CPSC 304 Project Cover Page

Milestone #: 2

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Group Number: 98

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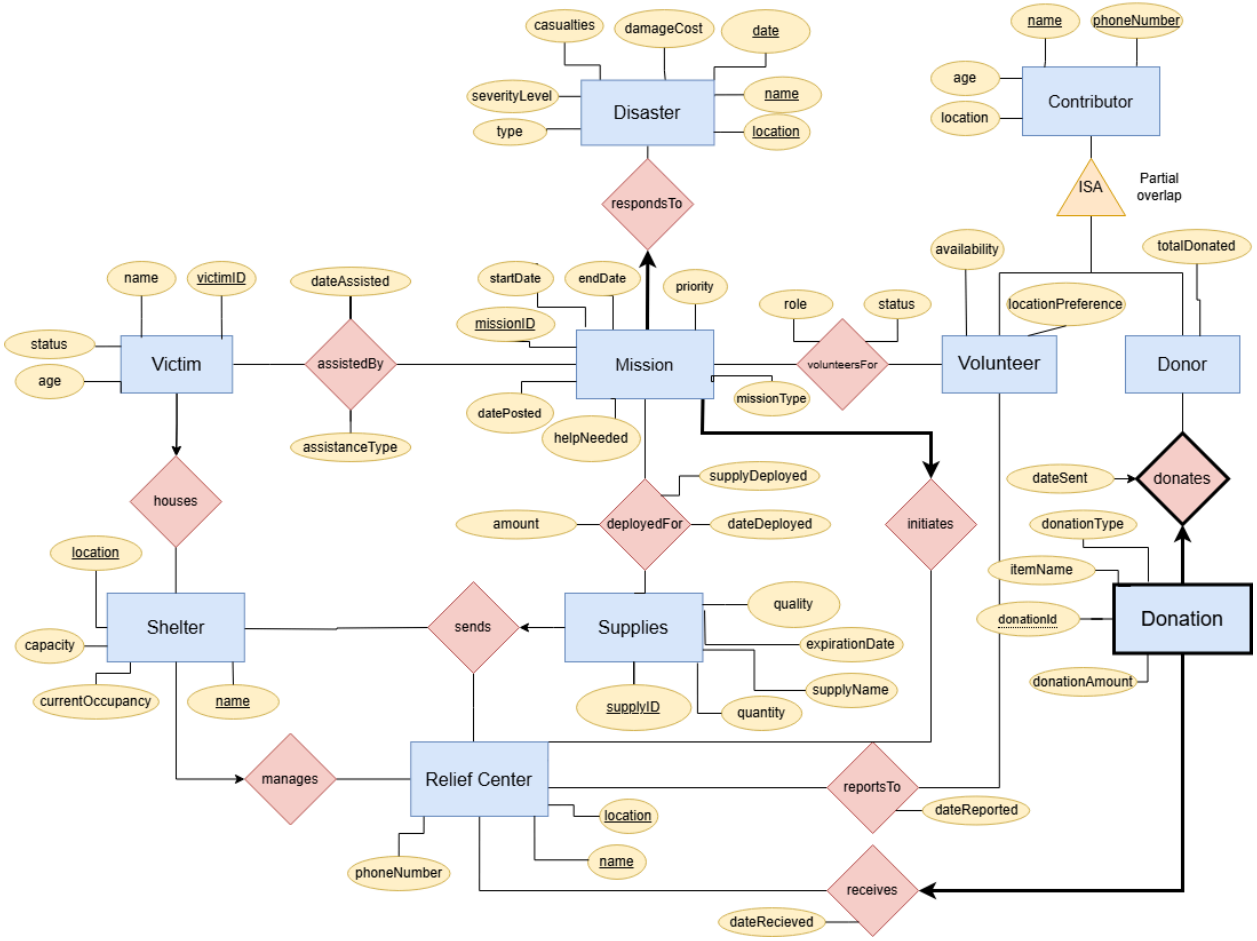
By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

2. Project Summary

The domain of the application is disaster crisis response/logistics. The application is meant to address the challenges faced during natural disasters, where organizing volunteers, missions, and aid distribution can be overwhelming. This app will help make that process more efficient by ensuring that those in need get the help they need as quickly as possible.

