**SOFTWARE ENGINEERING PROBLEM SPECIFICATION TABLE, identifying the following elements**

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| CLIENT | NeoTunes |
| USERNAME | Everyone who uses the app |
| FUNCTIONAL REQUIREMENTS | R1: Register producer users, artists and content creators.  A2: Register consumer, standard and premium users.  A3: Register songs  A4: Register podcasts  A5: Create a playlist.  A6: Edit a playlist. |
| CONTEXT OF THE PROBLEM | Develop music and audio content streaming software for the company NeoTunes. This program allows the subscription of users and the sale of songs. Where there are consumer and producer users. The former can be standard and premium and the latter can be artist and content creators. In addition, the platform handles two types of audio content, which are songs and podcasts. Also, consumer users can create playlists, standard users can create up to 20, and premium users can create unlimited. As for the purchase of songs, the standards can buy up to 100 songs and the premium unlimited. |
| NON-FUNCTIONAL REQUIREMENTS |  |

**Functional Requirements Analysis Table (Note: One table for each functional requirement)**

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| Name or identifier | R1: Register producer users, artists and content creators. | | |
| Description | The system allows the registration of producers, who can be artists and content creators. To do this, the system displays a menu where artists and content creators can be registered, the user chooses the option, then the system asks the user for the name, ID and URL with their photo or distinguished image. The system registers the user with these data and likewise the date of connection of that day. | | |
| Input | name | Datatype | Selection or repetition condition |
| nickname | String |  |
| go | String |  |
| URL | String |  |
| option | int | If they are not 1 and 2 |
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| General activities necessary to obtain the results | Act1: The system displays a menu with the two types of producer users to register  Act2: The user chooses the option he wants and the system verifies that the option is valid  Act3: The user enters the name, id and the url of the photo  Act4: The system registers the chosen producer user, in case this does not happen, the system will notify what happened | | |
| Result or postcondition | * Creation of object type Artist or Content Creator * Add the created objects to the Users list | | |
| Output | name | Datatype | Selection or repetition condition |
| Message | String |  |
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| Name or identifier | A2: Register consumer, standard and premium users. | | |
| Description | The system allows the registration of consumers, of which there are two types, the standard and the premium. To do this, the system displays a menu with the types of users and the user chooses the option they want, then the system will ask the user for their name and ID. The system will register the consumer user with the linking date of that day. | | |
| Input | name | Datatype | Selection or repetition condition |
| nickname | String |  |
| go | String |  |
| option | int | If they are not 1 and 2 |
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| General activities necessary to obtain the results | Act1: The system displays a menu with the two types of consumer users to register  Act2: The user chooses the option he wants and the system verifies that the option is valid  Act3: The user enters the name and the id  Act4: The system registers the chosen consumer user, in case this does not happen, the system will notify what happened | | |
| Result or postcondition | * Creation of standard or premium type object * Add the created objects to the Users list | | |
| Output | name | Datatype | Selection or repetition condition |
| Message | String |  |
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| Name or identifier | A3: Register songs | | |
| Description | The system allows the registration of songs. To do this, it will ask the user for the name of the song, a url with the album cover, the duration, the album and the value. In addition, the system shows the existing genres and the user chooses which one he wants. Also the number of reproductions and the number of times sold are initialized to 0. Finally, the system will notify if the song could be registered correctly. | | |
| Input | name | Datatype | Selection or repetition condition |
| yam | String |  |
| URL | String |  |
| duration | double |  |
| album | String |  |
| general | int |  |
| valueSale | Double |  |
| General activities necessary to obtain the results | Act1: The system asks for the data to register the song and the user enters it.  Act2: The system creates the song type object with the data given by the user and the times played and sold are initialized to 0.  Act4: The system adds this song to the list of audios that it has | | |
| Result or postcondition | * Song type object creation * Add the created object to the list of Audios | | |
| Output | name | Datatype | Selection or repetition condition |
| Message | String |  |
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| Name or identifier | A4: Register podcasts | | |
| Description | The system allows the registration of podcasts. To do this, it will ask the user for the name of the song, a url with the distinctive image, the duration, the album and a description. In addition, the system shows the existing categories and the user chooses which one he wants. Also the number of reproductions is initialized to 0. Finally, the system will notify if the song could be registered correctly. | | |
| Input | name | Datatype | Selection or repetition condition |
| yam | String |  |
| URL | String |  |
| duration | double |  |
| description | String |  |
| category | int |  |
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| General activities necessary to obtain the results | Act1: The system asks for the data to register the podcast and the user enters it.  Act2: The system creates the posdcast type object with the data given by the user and initializes the playback times to 0  Act4: The system adds the podcast to the list of audios that it has | | |
| Result or postcondition | * Creation of Postcast type object * Add the created object to the list of Audios | | |
| Output | name | Datatype | Selection or repetition condition |
| Message | String |  |
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| Name or identifier | A5: Create a playlist | | |
| Description | The system allows the registration of playlists for a user. To do this, the system asks for the user who is going to create a new list. Then the system will ask for the name of the playlist and finally the system creates the playlist for that user. In case of not creating it, it will notify you. | | |
| Input | name | Datatype | Selection or repetition condition |
| index | int |  |
| Yam | String |  |
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| General activities necessary to obtain the results | Act1: The system will ask for the user to whom the playlist will be created  Act2: The index of the user to whom the playlist will be created is entered  Act3: The system will ask the user for the name of the playlist and the user will enter it  Act4: The system creates the list of reproductions in the user, in case of not being able, it will notify him. | | |
| Result or postcondition | * Create playlist type object * Add the created object to the user's playlists | | |
| Output | name | Datatype | Selection or repetition condition |
| Message | String |  |
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| Name or identifier | A6: Edit a playlist. | | |
| Description | The system allows you to edit a playlist. To do this, the user will have the option to change the name, add audios and remove audios from the playlist. In the first, the system shows the user his list, the user selects one and will ask for the new name, the system changes the name of the list. In both the second and the third, the system shows the user's playlists and they select the one to which they want to add or remove audio. Then, to add, the system asks the user if it is a song or a podcast and he will select one of the two, then it shows the audios registered in the system that he selected and the user must choose the audio to add and to delete, the system shows the audios from the list that I select and the user chooses the one he wants to delete. Finally, | | |
| Input | name | Datatype | Selection or repetition condition |
| indexUser | int |  |
| Yam | String |  |
| IndexPlaylist | int |  |
| IndexAudio | int |  |
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| General activities necessary to obtain the results | Act1: The system will ask for the index of the user whose list you want to modify and the user types it  Act2: The system will show the user's playlists and the user types the position of the list to be modified  Act3: The system shows the options that the user can perform (change the name, add audios and delete audios from the playlist). The user selects which one they want.  Act4: In case it is option 1, the system will ask for the new name and change it  Act5: In case it is option 2 and 3, the system asks the user to select if it is a song or a podcast, the system shows the types of audio that he chose and the user enters the audio that he wants to add or delete  Act6: The system adds the audio to the playlist if it is option 2  Act7: The system will remove the audio from the playlist if it is option 3 | | |
| Result or postcondition | * Create playlist type object * Add the created object to the user's playlists | | |
| Output | name | Datatype | Selection or repetition condition |
| Message | String |  |
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