Create table:

**CREATE EXTENSION IF NOT EXISTS "uuid-ossp"; -- Ensure UUID generation function is available**

**CREATE TABLE drc\_folder (**

**id UUID PRIMARY KEY DEFAULT uuid\_generate\_v4(), -- UUID as primary key with auto-generation**

**parent\_id UUID, -- Parent folder reference, also UUID**

**name VARCHAR(255) NOT NULL, -- Folder name**

**path VARCHAR(1000) NOT NULL, -- Full path of the folder**

**created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP, -- Timestamp for folder creation**

**updated\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP, -- Timestamp for updates**

**CONSTRAINT unique\_parent\_name UNIQUE (parent\_id, name), -- Ensure unique folder names under the same parent**

**FOREIGN KEY (parent\_id) REFERENCES drc\_folder(id) ON DELETE CASCADE -- Cascade delete for child folders**

**);**

**Maintaining the path Column**

You can manage the path column in one of the following ways:

**1. Using Triggers**

Create triggers to update the path column whenever a new folder is inserted or updated.

CREATE OR REPLACE FUNCTION drc\_folder\_insert\_trigger()

RETURNS TRIGGER AS $$

BEGIN

IF NEW.parent\_id IS NULL THEN

-- Root folder path

NEW.path := NEW.name;

ELSE

-- Concatenate parent path and current folder name

SELECT path INTO NEW.path

FROM drc\_folder

WHERE id = NEW.parent\_id;

NEW.path := NEW.path || '/' || NEW.name;

END IF;

RETURN NEW;

END;

$$ LANGUAGE plpgsql;

-- Create the trigger

CREATE TRIGGER drc\_folder\_insert\_trigger

BEFORE INSERT ON drc\_folder

FOR EACH ROW

EXECUTE FUNCTION drc\_folder\_insert\_trigger();

Update:

CREATE OR REPLACE FUNCTION drc\_folder\_update\_trigger()

RETURNS TRIGGER AS $$

BEGIN

IF NEW.parent\_id IS NULL THEN

-- Root folder path

NEW.path := NEW.name;

ELSE

-- Concatenate parent path and current folder name

SELECT path INTO NEW.path

FROM drc\_folder

WHERE id = NEW.parent\_id;

NEW.path := NEW.path || '/' || NEW.name;

END IF;

RETURN NEW;

END;

$$ LANGUAGE plpgsql;

-- Create the trigger

CREATE TRIGGER drc\_folder\_update\_trigger

BEFORE UPDATE ON drc\_folder

FOR EACH ROW

EXECUTE FUNCTION drc\_folder\_update\_trigger();