

TRIGGERS AND PROCEDURES DESCRIPTION

PL/SQL (Oracle)

Trigger1

The trigger is controlling inserting and updating data in 'Episode' table. Firstly, it checks if the TV show we are trying to update is not completed (it is not possible to add or modify episodes in this case).

Secondly, it analyzes number of season (it can be 1st season if we have not added any seasons to the series yet; current season, if we want to add next episode to it; next season, if we want to add its first episode). Then we are looking at episode order number in the season (it can be either next episode if the season already has some episodes added, or first episode, if we are trying to add first episode to newly created season).

At the end we must check if release date of the episode is not earlier than release date of already added episodes.

Trigger2

The trigger controls inserting, updating, and deleting data from 'Watched' table. Updating of the table is not permitted (error will appear when trying to do so). When inserting, we check if the user's age is not smaller than content age limit. When deleting, we check if the age of the user is not smaller than 16 years old. Otherwise, history of watched content cannot be deleted.

Procedure1

The procedure can safely change password of any user. The inputs are user's email, the old password, and the new password. The procedure checks if there is user with such an email and whether the old password is correct and not equal to new one. In case everything is accurate password of the user will be changed.

Procedure2

The procedure can show and add to list contents translated into user's language and in the specified genre. Hence, the inputs are user's email and the genre. Firstly, the procedure checks if the email and the genre are present in the database. If inputs are proper, the contents will be printed, and those that are not in the user's list will be added to it. Also, message will appear that notifies us how many new contents were added to the list.

T-SQL (Microsoft)

Trigger1

The trigger controls inserting, updating, and deleting in table 'Device.' It is executed after the operations. In case of an error, whole batch will be aborted. When updating, trigger checks if we are not editing user of any device (it is not allowed). When inserting, we must check if number of already added devices is not higher than user's subscription limit. After deleting, trigger checks if the user hasn't deleted last device (user must have at least one device connected).

Trigger2

The trigger controls updating and deleting data from table 'UserAccount.' It is executed instead of the operations; in case of an error, it will ignore incorrect values. When updating, it checks whether password was updated (it is not allowed) and whether the subscription was changed (if number of connected devices is higher than allowed, trigger deletes difference). Instead of deleting, we first delete user from other depending tables and then deleting the user from 'UserAccount.'

Procedure1

The procedure prints detailed information about the content. Hence, input is content ID. Firstly, it checks whether the content exists in the database. It prints title, description, age limitation, warning tags. For TV shows, it prints all the episodes that belong to it. For films, year of release and length in hours and minutes.

Procedure2

The procedure adds top number of contents (by number of likes) to list of the specified user. Hence, the inputs are user email and the top number. Firstly, procedure will check whether the given data is correct (email exists in the database, and the top number is positive). If inputs are accurate, the contents will be printed, and those that are not in the user's list will be added to it. Also, message will appear that notifies us how many new contents were added to the list.