3. Project ER Diagram



ER Diagram's Changes

Supplies - added new attribute quality to create a new FD

Volunteer - added locationPreference and availability attributes because we wanted to better differentiate Volunteers and Donors

Donor - added totalDonated attribute to better differentiate Volunteers and Donors

Donation - added itemName

Relief Center - changed contactInfo to phoneNumber

Mission - added startDate and endDate to missions to better represent a real world situation

4. ER Diagram's Schema

Disaster(name: VARCHAR(50), date: DATE, location: VARCHAR(100), damageCost: INTEGER, casualties: INTEGER, severityLevel: NUMBER(10), type: VARCHAR(50))
Mission(missionID: NUMBER(30), missionType: VARCHAR(50), datePosted: DATE, helpNeeded: NUMBER(10), priority: NUMBER(10), **disasterName**: VARCHAR(50)**, disasterDate:** DATE**, disasterLocation**: VARCHAR(100)**, rcName**: VARCHAR(50), **rcLocation**: VARCHAR(100), startDate: DATE, endDate: DATE) - disasterName, disasterDate, disasterLocation, rcName, rcLocation are NOT NULL FOREIGN KEY(disasterName, disasterDate, disasterLocation) REFERENCES Disaster FOREIGN KEY(rcName, rcLocation) REFERENCES ReliefCenter
Victim(victimID: NUMBER(30), name: VARCHAR(50), status: VARCHAR(250), age: NUMBER(150), **shelterName**: VARCHAR(50), **shelterLocation**: VARCHAR(100)) FOREIGN KEY(shelterName, shelterLocation) REFERENCES Shelter
AssistedBy(**victimID**: NUMBER(30), **missionID**: NUMBER(30), dateAssisted: DATE, assistanceType: VARCHAR(250)) FOREIGN KEY(victimID) REFERENCES Victim FOREIGN KEY(missionID) REFERENCES Mission

Shelter(name: VARCHAR(50), location: VARCHAR(100), capacity: INTEGER, currentOccupancy: INTEGER, **rcName**: VARCHAR(50), **rcLocation**: VARCHAR(100))

FOREIGN KEY(rcName, rcLocation) REFERENCES ReliefCenter

ReliefCenter(name: VARCHAR(50), location: VARCHAR(100), phoneNumber: VARCHAR(15))
- phoneNumber is UNIQUE

Supplies(supplyID: NUMBER(30), supplyName: VARCHAR(50), quantity: INTEGER, expirationDate: DATE, quality: VARCHAR(50), **shelterName**: VARCHAR(50), **shelterLocation**: VARCHAR(100), **rcName**: VARCHAR(50), **rcLocation**: VARCHAR(100))

FOREIGN KEY(shelterName, shelterLocation) REFERENCES Shelter

FOREIGN KEY(rcName, rcLocation) REFERENCES ReliefCenter

DeployedFor(**missionID**: NUMBER(30), **supplyID**: NUMBER(30), amount: INTEGER, dateDeployed: DATE)

FOREIGN KEY(missionID) REFERENCES Mission

FOREIGN KEY (supplyID) REFERENCES Supplies

Contributor(name: VARCHAR(50), phoneNumber**:** VARCHAR(15), age: NUMBER(150), location: VARCHAR(100))

Donor(name: VARCHAR(50), phoneNumber**:** VARCHAR(15), totalDonated: INTEGER)

Volunteer**(**name: VARCHAR(50), phoneNumber: NUMBER(15), locationPreference: VARCHAR(100), availability: VARCHAR(100)**)**

Donation(donationID: NUMBER(30), donationType: VARCHAR(50), donationAmount: INTEGER, dateSent: DATE, itemName: VARCHAR(50), **donorName**: VARCHAR(50), **donorPhoneNumber:** VARCHAR(15), **rcName**: VARCHAR(50), **rcLocation**: VARCHAR(100)**,** dateReceived: DATE)
- rcName, rcLocation are NOT NULL

FOREIGN KEY(donorName, donorPhoneNumber) REFERENCES Donor

FOREIGN KEY(rcName, rcLocation) REFERENCES ReliefCenter

VolunteersFor(**missionID**: NUMBER(30), **volunteerName**: VARCHAR(50), **volunteerPhoneNumber:** VARCHAR(15), role: VARCHAR(50), status: VARCHAR(250))

FOREIGN KEY(volunteerName, volunteerPhoneNumber) REFERENCES Volunteers

FOREIGN KEY(missionID) REFERENCES Mission

ReportsTo(**rcName**: VARCHAR(50), **rcLocation**: VARCHAR(100)**, volunteerName**: VARCHAR(50), **volunteerPhoneNumber:** VARCHAR(15), dateReported: DATE)

