MaNGO

Data Definition Language (DDL) based on tables

CREATE DATABASE REGISTER;

USE REGISTER;

CREATE TABLE Users (

user\_id VARCHAR(20) PRIMARY KEY, -- Use VARCHAR to store IDs with prefixes

user\_type VARCHAR(1),

first\_name VARCHAR(50) NOT NULL,

middle\_name VARCHAR(50),

last\_name VARCHAR(50) NOT NULL,

contact VARCHAR(15) NOT NULL UNIQUE,

email VARCHAR(100) NOT NULL UNIQUE,

password VARCHAR(255) NOT NULL,

address VARCHAR(255),

city VARCHAR(100) NOT NULL,

CONSTRAINT chk\_contact CHECK (LENGTH(contact) BETWEEN 10 AND 15),

CONSTRAINT chk\_email CHECK (email LIKE '%@%.\_%')

);

CREATE TABLE ServiceProvider (

user\_id VARCHAR(50) PRIMARY KEY,

FOREIGN KEY (user\_id) REFERENCES Users(user\_id)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE Donor (

user\_id VARCHAR(50) PRIMARY KEY,

FOREIGN KEY (user\_id) REFERENCES Users(user\_id)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE ResourceProvider (

user\_id VARCHAR(50) PRIMARY KEY,

FOREIGN KEY (user\_id) REFERENCES Users(user\_id)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE Contributor (

contributor\_id VARCHAR(50) PRIMARY KEY,

FOREIGN KEY (contributor\_id) REFERENCES Users(user\_id)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE Resource (

resource\_id VARCHAR(50) PRIMARY KEY,

user\_id VARCHAR(50) NOT NULL,

name VARCHAR(255) NOT NULL,

description TEXT,

expiry\_time DATE,

quantity INT NOT NULL,

type VARCHAR(255) NOT NULL,

FOREIGN KEY (user\_id) REFERENCES ResourceProvider(user\_id)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE Service (

service\_id VARCHAR(50) PRIMARY KEY,

ser\_provider\_id VARCHAR(50) NOT NULL,

timestamp TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

type VARCHAR(255) NOT NULL,

FOREIGN KEY (ser\_provider\_id) REFERENCES ServiceProvider(user\_id)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE NGO (

ngo\_id VARCHAR(50) PRIMARY KEY,

FOREIGN KEY (ngo\_id) REFERENCES Users(user\_id)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE notifications (

notification\_id INT AUTO\_INCREMENT PRIMARY KEY,

resource\_id INT, -- Reference to the uploaded resource

message TEXT, -- The notification message

created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (resource\_id) REFERENCES Resource(resource\_id)

);

CREATE TABLE Review (

review\_id VARCHAR(50) PRIMARY KEY,

contributor\_id VARCHAR(50) NOT NULL,

ngo\_id VARCHAR(50) NOT NULL,

description TEXT NOT NULL,

FOREIGN KEY (contributor\_id) REFERENCES Contributor(contributor\_id)

ON DELETE CASCADE

ON UPDATE CASCADE,

FOREIGN KEY (ngo\_id) REFERENCES NGO(ngo\_id)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE Receives (

ngo\_id VARCHAR(50) PRIMARY KEY,

notification\_id VARCHAR(50) NOT NULL,

FOREIGN KEY (ngo\_id) REFERENCES NGO(ngo\_id)

ON DELETE CASCADE

ON UPDATE CASCADE,

FOREIGN KEY (notification\_id) REFERENCES Notification(notification\_id)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE PaymentGateway (

gateway\_id VARCHAR(50) PRIMARY KEY,

service\_fees INT,

transaction\_id VARCHAR(50) NOT NULL,

amount INT NOT NULL,

transaction\_date VARCHAR(50) NOT NULL,

donor\_id VARCHAR(50) NOT NULL,

FOREIGN KEY (donor\_id) REFERENCES Donor(user\_id)

ON DELETE CASCADE

ON UPDATE CASCADE

);

SELECT \* FROM Users;

CREATE TABLE Donations (

donation\_id INT AUTO\_INCREMENT PRIMARY KEY,

donor\_id VARCHAR(20),

ngo\_id VARCHAR(20),

donation\_amount DECIMAL(10, 2),

donation\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (donor\_id) REFERENCES Users(user\_id) ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY (ngo\_id) REFERENCES Users(user\_id) ON DELETE CASCADE ON UPDATE CASCADE

);