CREATE TABLE users (

    UserID SERIAL PRIMARY KEY,

    Name VARCHAR(255) NOT NULL,

    Password VARCHAR(255) NOT NULL,

    Email VARCHAR(255) UNIQUE NOT NULL

);

CREATE TABLE workspace (

    WorkspaceID SERIAL PRIMARY KEY,

    Name VARCHAR(255) NOT NULL,

    CreatedDate TIMESTAMP NOT NULL DEFAULT CURRENT\_TIMESTAMP,

    OwnerID INT NOT NULL,

    FOREIGN KEY (OwnerID) REFERENCES users(UserID)

);

CREATE TABLE user\_works (

    WorkspaceID INT NOT NULL,

    UserID INT NOT NULL,

    PRIMARY KEY (WorkspaceID, UserID),

    FOREIGN KEY (WorkspaceID) REFERENCES WORKSPACE(WorkspaceID),

    FOREIGN KEY (UserID) REFERENCES users(UserID)

);

CREATE TABLE plan (

    UserID INT NOT NULL,

    PlanID SERIAL PRIMARY KEY,

    CreatedDate TIMESTAMP NOT NULL DEFAULT CURRENT\_TIMESTAMP,

    duedate TIMESTAMP NOT NULL DEFAULT CURRENT\_TIMESTAMP,

    Content TEXT,

    FOREIGN KEY (UserID) REFERENCES users(UserID)

);

ALTER TABLE plan

ADD COLUMN importance BOOLEAN DEFAULT FALSE;

CREATE TABLE note (

    PageID SERIAL PRIMARY KEY,

    CreatedDate TIMESTAMP NOT NULL DEFAULT CURRENT\_TIMESTAMP,

    Content TEXT,

    Title VARCHAR(255) NOT NULL,

    Document TEXT,

    UpdatedDate TIMESTAMP,

    UserID INT NOT NULL,

    Visibility BOOLEAN NOT NULL DEFAULT FALSE, -- Visibility as boolean with default false

    FOREIGN KEY (UserID) REFERENCES users(UserID)

);

ALTER TABLE note

    ALTER COLUMN Document TYPE INTEGER USING Document::integer;

CREATE TYPE permission\_type AS ENUM ('view', 'update');

CREATE TABLE note\_shares (

    NoteID INT NOT NULL,

    SharedWithUserID INT NOT NULL,

    SharedDate TIMESTAMP NOT NULL DEFAULT CURRENT\_TIMESTAMP,

    Permission permission\_type NOT NULL DEFAULT 'view',

    PRIMARY KEY (NoteID, SharedWithUserID),

    FOREIGN KEY (NoteID) REFERENCES note(PageID) ON DELETE CASCADE,

    FOREIGN KEY (SharedWithUserID) REFERENCES users(UserID) ON DELETE CASCADE

);