FOREIGN KEY(volunteerName, volunteerPhoneNumber) REFERENCES Volunteers

FOREIGN KEY(rcName, rcLocation) REFERENCES ReliefCenter

5. Functional Dependencies

Disaster:

{name, date, location} -> {damageCost, casualties, severityLevel, type}

{damageCost, casualties} -> {severityLevel}

Mission:

{missionID} -> {missionType, datePosted, helpNeeded, priority, disasterName, disasterDate, disasterLocation, rcName, rcLocation, startDate, endDate}

{disasterLocation} -> {rcName, rcLocation}

{missionType, helpNeeded} -> {priority}

Victim:

{victimID} -> {name, status, age, shelterName, shelterLocation}

AssistedBy:

{victimID, missionID} -> {dateAssisted, assistanceType}

Shelter:

{name, location} -> {capacity, currentOccupancy, rcName, rcLocation}

ReliefCenter:

{name, location} -> {phoneNumber}

Supplies:

{supplyID} -> { supplyName, quantity, expirationDate, shelterName, shelterLocation, rcName, rcLocation, quality}

{shelterName, shelterLocation} -> {rcName, rcLocation}

{supplyName, expirationDate} -> {quality}

DeployedFor:

{MissionID, supplyID} -> {amount, dateDeployed}

Contributor:

{name, phoneNumber} -> {age, location}

Donation:

{donationID, , donorName, donorPhoneNumber} -> {donationAmount, dateSent,donationType, rcName, rcLocation, dateReceived, itemName}

{itemName} -> {donationType}

VolunteersFor:

{missionID, volunteerName, volunteerPhoneNumber} -> {role, status}

Volunteer:

{name, phoneNumber} -> {locationPreference, availability}

Donor:

{name, phoneNumber} -> {totalDonated}

ReportsTo:

{rcName, rcLocation, volunteerName, volunteerPhoneNumber} -> {dateReported}

6. Normalization

Disaster

Disaster(name: VARCHAR(50), date: DATE, location: VARCHAR(100), damageCost: INTEGER, casualties: INTEGER, severityLevel: NUMBER(10), type: VARCHAR(50))
Decompose on {damageCost, casualties} -> {severityLevel} Disaster relation in BCNF form: SeverityLevel(damageCost: INTEGER, casualties: INTEGER, severityLevel: NUMBER(10)) Disaster(name: VARCHAR(50), date: DATE, location: VARCHAR(100), **damageCost**: INTEGER, **casualties**: INTEGER, type: VARCHAR(50))

Mission

Mission(missionID: NUMBER(30), missionType: VARCHAR(50), datePosted: DATE, helpNeeded: NUMBER(10), priority: NUMBER(10), **disasterName**: VARCHAR(50)**, disasterDate:** DATE**, disasterLocation**: VARCHAR(100)**, rcName**: VARCHAR(50), **rcLocation**: VARCHAR(100), startDate: DATE, endDate: DATE)
Decompose on: {disasterLocation} -> {rcName, rcLocation} LocationReliefCenter(disasterLocation: VARCHAR(100), **rcName**: VARCHAR(50), **rcLocation**: VARCHAR(100)) Mission(missionID: NUMBER(30), missionType: VARCHAR(50), datePosted: DATE, helpNeeded: NUMBER(10), priority: NUMBER(10), **disasterName**: VARCHAR(50)**,**

disasterDate: DATE**, disasterLocation**: VARCHAR(100), startDate: DATE, endDate: DATE)

Decompose on: {missionType, helpNeeded} -> {priority}

Mission relation in BCNF form:

LocationReliefCenter(disasterLocation: VARCHAR(100), **rcName**: VARCHAR(50), **rcLocation**: VARCHAR(100))

Priority(missionType: VARCHAR(50), helpNeeded: NUMBER(10), priority: NUMBER(10)),

Mission(missionID: NUMBER(30), **missionType**: VARCHAR(50), datePosted: DATE, **helpNeeded**: NUMBER(10), **disasterName**: VARCHAR(50)**, disasterDate:** DATE**, disasterLocation**: VARCHAR(100), startDate: DATE, endDate: DATE)

