DROP TRIGGER phone\_counting;

DROP TRIGGER vSkillList\_update;

DROP TRIGGER registeredNurse\_qualification;

DROP TRIGGER assistant\_counting;

DROP TRIGGER occupied\_bed;

--Place after create tables DDL and before inserts DML

--This is a trigger to minimize a personnel’s amount of phone numbers to 3.

DELIMITER //

CREATE TRIGGER phone\_counting BEFORE INSERT ON phone FOR EACH ROW

BEGIN

DECLARE phone\_count INT;

SELECT COUNT(phoneNumber) INTO phone\_count

FROM personnel NATURAL JOIN phone

WHERE personnel\_ID = new.personnel\_ID;

IF phone\_count = 3 THEN

SIGNAL SQLSTATE '45000' SET message\_text = 'This person already has too many phone numbers!';

END IF;

END;//

DELIMITER ;

--The relationship of vSkills and Volunteer is a many to many and has an association class named --Volunteer Skills which keeps instances of a Volunteer's skills. Since we decided to denormilaze --the table for volunteers by allowing multi valued attributes for skills we will need to create a --trigger to add all skills from the Volunteer Skills Table to the attribute vSkillList.

CREATE TRIGGER vSkillList\_update AFTER INSERT ON volunteer\_skills FOR EACH ROW

UPDATE volunteer

INNER JOIN volunteer\_skills USING (volunteer\_ID)

SET vSkillList = (

SELECT GROUP\_CONCAT(vSkill)

FROM volunteer\_skills

WHERE volunteer\_ID = volunteer.volunteer\_ID);

--This is a trigger to check if a nurse is certified to be registered nurse.

DELIMITER //

CREATE TRIGGER registeredNurse\_qualification BEFORE INSERT ON registeredNurse FOR EACH ROW

BEGIN

DECLARE certificate varchar(30);

SELECT nCertificate INTO certificate

FROM nurse

WHERE nurse\_ID = new.registeredNurse\_ID;

IF certificate != 'RN' THEN

SIGNAL SQLSTATE '45000' SET message\_text = 'This nurse is not qualified to become a registered nurse!';

END IF;

END;//

DELIMITER ;

--This is a trigger to minimize a physician’s amount of assistants to 4.

DELIMITER //

CREATE TRIGGER assistant\_counting BEFORE INSERT ON physicianAssistant FOR EACH ROW

BEGIN

DECLARE assistant\_count INT;

SELECT COUNT(physicianAssistant\_ID) INTO assistant\_count

FROM physician NATURAL JOIN physicianAssistant

WHERE physician\_ID = new.physician\_ID;

IF assistant\_count = 4 THEN

SIGNAL SQLSTATE '45000' SET message\_text = 'This physician already has too many assistants!';

END IF;

END;//

DELIMITER ;

--This is a trigger to check if a bed is already occupied by a patient.

DELIMITER //

CREATE TRIGGER occupied\_bed BEFORE INSERT ON bed FOR EACH ROW

BEGIN

DECLARE occupied varchar(30);

SELECT patient\_ID INTO occupied

FROM bed

WHERE patient\_ID = new.patient\_ID;

IF occupied IS NOT NULL THEN

SIGNAL SQLSTATE '45000' SET message\_text = 'There is already a patient in this bed!';

END IF;

END;//

DELIMITER ;