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| **Client** | NeoTunes |
| **User** | Users |
| **Functional Requirements** | **R1:** Register producer users: Artist and Content creators.  **R2:** Register consumer users: Standard and Premium.  **R3:** Register songs and podcasts.  **R4:** Create a playlist.  **R5:** Edit a playlist.  **R6:** Share a playlist.  **R7:** Simulate playback of a song or podcast.  **R8:** Buy a song.  **R9:** Report the total accumulated plays of songs or podcasts on the platform.  **R10:** Report the name and number of plays of the most listened song genre for a specific user and for the entire platform.  **R11:** Report the name and number of plays of the most listened podcast category for a specific user and for the entire platform.  **R12:** Report the name and number of reproductions of each member of the top 5 artists and top 5 content creators.  **R13:** Report the name, genre or category and the number of plays of each member of the top 10 songs and top 10 podcasts.  **R14:** Report the number of songs sold and total sales value, for each genre.  **R15:** Report the total number of sales and the total sales value of the best-selling song on the platform. |
| **Problem Context** | A prototype of a software that allows streaming audio content is required. For this, the software must satisfy several functionalities, among which are user registration, audio registration and audio playback. |
| **Non-functional Requirements** |  |

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| **Name or identifier** | **R1:**  Register producer users: Artist and Content creators. | | |
| **Abstract** | The system must allow the registration of a producer user. | | |
| **Inputs** | **Input name** | **Datatype** | **Selection or repetition condition** |
| Nickname | String | If the user to be registered does not exist within the platform yet. |
| ID of the producer user. | String |
| Name of the producer user. | String |
| URL of the producer user's image. | String |
| **General activities necessary to obtain the results** | * The program asks what type of producer user you want to register. * The information of the producer user to be registered is requested and it is confirmed whether or not it exists within the platform. * If it does not exist yet, an instance is created and saved in the array list of users. | | |
| **Result or postcondition** | The program returns a message confirming the registration of the producer user. | | |
| **Outputs** | **Output name** | **Datatype** | **Selection or repetition condition** |
| Confirmation message | String |  |

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| **Name or identifier** | **R2:**  Register consumer users: Standard and Premium. | | |
| **Abstract** | The system must allow the registration of a consumer user. | | |
| **Inputs** | **Input name** | **Datatype** | **Selection or repetition condition** |
| Nickname | String | If the user to be registered does not exist within the platform yet. |
| ID of the consumer user. | String |
| **General activities necessary to obtain the results** | * The program asks what type of consumer user you want to register. * The information of the consumer user to be registered is requested and it is confirmed whether or not it exists within the platform. * If it does not exist yet, an instance is created and saved in the array list of users. | | |
| **Result or postcondition** | The program returns a message confirming the registration of the consumer user. | | |
| **Outputs** | **Output name** | **Datatype** | **Selection or repetition condition** |
| Confirmation message | String |  |

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| **Name or identifier** | **R3:**  Register songs and podcasts. | | |
| **Abstract** | The system must allow the registration of an audio: song and podcast. | | |
| **Inputs** | **Input name** | **Datatype** | **Selection or repetition condition** |
| Name of the audio. | String | If the audio to be registered does not exist for the artist or content creator yet. |
| URL of the audio album or podcast image. | String |
| Audio duration. | double |
| Album of the song. | String |
| Musical genre. | Enum (String) |
| Sales value of the song. | double |
| Description of the podcast. | String |
| Podcast category. | Enum (String) |
| **General activities necessary to obtain the results** | * The program asks what type of audio you want to register. * The information to register the audio is requested and confirmed if the artist or content creator already has an audio with that name. * If it does not exist yet, an instance is created and saved in the artist's or content creator's song or podcast array. | | |
| **Result or postcondition** | The program returns a message confirming the registration of the audio. | | |
| **Outputs** | **Output name** | **Datatype** | **Selection or repetition condition** |
| Confirmation message | String |  |

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| **Name or identifier** | **R4:**  Create a playlist. | | |
| **Abstract** | The system must allow the registration of a playlist. | | |
| **Inputs** | **Input name** | **Datatype** | **Selection or repetition condition** |
| Name of the playlist. | String | If the playlist to be registered does not exist for the Standard or Premium user yet. |
| ID of the user to whom the playlist belongs. | String |
| **General activities necessary to obtain the results** | * The program asks for the name of the playlist. * The program asks for the ID of the user who will have the playlist. * If it does not already exist, it adds it to the playlist array of the consuming users. | | |
| **Result or postcondition** | The program returns a message confirming the registration of the audio. | | |
| **Outputs** | **Output name** | **Datatype** | **Selection or repetition condition** |
| Confirmation message | String |  |

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| **Name or identifier** | **R5:**  Edit a playlist. | | |
| **Abstract** | The system must allow to edit a playlist: add song or podcast. | | |
| **Inputs** | **Input name** | **Datatype** | **Selection or repetition condition** |
| Name of the audio to be added. | String | If the playlist, the consumer user to which the playlist belongs, the audio to be added and the producer user to which the audio belongs exist within the platform. |
| ID of the producer user to which the audio belongs. | String |
| Name of the playlist to be edited. | String |
| ID of the consumer user who has the playlist to be edited. | String |
| **General activities necessary to obtain the results** | * The program asks for the data needed to edit a playlist. * The program confirms that all data exists within the platform and edits the playlist. * The necessary path to the playlist content is performed and a confirmation message is returned if the playlist was edited or not. | | |
| **Result or postcondition** | The program returns a confirmation message if the playlist was edited or not. | | |
| **Outputs** | **Output name** | **Datatype** | **Selection or repetition condition** |
| Confirmation message | String |  |