Supplies

Supplies(supplyID: NUMBER(30), supplyName: VARCHAR(50), quantity: INTEGER, expirationDate: DATE, quality: VARCHAR(50), **shelterName**: VARCHAR(50), **shelterLocation**: VARCHAR(100), **rcName**: VARCHAR(50), **rcLocation**: VARCHAR(100))

Decompose on: {shelterName, shelterLocation} -> {rcName, rcLocation}

ShelterReliefCenter(**shelterName**: VARCHAR(50), **shelterLocation**: VARCHAR(100), **rcName**: VARCHAR(50), **rcLocation**: VARCHAR(100)),

Supplies(supplyID: NUMBER(30), supplyName: VARCHAR(50), quantity: INTEGER, expirationDate: DATE, quality: VARCHAR(50), **shelterName**: VARCHAR(50), **shelterLocation**: VARCHAR(100))

Decompose on: {supplyName, expirationDate} -> {quality}

Supplies relation in BCNF form:

ShelterReliefCenter(shelterName: VARCHAR(50), shelterLocation: VARCHAR(100), **rcName**: VARCHAR(50), **rcLocation**: VARCHAR(100)),

Quality(supplyName: VARCHAR(50), expirationDate: DATE, quality: VARCHAR(50)),

Supplies(supplyID: NUMBER(30), supplyName: VARCHAR(50), quantity: INTEGER, expirationDate: DATE, **shelterName**: VARCHAR(50), **shelterLocation**: VARCHAR(100))

Donation

Donation(donationID: NUMBER(30), donationType: VARCHAR(50), donationAmount: INTEGER, dateSent: DATE, itemName: VARCHAR(50), **donorName**: VARCHAR(50), **donorPhoneNumber:** VARCHAR(15), **rcName**: VARCHAR(50), **rcLocation,** dateReceived: DATE)

Decompose on: {itemName} -> {donationType}

Donation relation in BCNF form:

DonationType(itemName: VARCHAR(50), donationType: VARCHAR(50))

Donation(donationID: NUMBER(30), donationAmount: INTEGER, dateSent: DATE, **itemName**: VARCHAR(50), **donorName**: VARCHAR(50), **donorPhoneNumber:** VARCHAR(15), **rcName**: VARCHAR(50), **rcLocation**: VARCHAR(100)**,** dateReceived: DATE)

