# Creating tables

Need table

**CREATE TABLE** missiontrack.need  
(need\_id **INTEGER PRIMARY KEY**,  
 need\_name **VARCHAR**(50),  
 urgency **VARCHAR**(50),  
 **CHECK** (urgency = **'very high' OR** urgency = **'high' OR** urgency = **'moderate' OR** urgency = **'low'**)  
);

Skills table

**CREATE TABLE** missiontrack.skill  
(skill\_id **INTEGER PRIMARY KEY**,  
 skill\_name **VARCHAR**(50),  
 description **VARCHAR**(256)  
);

Country table

**CREATE TABLE** missiontrack.country  
(country\_id **INTEGER PRIMARY KEY**,  
 country\_name **VARCHAR**(50)  
);

Ability table

**CREATE TABLE** missiontrack.ability  
(ability\_id **INTEGER PRIMARY KEY**,  
 ability\_name **VARCHAR**(50)  
);

Coordinator table

**CREATE TABLE** missiontrack.coordinator  
(coordinator\_id **INTEGER PRIMARY KEY**,  
 first\_name **VARCHAR**(50),

last\_name **VARCHAR**(50),  
 phone\_number **VARCHAR**(20),  
 email **VARCHAR**(60)  
);

Volunteer table

**CREATE TABLE** missiontrack.volunteer  
(**volunteer\_id INTEGER PRIMARY KEY**,  
 **username VARCHAR**(50) **UNIQUE**,  
 **volunteer\_password VARCHAR**(50),  
 **first\_name VARCHAR**(50),

**last\_name VARCHAR**(50),  
 **address VARCHAR**(200),

**city VARCHAR**(50),

**state VARCHAR**(2),

**zip\_code VARCHAR**(5),  
 **phone\_number VARCHAR**(20),  
 **email VARCHAR**(60)  
);

need\_skill table

**CREATE TABLE** missiontrack.need\_skill  
(**need\_id INTEGER**,  
 **skill\_id INTEGER**,  
 **FOREIGN KEY** (**need\_id**)  
 **REFERENCES** missiontrack.need  
 **ON UPDATE CASCADE  
 ON DELETE RESTRICT**,  
 **FOREIGN KEY** (**skill\_id**)  
 **REFERENCES** missiontrack.skill  
 **ON UPDATE CASCADE  
 ON DELETE RESTRICT**);

Country\_skill table

**CREATE TABLE** missiontrack.country\_skill  
(**country\_id INTEGER**,  
 **skill\_id INTEGER**,  
 **FOREIGN KEY** (**country\_id**)  
 **REFERENCES** missiontrack.country  
 **ON UPDATE CASCADE   
 ON DELETE RESTRICT**);

Skill\_ability table

**CREATE TABLE** missiontrack.skill\_ability  
(**skill\_id INTEGER**,  
 **ability\_id INTEGER**,  
 **FOREIGN KEY** (**skill\_id**)  
 **REFERENCES** missiontrack.skill  
 **ON UPDATE CASCADE   
 ON DELETE RESTRICT**,  
 **FOREIGN KEY** (**ability\_id**)  
 **REFERENCES** missiontrack.ability  
 **ON UPDATE CASCADE  
 ON DELETE RESTRICT**);

Volunteer\_ability table

**CREATE TABLE** missiontrack.volunteer\_ability  
(**volunteer\_id INTEGER**,  
 **ability\_id INTEGER**,  
 **experience VARCHAR**(30),  
 **CHECK** (**experience** = **'novice' OR  
 experience** = **'developing' OR   
 experience** = **'expert'**),  
 **FOREIGN KEY** (**ability\_id**)  
 **REFERENCES** missiontrack.ability  
 **ON UPDATE CASCADE   
 ON DELETE RESTRICT**,  
 **FOREIGN KEY** (**volunteer\_id**)  
 **REFERENCES** missiontrack.volunteer  
 **ON UPDATE CASCADE   
 ON DELETE RESTRICT**);

Missions table

**CREATE TABLE** missiontrack.missions  
(**mission\_id INTEGER PRIMARY KEY**,  
 **mission\_name VARCHAR**(50),  
 **url VARCHAR**(60),  
 **need\_id INTEGER**,  
 **FOREIGN KEY** (**need\_id**)  
 **REFERENCES** missiontrack.need  
 **ON UPDATE CASCADE   
 ON DELETE RESTRICT**);

