Enchanted Ears

NHL Stenden, Assignment 1: Use Case

Content

Description

EnchantedEars was founded in 2024 by Virag Szabo for educational purposes and her improvement in the Netherlands (Haarlem). She wanted to create something unique besides Netflix or Spotify and something that is not too complicated to build, but hard enough to create. The student is going to work hard in the upcoming weeks on this final assignment, following the steps from the subject. This student needs to make a positive contribution to the implementation of this music streaming system.

Entities

Song: It has a songID, a title, an artist, a genre, a release date, duration, an album and a playlist.
Playlist: It has a playlistID, a name, a description, and a collection of songs.
Album: It has an albumID, a title, and a release date.
Artist: It has an artistID, a name, a description, and a list of albums with their songs.
User: It has a user ID, a username, an email address, a password, and a list of playlists - they can create a playlist of the songs from the albums, and a subscription.
Subscription: It has a subscription, a name and a price. This is an abstract class because there is a single package for one person and a family package involving four members.

Users

Users can register themselves using an email address and a password. They need these to log in. Before users can log in for the first time, their account must be activated via email address. After three wrong login attempts the account is temporarily blocked. If a user has forgotten the password, it can be reset. The user will receive an email containing a link where they can change their password. After logging in successfully, their profile is automatically created. The user must provide a username.

Listen

The users can listen to songs and create playlists.

Subscription

The users can subscribe for a single or a family package. The payment depends on the package (single: 3 euros/month, family: 2 euros/month). They cannot have multiple subscriptions.

Operations to Test

1. **Create:** Add new songs to the database.
2. **Read:** Retrieve information about songs, possibly with different filtering options (by artist, genre, album).
3. **Update:** Modify details of existing songs (change the genre or update the release date).
4. **Delete:** Remove songs from the database.

UML Diagram