7. SQL DDL Statements

```
CREATE TABLE Disaster {
    name: VARCHAR(50),
    date: DATE,
    location: VARCHAR(100),
    damageCost: INTEGER,
    casualties: INTEGER,
    type: VARCHAR(50),
    PRIMARY KEY (name, date, location)
    FOREIGN KEY (damageCost, casualties) REFERENCES
     DisasterSeverity
}



CREATE TABLE DisasterSeverity {
    damageCost: INTEGER,
    casualties: INTEGER,
    severityLevel: NUMBER(10),
    PRIMARY KEY (damageCost, casualties)
}



CREATE TABLE Mission {
    missionID: NUMBER(30),
    missionType: VARCHAR(50),
    datePosted: DATE,
    helpNeeded: NUMBER(10),
    disasterName: VARCHAR(50) NOT NULL,
    disasterDate: DATE NOT NULL,
    disasterLocation: VARCHAR(100) NOT NULL,
    PRIMARY KEY (missionID)
    FOREIGN KEY (disasterName, disasterDate, disasterLocation)
        REFERENCES Disaster(name, date, location)
    FOREIGN KEY (missionType, helpNeeded) REFERENCES MissionPriority
    FOREIGN KEY (disasterLocation) REFERENCES MissionLocationRC
}



CREATE TABLE MissionPriority {
    missionType: VARCHAR(50),
    helpNeeded: NUMBER(10),
    priority: NUMBER(10),
    PRIMARY KEY (missionType, helpNeeded)
}
```

```
CREATE TABLE MissionLocationRC {
    disasterLocation: VARCHAR(100),
    rcName: VARCHAR(50) NOT NULL,
    rcLocation: VARCHAR(100) NOT NULL,
    PRIMARY KEY (disasterLocation)
    FOREIGN KEY (rcName, rcLocation) REFERENCES ReliefCenter(name,
location)
}



CREATE TABLE Victim {
    victimID: NUMBER(30),
    name: VARCHAR(50),
    status: VARCHAR(250),
    age: NUMBER(150),
    shelterName: VARCHAR(50),
    shelterLocation: VARCHAR(100),
    PRIMARY KEY (victimID),
    FOREIGN KEY (shelterName, shelterLocation) REFERENCES
Shelter(name, location)
}



CREATE TABLE AssistedBy {
    victimID: NUMBER(30),
    missionID: NUMBER(30),
    dateAssisted: DATE,
    assistanceType: VARCHAR(250)
    PRIMARY KEY (victimID, missionID),
    FOREIGN KEY(victimID) REFERENCES Victim,
    FOREIGN KEY(missionID) REFERENCES Mission
}



CREATE TABLE Shelter {
    name: VARCHAR(50),
    location: VARCHAR(100),
    capacity: INTEGER,
    currentOccupancy: INTEGER,
    rcName: VARCHAR(50),
    rcLocation: VARCHAR(100),
    PRIMARY KEY (name, location),
    FOREIGN KEY (rcName, rcLocation) REFERENCES ReliefCenter(name,
location)
```

```
}

CREATE TABLE ReliefCenter {
    name: VARCHAR(50),
    location: VARCHAR(100),
    phoneNumber: VARCHAR(15) UNIQUE,
    PRIMARY KEY (name, location)
}

CREATE TABLE Supplies {
    supplyID: NUMBER(30),
    supplyName: VARCHAR(50),
    quantity: INTEGER,
    expirationDate: DATE,
    shelterName: VARCHAR(50),
    shelterLocation: VARCHAR(100),
    PRIMARY KEY (supplyID),
    FOREIGN KEY (shelterName, shelterLocation) REFERENCES
SuppliesShelterRC,
    FOREIGN KEY (supplyName, expirationDate) REFERENCES SupplyQuality
}

CREATE TABLE SuppliesShelterRC {
     shelterName: VARCHAR(50),
     shelterLocation: VARCHAR(100),
     rcName: VARCHAR(50),
     rcLocation: VARCHAR(100),
     PRIMARY KEY (shelterName, shelterLocation)
     FOREIGN KEY (shelterName, shelterLocation) REFERENCES
Shelter(name, location),
     FOREIGN KEY (rcName, rcLocation) REFERENCES ReliefCenter(name,
location)
}

CREATE TABLE SupplyQuality {
    supplyName: VARCHAR(50),
    expirationDate: DATE,
    quality: VARCHAR(50),
    PRIMARY KEY (supplyName, expirationDate)
}



CREATE TABLE DeployedFor {
    missionID: NUMBER(30),
    supplyID: NUMBER(30),
    amount: INTEGER,
    dateDeployed: DATE,
    PRIMARY KEY (missionID, supplyID),
```

```
    FOREIGN KEY (missionID) REFERENCES Mission,
    FOREIGN KEY (supplyID) REFERENCES Supplies
}

CREATE TABLE Contributor {
    name: VARCHAR(50),
    phoneNumber: VARCHAR(15),
    age: NUMBER(150),
    location: VARCHAR(100),
    PRIMARY KEY (name, phoneNumber)
}

CREATE TABLE Volunteer {
    name: VARCHAR(50),
    phoneNumber: NUMBER(15),
    locationPreference: VARCHAR(100),
    availability: VARCHAR(100),
    PRIMARY KEY (name, phoneNumber),
    FOREIGN KEY (name, phoneNumber) REFERENCES Contributor
}

CREATE TABLE VolunteersFor {
    missionID: NUMBER(30),
    name: VARCHAR(50),
    phoneNumber: VARCHAR(15),
    role: VARCHAR(50),
    status: VARCHAR(250),
    PRIMARY KEY (missionID, name, phoneNumber),
    FOREIGN KEY(name, phoneNumber) REFERENCES Volunteer,
    FOREIGN KEY(missionID) REFERENCES Mission
}



CREATE TABLE ReportsTo {
    rcName: VARCHAR(50),
    rcLocation: VARCHAR(100),
    volunteerName: VARCHAR(50),
    volunteerPhoneNumber: VARCHAR(15),
    dateReported: DATE,
    PRIMARY KEY (rcName, rcLocation, volunteerName,
           volunteerPhoneNumber),
    FOREIGN KEY(volunteerName, volunteerPhoneNumber) REFERENCES
           Volunteer(name, phoneNumber),
    FOREIGN KEY(rcName, rcLocation) REFERENCES
           ReliefCenter(name, location)
}
```

```
CREATE TABLE Donor {
    name: VARCHAR(50),
    phoneNumber: VARCHAR(15),
    totalDonated: INTEGER,
    PRIMARY KEY (name, phoneNumber),
    FOREIGN KEY (name, phoneNumber) REFERENCES Contributor
}


CREATE TABLE Donation {
    donationID: NUMBER(30),
    donationAmount: INTEGER,
    dateSent: DATE,
    itemName: VARCHAR(50),
    donorName: VARCHAR(50),
    donorPhoneNumber: VARCHAR(15),
    rcName: VARCHAR(50) NOT NULL,
    rcLocation: VARCHAR(100) NOT NULL,
    dateReceived: DATE,
    PRIMARY KEY (donationID, donorName, donorPhoneNumber),
    FOREIGN KEY (donorName, donorPhoneNumber) REFERENCES Donor(name,
phoneNumber),
    FOREIGN KEY (itemName) REFERENCES DonationType
}


CREATE TABLE DonationType {
    itemName: VARCHAR(50),
    donationType: VARCHAR(50),
    PRIMARY KEY (itemName)
}
```