Mission\_volunteer table

**CREATE TABLE** missiontrack.mission\_volunteer  
(**mission\_id INTEGER**,  
 **volunteer\_id INTEGER**,  
 **level\_of\_interest VARCHAR**(20),  
 **CHECK** (**level\_of\_interest** = **'very high' OR   
 level\_of\_interest** = **'high' OR   
 level\_of\_interest** = **'moderate'**),  
 **FOREIGN KEY** (**mission\_id**)  
 **REFERENCES** missiontrack.missions  
 **ON UPDATE CASCADE   
 ON DELETE RESTRICT**,  
 **FOREIGN KEY** (**volunteer\_id**)  
 **REFERENCES** missiontrack.volunteer  
 **ON UPDATE CASCADE   
 ON DELETE RESTRICT**);

Mission\_coordinator table

**CREATE TABLE** missiontrack.mission\_coordinator  
(mission\_id **INTEGER**,  
 coordinator\_id **INTEGER**,  
 **FOREIGN KEY** (mission\_id)  
 **REFERENCES** missiontrack.missions  
 **ON UPDATE CASCADE   
 ON DELETE RESTRICT**,  
 **FOREIGN KEY** (coordinator\_id)  
 **REFERENCES** missiontrack.coordinator  
 **ON UPDATE CASCADE   
 ON DELETE RESTRICT**);

Coordinator\_volunteer table

**CREATE TABLE** missiontrack.coordinator\_volunteer  
(**coordinator\_id INTEGER**,  
 **volunteer\_id INTEGER**,  
 **last\_contacted** *DATE*,  
 **FOREIGN KEY** (**coordinator\_id**)  
 **REFERENCES** missiontrack.coordinator  
 **ON UPDATE CASCADE   
 ON DELETE RESTRICT**,  
 **FOREIGN KEY** (**volunteer\_id**)  
 **REFERENCES** missiontrack.volunteer  
 **ON UPDATE CASCADE   
 ON DELETE RESTRICT**);

Notes table

**CREATE TABLE** missiontrack.notes  
(note\_id **INTEGER PRIMARY KEY**,  
 note **VARCHAR**(256),  
 coordinator\_id **INTEGER**,  
 volunteer\_id **INTEGER**,  
 **FOREIGN KEY** (coordinator\_id)  
 **REFERENCES** missiontrack.coordinator  
 **ON UPDATE CASCADE   
 ON DELETE RESTRICT**,  
 **FOREIGN KEY** (volunteer\_id)  
 **REFERENCES** missiontrack.volunteer  
 **ON UPDATE CASCADE   
 ON DELETE RESTRICT**);

# Populating tables

Ability table

**INSERT INTO** missiontrack.ability (**ability\_id**, **ability\_name**)  
 **VALUES** (1, **'wiring'**)

**INSERT INTO** missiontrack.ability (**ability\_id**, **ability\_name**)  
 **VALUES** (2, **'cutting wood'**)

**INSERT INTO** missiontrack.ability (**ability\_id**, **ability\_name**)  
 **VALUES** (3, **'work with kids'**)

Coordinator table

**INSERT INTO** missiontrack.coordinator (**coordinator\_id**, **phone\_number**, **email**, **first\_name**, **last\_name**)  
 **VALUES** (1, **'123-456-7890'**, **'havefun@yahoo.com'**, **'Billy'**, **'Graham'**)

**INSERT INTO** missiontrack.coordinator (**coordinator\_id**, **phone\_number**, **email**, **first\_name**, **last\_name**)  
 **VALUES** (2, **'098-765-4321'**, **'benice@gmail.com'**, **'Tim'**, **'Keller'**)

**INSERT INTO** missiontrack.coordinator (**coordinator\_id**, **phone\_number**, **email**, **first\_name**, **last\_name**)  
 **VALUES** (3, **'855-594-8747'**, **'hoangle@optionline.com'**, **'CS'**, **'Lewis'**)

