CREATE TABLE tbl\_skill (

skill\_id SERIAL PRIMARY KEY,

name TEXT NOT NULL,

category TEXT NOT NULL,

CHECK(category IN (‘Software’,’Fine Arts’, ‘Science’, ‘Sports’))

);

Create TABLE tbl\_address(

address\_id SERIAL PRIMARY KEY,

country TEXT NOT NULL,

city TEXT NOT NULL,

street TEXT NOT NULL,

zip INTEGER NOT NULL

);

CREATE TABLE tbl\_course(

course\_id SERIAL PRIMARY KEY,

name TEXT NOT NULL,

code TEXT NOT NULL,

credit INTEGER NOT NULL,

dep\_name TEXT NOT NULL REFERENCES tbl\_department(name),

fac\_name TEXT NOT NULL REFERENCES tbl\_department(fac\_name),

address\_id INTEGER NOT NULL REFERENCES tbl\_department(address\_id),

org\_id INTEGER NOT NULL REFERENCES tbl\_department(org\_id)

);

CREATE TABLE tbl\_project(

project\_id SERIAL PRIMARY KEY,

title TEXT NOT NULL,

description TEXT NOT NULL,

course\_id INTEGER NOT NULL REFERENCES tbl\_course(course\_id)

);

CREATE TABLE tbl\_group(

group\_id SERIAL PRIMARY KEY,

name TEXT NOT NULL,

description TEXT NOT NULL,

member\_id INTEGER NOT NULL REFERENCES tbl\_member(member\_id)

);

CREATE TABLE tbl\_person(

person\_id SERIAL PRIMARY KEY,

fname TEXT NOT NULL,

lname TEXT NOT NULL,

phone INTEGER,

mail TEXT NOT NULL UNIQUE

bday DATE NOT NULL,

type VARCHAR(3) NOT NULL,

CHECK( type IN (‘TEA’,’STU’,MEM’))

);

CREATE TABLE tbl\_teacher(

teacher\_id REFERENCES tbl\_person(person\_id),

branch TEXT,

CHECK (teacher\_id IN (SELECT person\_id FROM tbl\_person WHERE type=’TEA’))

);

CREATE TABLE tbl\_student(

student\_id REFERENCES tbl\_person(person\_id),

gpa FLOAT,

grade varchar(1),

CHECK( grade IN (‘1’, ‘2’, ‘3’, ‘4’)),

CHECK (student\_id IN (SELECT person\_id FROM tbl\_person WHERE type=STU))

);

CREATE TABLE tbl\_member(

member\_id REFERENCES tbl\_person(person\_id),

password TEXT NOT NULL,

CHECK( char\_length(password)>=8 ),

CHECK (member\_id IN (SELECT person\_id FROM tbl\_person WHERE type=’MEM’))

);

CREATE TABLE tbl\_organization(

org\_id SERIAL PRIMARY KEY,

name TEXT NOT NULL UNIQUE,

phone INTEGER NOT NULL,

mail TEXT NOT NULL UNIQUE

type VARCHAR(3) NOT NULL,

CHECK( type IN (‘CMP,’UNI’))

);

CREATE TABLE tbl\_file(

name TEXT NOT NULL,

privacy BOOLEAN DEFAULT TRUE,

person\_id INTEGER NOT NULL REFERENCES tbl\_person(person\_id),

PRIMARY KEY(name, person\_id),

CHECK( person\_id IN (SELECT person\_id FROM tbl\_person WHERE type = ‘STU’ OR type = ‘TEA’))

);

CREATE TABLE tbl\_graduate\_level(

name TEXT NOT NULL,

dept\_name TEXT NOT NULL REFERENCES tbl\_department(name),

fac\_name TEXT NOT NULL REFERENCES tbl\_faculty(name),

org\_id INTEGER NOT NULL REFERENCES tbl\_organization(org\_id),

PRIMARY KEY(name, dept\_name, fac\_name, org\_id),

CHECK( org\_id IN (SELECT org\_id FROM tbl\_organization WHERE type=”UNI”))

);

CREATE TABLE tbl\_department(

name TEXT NOT NULL,

fac\_name TEXT NOT NULL REFERENCES tbl\_faculty(name),

address\_id INTEGER NOT NULL REFERENCES tbl\_address(address\_id),

org\_id INTEGER NOT NULL REFERENCES tbl\_organization(org\_id),

PRIMARY KEY(name, fac\_name, org\_id),

CHECK( org\_id IN (SELECT org\_id FROM tbl\_organization WHERE type=”UNI”))

);

CREATE TABLE tbl\_faculty(

name TEXT NOT NULL,

org\_id INTEGER NOT NULL REFERENCES tbl\_organization(org\_id),

PRIMARY KEY(name, org\_id),

CHECK( org\_id IN (SELECT org\_id FROM tbl\_organization WHERE type=”UNI”))

);

CREATE TABLE tbl\_job\_offer(

job\_title TEXT NOT NULL,

description TEXT NOT NULL,

address\_id INTEGER NOT NULL REFERENCES tbl\_address(address\_id),

office\_name TEXT NOT NULL REFERENCES tbl\_office(name),

org\_id INTEGER NOT NULL REFERENCES tbl\_organization(org\_id),

PRIMARY KEY(job\_title, address\_id, office\_name, org\_id),

CHECK( org\_id IN (SELECT org\_id FROM tbl\_organization WHERE type=”CMP”))

);

CREATE TABLE tbl\_office(

name TEXT NOT NULL,

org\_id INTEGER NOT NULL REFERENCES tbl\_organization(org\_id),

address\_id INTEGER NOT NULL REFERENCES tbl\_address(address\_id),

PRIMARY KEY(name, org\_id, address\_id),

CHECK( org\_id IN (SELECT org\_id FROM tbl\_organization WHERE type=”CMP”))

);