

    New\_NCR\_Issue\_nbr VARCHAR(10),

    Close\_approved\_by TEXT NOT NULL,

    Close\_approved\_date DATE NOT NULL,

    Verified\_Chief\_IM TEXT NOT NULL,

    Verified\_Date DATE NOT NULL,

    TemporaryLink TEXT

);

**Table Project**

CREATE TABLE Tbl\_DO\_project (

    DO\_project\_id BIGSERIAL PRIMARY KEY,

    RegulationBased VARCHAR(5) CHECK (RegulationBased IN ('DGCA', 'EASA', 'IDAA')),

    ProjectTitle TEXT,

    ProjectNumber TEXT,

    ProjectDescription TEXT,

    ProjectCreatedDate DATE,

    EstStartDate DATE,

    EstFinishDate DATE,

    ActStartDate DATE,

    ActFinishDate DATE,

    AircraftTypeEngineTypePart TEXT,

    NumberOfAircraftEnginePart TEXT,

    CustomerName TEXT,

    ProjectClassification VARCHAR(5) CHECK (ProjectClassification IN ('Major', 'Minor')),

    SubClassification VARCHAR(10) CHECK (SubClassification IN ('Alteration', 'Repair'))

);

CREATE TABLE RequiredDocuments (

    doc\_id BIGSERIAL  PRIMARY KEY,

    DO\_project\_id BIGSERIAL ,

    FOREIGN KEY (DO\_project\_id) REFERENCES Tbl\_DO\_project(DO\_project\_id),

    DocumentType TEXT,

    DocumentName TEXT,

    DocumentNumber TEXT,

    DocumentCreatedBy TEXT,

    DocumentCreatedDate DATE,

    DocumentCheckBy TEXT,

    DocumentCheckDate DATE,

    DocumentApproveBy TEXT,

    DocumentApproveDate DATE,

    Status VARCHAR(5) CHECK (Status IN ('Open', 'Monitor', 'Close')),

    Remark TEXT

);

CREATE TABLE AssignPIC (

    pic\_id BIGSERIAL  PRIMARY KEY,

    DO\_project\_id BIGSERIAL ,

    FOREIGN KEY (DO\_project\_id) REFERENCES Tbl\_DO\_project(DO\_project\_id),

    Name TEXT,

    Role TEXT,

    AuthorizedLetterValidity DATE

);

CREATE TABLE HighlightIssue (

    highlight\_id BIGSERIAL  PRIMARY KEY,

    DO\_project\_id BIGSERIAL ,

    FOREIGN KEY (DO\_project\_id) REFERENCES Tbl\_DO\_project(DO\_project\_id),

    Date DATE,

    ProblemIssue TEXT,

    CorrectiveAction TEXT,

    PIC TEXT,

    Status VARCHAR(5) CHECK (Status IN ('Open', 'Monitor', 'Close')),

    Remark TEXT

);

CREATE TABLE CommercialAspect (

    cost\_id BIGSERIAL  PRIMARY KEY,

    DO\_project\_id BIGSERIAL ,

    FOREIGN KEY (DO\_project\_id) REFERENCES Tbl\_DO\_project(DO\_project\_id),

    Budget TEXT,

    CostSpend TEXT,

    PostProject TEXT,

    BillingProcess TEXT

);

**TABLE IOR**

CREATE TABLE tbl\_occurrence (

    id\_IOR BIGSERIAL PRIMARY KEY,

    subject\_ior TEXT,

    occur\_nbr VARCHAR(15),

    occur\_date DATE,

    reference\_ior VARCHAR(80),

    to\_uic VARCHAR(4),

    cc\_uic VARCHAR(4),

    category\_occur VARCHAR(1),

    type\_or\_pnbr VARCHAR(15),

    level\_type VARCHAR(10),

    detail\_occurance TEXT,

    ReportedBy VARCHAR(75),

    reporter\_uic VARCHAR(4),

    report\_date DATE,

    reporter\_identity BOOLEAN,

    data\_reference BOOLEAN,

    hirac\_process BOOLEAN,

    initial\_probability VARCHAR(1),

    initial\_severity VARCHAR(1),

    initial\_riskindex VARCHAR(40)

);

CREATE TABLE tbl\_category\_ior (

    id\_IOR BIGSERIAL ,

    FOREIGN KEY (id\_IOR) REFERENCES tbl\_occurrence(id\_IOR),

    id\_ior\_category BIGSERIAL PRIMARY KEY,

    number\_cat VARCHAR(2),

    occur\_nbr VARCHAR(60)

);

CREATE TABLE tbl\_follupOccur (

    id\_follup BIGSERIAL PRIMARY KEY,

    id\_IOR BIGSERIAL ,

    FOREIGN KEY (id\_IOR) REFERENCES tbl\_occurrence(id\_IOR),

    follup\_detail TEXT,

    follupby VARCHAR(75),

    follup\_uic VARCHAR(4),

    follup\_date DATE,

    follup\_datarefer BOOLEAN,

    follup\_status VARCHAR(8),

    nextuic\_follup VARCHAR(4),

    current\_probability VARCHAR(1),

    current\_severity VARCHAR(1),

    current\_riskindex VARCHAR(40),

    FOREIGN KEY (id\_IOR) REFERENCES tbl\_occurrence(id\_IOR)

);