Volunteer table

**INSERT INTO** missiontrack.volunteer (**volunteer\_id**, **username**, **volunteer\_password**, **address**, **phone\_number**, **email**, **city**, **state**, **zip\_code**, **first\_name**, **last\_name**)  
 **VALUES** (1, **'username'**, **'password'**, **'7840 San Carlos Lane'**, **'774-462-9526'**, **'bdbrown@comcast.net'**, **'Pueblo'**, **'CO'**, **'81001'**, **'Orville'**, **'Maldonado'**)

**INSERT INTO** missiontrack.volunteer (**volunteer\_id**, **username**, **volunteer\_password**, **address**, **phone\_number**, **email**, **city**, **state**, **zip\_code**, **first\_name**, **last\_name**)  
 **VALUES** (2, **'hoppakerfa'**, **'123456789'**, **'9568 Greenview Road'**, **'630-517-2074'**, **'lpalmer@hotmail.com'**, **'Tampa'**, **'FL'**, **'33604'**, **'Sheila'**, **'Cannon'**)

**INSERT INTO** missiontrack.volunteer (**volunteer\_id**, **username**, **volunteer\_password**, **address**, **phone\_number**, **email**, **city**, **state**, **zip\_code**, **first\_name**, **last\_name**)  
 **VALUES** (3, **'kidgamer'**, **'987654321'**, **'20 NE. Rockland Street'**, **'132-295-7127'**, **'campware@outlook.com'**, **'New Windsor'**, **'NY'**, **'12553'**, **'Andrew'**, **'Henry'**)

Country table

**INSERT INTO** missiontrack.country (**country\_id**, **country\_name**)  
 **VALUES** (1, **'Nicaragua'**)

**INSERT INTO** missiontrack.country (**country\_id**, **country\_name**)  
 **VALUES** (2, **'Rwanda'**)

**INSERT INTO** missiontrack.country (**country\_id**, **country\_name**)  
 **VALUES** (3, **'Malaysia'**)

**INSERT INTO** missiontrack.country (**country\_id**, **country\_name**)  
 **VALUES** (4, **'Albania'**)

**INSERT INTO** missiontrack.country (**country\_id**, **country\_name**)  
 **VALUES** (5, **'Lebanon'**)

**INSERT INTO** missiontrack.country (**country\_id**, **country\_name**)  
 **VALUES** (6, **'China'**)

Need table

**INSERT INTO** missiontrack.need (**need\_id**, **need\_name**, **urgency**)  
 **VALUES** (1, **'Hurricane Relief'**, **'very high'**)

**INSERT INTO** missiontrack.need (**need\_id**, **need\_name**, **urgency**)  
 **VALUES** (2, **'Teach English'**, **'moderate'**)

**INSERT INTO** missiontrack.need (**need\_id**, **need\_name**, **urgency**)  
 **VALUES** (3, **'Wire homes'**, **'low'**)

Missions table

**INSERT INTO** missiontrack.missions (**mission\_id**, **mission\_name**, **url**, **need\_id**)  
 **VALUES** (1, **'Big Relief'**, **'www.bigrelief.com'**, 1)

**INSERT INTO** missiontrack.missions (**mission\_id**, **mission\_name**, **url**, **need\_id**)  
 **VALUES** (2, **'Teach English'**, **'www.esl.com'**, 2)

**INSERT INTO** missiontrack.missions (**mission\_id**, **mission\_name**, **url**, **need\_id**)  
 **VALUES** (3, **'Constructing Homes'**, **'www.albianiahomes.com'**, 3)

Skill table

**INSERT INTO** missiontrack.skill (**skill\_id**, **skill\_name**, **description**)  
 **VALUES** (1, **'Commercial Electrition'**, **'Work on electricity commercially'**)

**INSERT INTO** missiontrack.skill (**skill\_id**, **skill\_name**, **description**)  
 **VALUES** (2, **'Teacher'**, **'Teach kids'**)

**INSERT INTO** missiontrack.skill (**skill\_id**, **skill\_name**, **description**)  
 **VALUES** (3, **'Forklift Driver'**, **'Drive Forklifts'**)

Notes table

**INSERT INTO** missiontrack.notes (**note\_id**, **note**, **coordinator\_id**, **volunteer\_id**)  
 **VALUES** (1, **'good worker'**, 1, 1)