8. SQL Insert Statements

Disaster relation data:

```
INSERT INTO Disaster (name, date, location, damageCost, casualties,
type)
VALUES
('Hurricane Katrina', '2005-08-29', 'New Orleans, LA', 125000000000,
1836, 'Hurricane'),
('Fukushima Earthquake', '2011-03-11', 'Fukushima, Japan',
235000000000, 15897, 'Earthquake'),
('California Wildfires', '2020-09-01', 'California, USA',
12600000000, 31, 'Wildfire'),
('Tsunami Indian Ocean', '2004-12-26', 'Indonesia', 15000000000,
230000, 'Tsunami'),
('Haiti Earthquake', '2010-01-12', 'Port-au-Prince, Haiti',
8000000000, 160000, 'Earthquake');

INSERT INTO DisasterSeverityLevel (damageCost, casualties,
severityLevel)
VALUES (125000000000, 1836, 9), (235000000000, 15897, 10),
(12600000000, 31, 6), (15000000000, 230000, 10), (8000000000, 160000,
9);
```

Mission relation data:

```
INSERT INTO Mission (missionID, missionType, datePosted, helpNeeded,
disasterName, disasterDate, disasterLocation)
VALUES
(1, 'Rescue', '2005-08-30', 5000, 'Hurricane Katrina', '2005-08-29',
'New Orleans, LA'),
(2, 'Evacuation', '2011-03-12', 10000, 'Fukushima Earthquake',
'2011-03-11', 'Fukushima, Japan'),
(3, 'Firefighting', '2020-09-02', 2000, 'California Wildfires',
'2020-09-01', 'California, USA'),
(4, 'Medical Aid', '2004-12-27', 7000, 'Tsunami Indian Ocean',
'2004-12-26', 'Indonesia'),
(5, 'Reconstruction', '2010-01-13', 3000, 'Haiti Earthquake',
'2010-01-12', 'Port-au-Prince, Haiti');

INSERT INTO MissionPriority (missionType, helpNeeded, priority)
VALUES
('Rescue', 5000, 10),
('Evacuation', 10000, 9),
('Firefighting', 2000, 7),
('Medical Aid', 7000, 8),
('Reconstruction', 3000, 6);

INSERT INTO MissionLocationRC (disasterLocation, rcName, rcLocation)
VALUES
```

```
('New Orleans, LA', 'Red Cross Center NO', 'New Orleans, LA'),
('Fukushima, Japan', 'Red Cross Fukushima', 'Fukushima, Japan'),
('California, USA', 'Fire Relief CA', 'Los Angeles, CA'),
('Indonesia', 'Disaster Aid Indonesia', 'Jakarta, Indonesia'),
('Port-au-Prince, Haiti', 'Haiti Relief Center', 'Port-au-Prince,
Haiti');
```

Victim relation data:

```
INSERT INTO Victim (victimID, name, status, age, shelterName,
shelterLocation)
VALUES
(1, 'John Doe', 'Injured', 45, 'NO Shelter 1', 'New Orleans, LA'),
(2, 'Jane Smith', 'Missing', 32, 'Fukushima Shelter 1', 'Fukushima,
Japan'),
(3, 'Emily White', 'Displaced', 60, 'CA Shelter 1', 'Los Angeles,
CA'),
(4, 'Ali Rahman', 'Injured', 27, 'Indonesia Shelter 1', 'Jakarta,
Indonesia'),
(5, 'Pierre Louis', 'Homeless', 38, 'Haiti Shelter 1',
'Port-au-Prince, Haiti');
```

