**SOEN 363 Team Project Phase 1**

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Triggers

Our database contains the following trigger which prevents the deletion of a platform that has games associated with it.

USE soen\_project\_phase\_1;  
  
DELIMITER $$  
  
CREATE TRIGGER Check\_Games\_Associated  
BEFORE DELETE ON platform  
FOR EACH ROW  
BEGIN  
 DECLARE game\_count INT;  
 SELECT COUNT(\*) INTO game\_count FROM game\_platform WHERE platform\_id = OLD.platform\_id;  
 IF game\_count > 0 THEN  
 SIGNAL SQLSTATE '45000'  
 SET MESSAGE\_TEXT = 'Cannot delete platform as there are games associated to it.';  
 END IF;  
END$$  
  
DELIMITER ;

The following is the method used to ensure it functions correctly.

First we get a list of platforms and how many games are on it.

USE soen\_project\_phase\_1;  
  
Select p.platform\_id, p.name, count(gp.game\_id)  
From game\_platform gp  
JOIN platform p ON gp.platform\_id = p.platform\_id  
Group by platform\_id;

We see that there are a few platforms that only have one game associated with it. We'll use one of these for our test. For example:

Platform 'Family Computer Disk System' with platform\_id 9.

Next we run a command to attempt deleting the platform with platform\_id 9:

USE soen\_project\_phase\_1;  
  
DELETE FROM platform WHERE platform\_id = 9;

Our trigger successfully prevented the deletion of the platform and we get the following error message:

'Error Code: 1644. Cannot delete platform as there are games associated to it.'

Next we run a command to find the single game associated with the platform we're trying to delete.

USE soen\_project\_phase\_1;  
  
SELECT game.\* FROM game  
JOIN game\_platform ON game.game\_id = game\_platform.game\_id  
WHERE game\_platform.platform\_id = 9;

We get a single row with a game named '19: neunzehn' with game\_id 8.

We run a command to delete the game. We make sure to first delete the dependent rows in game\_genre and game\_platform

USE soen\_project\_phase\_1;  
  
DELETE FROM game\_genre WHERE game\_id = 8;  
DELETE FROM game\_platform WHERE game\_id = 8;  
DELETE FROM game WHERE game\_id = 8;

We can now run the delete platform command again. This successfully deletes the platform at platform\_id 9 since there are no longer any games associated with it.

USE soen\_project\_phase\_1;  
  
DELETE FROM platform WHERE platform\_id = 9;