**INSERT INTO** missiontrack.notes (**note\_id**, **note**, **coordinator\_id**, **volunteer\_id**)  
 **VALUES** (2, **'Pretty cool'**, 1, 2)

**INSERT INTO** missiontrack.notes (**note\_id**, **note**, **coordinator\_id**, **volunteer\_id**)  
 **VALUES** (3, **'Needs improvement'**, 2, 3)

Coordinator\_volunteer table

**INSERT INTO** missiontrack.coordinator\_volunteer (**coordinator\_id**, **volunteer\_id**, **last\_contacted**)  
 **VALUES** (1, 1, **'2017-07-13'**)

**INSERT INTO** missiontrack.coordinator\_volunteer (**coordinator\_id**, **volunteer\_id**, **last\_contacted**)  
 **VALUES** (1, 2, **'2017-07-23'**)

**INSERT INTO** missiontrack.coordinator\_volunteer (**coordinator\_id**, **volunteer\_id**, **last\_contacted**)  
 **VALUES** (2, 3, **'2017-09-03'**)

Country\_skill table

**INSERT INTO** missiontrack.country\_skill (**country\_id**, **skill\_id**)  
 **VALUES** (6, 2)

**INSERT INTO** missiontrack.country\_skill (**country\_id**, **skill\_id**)  
 **VALUES** (4, 1)

**INSERT INTO** missiontrack.country\_skill (**country\_id**, **skill\_id**)  
 **VALUES** (1, 3)

**INSERT INTO** missiontrack.country\_skill (**country\_id**, **skill\_id**)  
 **VALUES** (5, 2)

Mission\_coordinator table

**INSERT INTO** missiontrack.mission\_coordinator (**mission\_id**, **coordinator\_id**)  
 **VALUES** (1, 1)

**INSERT INTO** missiontrack.mission\_coordinator (**mission\_id**, **coordinator\_id**)  
 **VALUES** (2, 2)

**INSERT INTO** missiontrack.mission\_coordinator (**mission\_id**, **coordinator\_id**)  
 **VALUES** (3, 3)

Mission\_volunteer table

**INSERT INTO** missiontrack.mission\_volunteer (**mission\_id**, **volunteer\_id**, **level\_of\_interest**)  
 **VALUES** (1, 2, **'very high'**)

**INSERT INTO** missiontrack.mission\_volunteer (**mission\_id**, **volunteer\_id**, **level\_of\_interest**)  
 **VALUES** (2, 3, **'high'**)

**INSERT INTO** missiontrack.mission\_volunteer (**mission\_id**, **volunteer\_id**, **level\_of\_interest**)  
 **VALUES** (3, 1, **'moderate'**)

Need\_skill table

**INSERT INTO** missiontrack.need\_skill (**need\_id**, **skill\_id**)  
 **VALUES** (1, 3)

**INSERT INTO** missiontrack.need\_skill (**need\_id**, **skill\_id**)  
 **VALUES** (2, 2)

**INSERT INTO** missiontrack.need\_skill (**need\_id**, **skill\_id**)  
 **VALUES** (3, 1)

Skill\_ability table

**INSERT INTO** missiontrack.skill\_ability (**skill\_id**, **ability\_id**)  
 **VALUES** (1, 1)

**INSERT INTO** missiontrack.skill\_ability (**skill\_id**, **ability\_id**)  
 **VALUES** (3, 2)

**INSERT INTO** missiontrack.skill\_ability (**skill\_id**, **ability\_id**)  
 **VALUES** (2, 3)

Volunteer\_ability table

**INSERT INTO** missiontrack.volunteer\_ability (**volunteer\_id**, **ability\_id**, **experience**)  
 **VALUES** (1, 2, **'novice'**)

**INSERT INTO** missiontrack.volunteer\_ability (**volunteer\_id**, **ability\_id**, **experience**)  
 **VALUES** (1, 3, **'developing'**)

**INSERT INTO** missiontrack.volunteer\_ability (**volunteer\_id**, **ability\_id**, **experience**)  
 **VALUES** (2, 1, **'novice'**)