AssistedBy relation data:

```
INSERT INTO AssistedBy (victimID, missionID, dateAssisted,
assistanceType)
VALUES
(1, 1, '2005-08-31', 'Medical Assistance'),
(2, 2, '2011-03-13', 'Evacuation'),
(3, 3, '2020-09-03', 'Fire Relief'),
(4, 4, '2004-12-28', 'Medical Treatment'),
(5, 5, '2010-01-14', 'Shelter Placement');
```

Shelter relation data:

```
INSERT INTO Shelter (name, location, capacity, currentOccupancy,
rcName, rcLocation)
VALUES
('NO Shelter 1', 'New Orleans, LA', 1000, 950, 'Red Cross Center NO',
'New Orleans, LA'),
('Fukushima Shelter 1', 'Fukushima, Japan', 2000, 1800, 'Red Cross
Fukushima', 'Fukushima, Japan'),
('CA Shelter 1', 'Los Angeles, CA', 500, 450, 'Fire Relief CA', 'Los
Angeles, CA'),
('Indonesia Shelter 1', 'Jakarta, Indonesia', 1500, 1400, 'Disaster
Aid Indonesia', 'Jakarta, Indonesia'),
('Haiti Shelter 1', 'Port-au-Prince, Haiti', 800, 750, 'Haiti Relief
Center', 'Port-au-Prince, Haiti');
```

ReliefCenter relation data:

```
INSERT INTO ReliefCenter (name, location, phoneNumber)
VALUES
('Red Cross Center NO', 'New Orleans, LA', '504-123-4567'),
('Red Cross Fukushima', 'Fukushima, Japan', '024-987-6543'),
('Fire Relief CA', 'Los Angeles, CA', '310-555-1234'),
('Disaster Aid Indonesia', 'Jakarta, Indonesia', '021-444-7890'),
('Haiti Relief Center', 'Port-au-Prince, Haiti', '509-777-4321');
```

Supplies relation data:

```
INSERT INTO Supplies (supplyID, supplyName, quantity, expirationDate,
shelterName, shelterLocation)
VALUES
(1, 'Water Bottles', 5000, '2025-12-31', 'NO Shelter 1', 'New
Orleans, LA'),
(2, 'Blankets', 2000, NULL, 'Fukushima Shelter 1', 'Fukushima,
Japan'),
(3, 'Food Packs', 3000, '2023-09-01', 'CA Shelter 1', 'Los Angeles,
CA'),
(4, 'Medical Kits', 1500, '2024-06-30', 'Indonesia Shelter 1',
'Jakarta, Indonesia'),
(5, 'Tents', 1000, NULL, 'Haiti Shelter 1', 'Port-au-Prince, Haiti');

INSERT INTO SupplyQuality (supplyName, expirationDate, quality)
VALUES
('Water Bottles', '2025-12-31', 'Good'),
('Blankets', NULL, 'Excellent'),
('Food Packs', '2023-09-01', 'Fair'),
('Medical Kits', '2024-06-30', 'Good'),
('Tents', NULL, 'New');

INSERT INTO SuppliesShelterRC (shelterName, shelterLocation, rcName,
rcLocation)
VALUES
('Hope Shelter', 'New Orleans, LA', 'Red Cross Center NO', 'New
Orleans, LA'),
('Safe Haven', 'Fukushima, Japan', 'Red Cross Fukushima', 'Fukushima,
Japan'),
('Rescue Shelter', 'Los Angeles, CA', 'Fire Relief CA', 'Los Angeles,
CA'),
('Relief Shelter', 'Jakarta, Indonesia', 'Disaster Aid Indonesia',
'Jakarta, Indonesia'),
('Harbor Shelter', 'Port-au-Prince, Haiti', 'Haiti Relief Center',
'Port-au-Prince, Haiti');
```

DeployedFor relation data:

```
INSERT INTO DeployedFor (missionID, supplyID, amount, dateDeployed)
VALUES
```

```
(101, 201, 50, '2023-01-10'),
(102, 202, 100, '2023-02-15'),
(103, 203, 75, '2023-03-20'),
(104, 204, 120, '2023-04-25'),
(105, 205, 90, '2023-05-30');
```