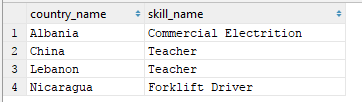
**INSERT INTO** missiontrack.volunteer\_ability (**volunteer\_id**, **ability\_id**, **experience**)  
 **VALUES** (2, 2, **'expert'**)

**INSERT INTO** missiontrack.volunteer\_ability (**volunteer\_id**, **ability\_id**, **experience**)  
 **VALUES** (3, 1, **'developing'**)

**INSERT INTO** missiontrack.volunteer\_ability (**volunteer\_id**, **ability\_id**, **experience**)  
 **VALUES** (3, 3, **'expert'**)

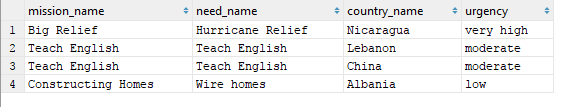
# Test Statements

**SELECT** missiontrack.country.**country\_name**, missiontrack.skill.**skill\_name  
FROM** missiontrack.country  
 **INNER JOIN** missiontrack.country\_skill **ON** missiontrack.country.**country\_id** = missiontrack.country\_skill.**country\_id  
 INNER JOIN** missiontrack.skill **ON** missiontrack.country\_skill.**skill\_id** = missiontrack.skill.**skill\_id  
ORDER BY country\_name**, **skill\_name**



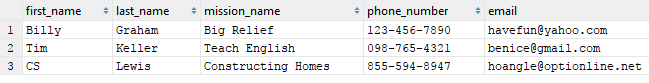
**SELECT** missiontrack.volunteer.**first\_name**, missiontrack.volunteer.**last\_name**, missiontrack.skill.**skill\_name**, missiontrack.volunteer\_ability.**experience**, missiontrack.country.**country\_name**, missiontrack.mission\_volunteer.**level\_of\_interest  
FROM**

**SELECT** missiontrack.missions.**mission\_name**, missiontrack.need.**need\_name**, missiontrack.country.**country\_name**, missiontrack.need.**urgency  
FROM** missiontrack.missions  
 **INNER JOIN** missiontrack.need **ON** missiontrack.missions.**need\_id** = missiontrack.need.**need\_id  
 INNER JOIN** missiontrack.need\_skill **ON** missiontrack.need.**need\_id** = missiontrack.need\_skill.**need\_id  
 INNER JOIN** missiontrack.skill **ON** missiontrack.need\_skill.**skill\_id** = missiontrack.skill.**skill\_id  
 INNER JOIN** missiontrack.country\_skill **ON** missiontrack.skill.**skill\_id** = missiontrack.country\_skill.**skill\_id  
 INNER JOIN** missiontrack.country **ON** missiontrack.country\_skill.**country\_id** = missiontrack.country.**country\_id**



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**SELECT** missiontrack.coordinator.**first\_name**, missiontrack.coordinator.**last\_name**, missiontrack.missions.**mission\_name**, missiontrack.coordinator.**phone\_number**, missiontrack.coordinator.**email  
FROM** missiontrack.coordinator  
 **INNER JOIN** missiontrack.mission\_coordinator **ON** missiontrack.coordinator.**coordinator\_id** = missiontrack.mission\_coordinator.**coordinator\_id  
 INNER JOIN** missiontrack.missions **ON** missiontrack.mission\_coordinator.**mission\_id** = missiontrack.missions.**mission\_id**



**SELECT** missiontrack.coordinator.**first\_name**, missiontrack.coordinator.**last\_name**, missiontrack.volunteer.**first\_name**, missiontrack.volunteer.**last\_name**, missiontrack.coordinator\_volunteer.**last\_contacted**, missiontrack.notes.**note  
FROM** missiontrack.coordinator  
 **INNER JOIN** missiontrack.notes **ON** missiontrack.coordinator.**coordinator\_id** = missiontrack.notes.**coordinator\_id  
 INNER JOIN** missiontrack.volunteer **ON** missiontrack.notes.**volunteer\_id** = missiontrack.volunteer.**volunteer\_id  
 INNER JOIN** missiontrack.coordinator\_volunteer **ON** missiontrack.volunteer.**volunteer\_id** = missiontrack.coordinator\_volunteer.**volunteer\_id**