Contributor relation data:

```
INSERT INTO Contributor (name, phoneNumber, age, location)
VALUES
('Alice Johnson', '555-111-2222', 35, 'New York, USA'),
('Bob Miller', '555-333-4444', 42, 'Tokyo, Japan'),
('Catherine Green', '555-555-6666', 29, 'Los Angeles, CA'),
('Daniel Brown', '555-777-8888', 50, 'Jakarta, Indonesia'),
('Emily Davis', '555-999-0000', 27, 'Haiti');
```

Donation relation data:

```
INSERT INTO Donation (donationID, donationAmount, dateSent, itemName,
donorName, donorPhoneNumber, rcName, rcLocation, dateReceived)
VALUES
(1, 500, '2023-01-15', 'Water Bottles', 'Alice Johnson',
'555-111-2222', 'Red Cross Center NO', 'New Orleans, LA',
'2023-01-20'),
(2, 200, '2023-02-10', 'Blankets', 'Bob Miller', '555-333-4444', 'Red
Cross Fukushima', 'Fukushima, Japan', '2023-02-15'),
(3, 1000, '2023-03-05', 'Food Packs', 'Catherine Green',
'555-555-6666', 'Fire Relief CA', 'Los Angeles, CA', '2023-03-10'),
(4, 300, '2023-04-12', 'Medical Kits', 'Daniel Brown',
'555-777-8888', 'Disaster Aid Indonesia', 'Jakarta, Indonesia',
'2023-04-18'),
(5, 400, '2023-05-20', 'Tents', 'Emily Davis', '555-999-0000', 'Haiti
Relief Center', 'Port-au-Prince, Haiti', '2023-05-25');

INSERT INTO DonationType (itemName, donationType)
VALUES
('Water Bottles', 'Essential Supplies'),
('Blankets', 'Shelter Aid'),
('Food Packs', 'Essential Supplies'),
('Medical Kits', 'Healthcare Supplies'),
('Tents', 'Shelter Aid');
```

VolunteersFor relation data:

```
INSERT INTO VolunteersFor (missionID, name, phoneNumber, role, status)
VALUES
(101, 'John Smith', '555-123-4567', 'Medical Aid', 'Active'),
```

```
(102, 'Emily Johnson', '555-987-6543', 'Logistics Coordinator', 'Active'),
(103, 'Michael Brown', '555-456-7890', 'Rescue Worker', 'On Standby'),
(104, 'Sarah Williams', '555-321-0987', 'Food Distribution', 'Active'),
(105, 'David Wilson', '555-654-3210', 'Shelter Management', 'Completed');
```

Volunteer relation data:

```
INSERT INTO Volunteer (name, phoneNumber, locationPreference,
availability)
VALUES
('John Smith', 5551234567, 'New Orleans, LA', 'Weekends'),
('Emily Johnson', 5559876543, 'Fukushima, Japan', 'Full-Time'),
('Michael Brown', 5554567890, 'Los Angeles, CA', 'Weekdays'),
('Sarah Williams', 5553210987, 'Jakarta, Indonesia', 'On-Call'),
('David Wilson', 5556543210, 'Port-au-Prince, Haiti', 'Evenings');
```

Donor relation data:

```
INSERT INTO Donor (name, phoneNumber, totalDonated)
VALUES
('Alice Johnson', '555-111-2222', 5000),
('Bob Miller', '555-333-4444', 10000),
('Catherine Green', '555-555-6666', 7500),
('Daniel Brown', '555-777-8888', 2000),
('Emily Davis', '555-999-0000', 1500);
```

ReportsTo relation data:

```
INSERT INTO ReportsTo (rcName, rcLocation, volunteerName,
volunteerPhoneNumber, dateReported)
VALUES
('Red Cross Center NO', 'New Orleans, LA', 'John Smith',
'555-123-4567', '2023-01-12'),
('Red Cross Fukushima', 'Fukushima, Japan', 'Emily Johnson',
'555-987-6543', '2023-02-18'),
('Fire Relief CA', 'Los Angeles, CA', 'Michael Brown',
'555-456-7890', '2023-03-22'),
('Disaster Aid Indonesia', 'Jakarta, Indonesia', 'Sarah Williams',
'555-321-0987', '2023-04-28'),
('Haiti Relief Center', 'Port-au-Prince, Haiti', 'David Wilson',
'555-654-3210', '2023-05-30');
```

9. AI Acknowledgement

Used ChatGPT to generate data for insert statements, with prompt: create 5 tuples data for {table relation name + domain types}.