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**A00372620**

**SOFTWARE ENGINEERING PROBLEM SPECIFICATION TABLE, IDENTIFYING THE FOLLOWING ITEMS**

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| CUSTOMER | NeoTunes |
| USER | NeoTunes Customers |
| FUNCTIONAL REQUIREMENTS | RF1: Register users producers, artists and content creators.  RF2: Register consumer, standard and premium users.  RF3: Record songs and podcasts.  RF4: Create a playlist.  RF5: Edit a playlist.  RF6: Share a playlist.  RF7: Simulate the playback of a song or podcast (standard and premium).  RF8: Buy a song.  Generate reports with the recorded data:  RF9: For each type of audio, songs, and podcast, report the cumulative total streams across the platform.  RF10: Report the most listened song genre (name and number of plays) for a specific user and for the entire platform and its number of plays.  RF11: Report the most listened to podcast category (name and number of views) for a specific user and for the entire platform.  RF12: From each of the members of the Top 5 artists and the Top 5 content creators on the platform, report the name and number of total views.  RF13: For each of the members of the Top 10 songs and the Top 10 podcast, report the name, genre or category and total number of views.  RF14: For each genre, report the number of songs sold and the total sales value ($).  RF15: From the best-selling song on the platform, report the total number of sales and the total sales value ($). |
| CONTEXT OF THE PROBLEM | The NeoTunes company enters the music treaming market and has two focuses subscriptions and sale of songs. |
| NON-FUNCTIONAL REQUIREMENTS | RF1: For every 2 songsor podcast that the user plays, they must play an ad.  RF2: The creation of future types of users such as consumers and producers.  RF3: The creation of new types of audio.  RF4: Generation of the 6x6 matrix. |

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

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| Name or identifier | RF1: Register users producers, artists and content creators. | | |
| Summary | This requirement contains the data to be able to register the artists and content creators. | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
| name | String | Must be at least 5 characters long |
| Date of linking | LocalDate | Must be at least 1 character |
| URL | String | Must have a minimum of 20 characters |
| Playback time | Int | Must have 1 minimum character |
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| General activities required to achieve results | 1. Register Name 2. Record the program linking date 3. Register the url | | |
| Result or postcondition |  | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
| Confirmation User registration artistic producers and content creators | Boolean | You must meet all attribute conditions. |
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| Name or identifier | RF2: Register consumer, standard and premium users. | | |
| Summary | This requirement contains the data to be able to register artists and content creators. | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
| nickname | String | Must be at least 5 characters long |
| License | String | Must be 10 digits |
| Date of linking | Int | Must be at least 3 characters |
| Playback time | Int | It must have 1 minimum character. |
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| General activities required to achieve results | 1. Register Name 2. Register ID 3. Record the linking date | | |
| Result or postcondition | Save all user data | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
| User registration of artistic producers and content creators | Boolean | You must meet all attribute conditions. |
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| Name or identifier | RF3: Record songs and podcasts. | | |
| Summary | This requirement contains the data to be able to register artists and content creators. | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
| name | String | Must be at least 5 characters long |
| Album | String | Must be at least 1 character |
| Genre | TypeGenre | You must select the type of genre |
| URL | String | Must be at least 5 characters long |
| Podcast | typePodcast | You must select the type of podcast |
| General activities required to achieve results | 1. Register Name 2. Register ID 3. Record the linking date | | |
| Result or postcondition | Save song and podcast data | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
| User registration of artistic producers and content creators | Boolean | You must meet all attribute conditions. |
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| Name or identifier | RF4: Create a playlist. | | |
| Summary | The playlist allows us to create our list with song or podcast, also song and podcast. Only the standard user can create 20 playlists. | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
| Name | String | Must be at least 5 characters long |
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| Name | String | You need to enter the name of the registered song |
| Name | String | You must enter the name of the registered song |
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| General activities required to achieve results | 1. Register username 2. Show recorded songs and podcasts 3. Add song or podcast, also both options 4. Remove song or podcast, also both options | | |
| Result or postcondition | Show playlist creation | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
|  | Confirmation ListPlayback | Boolean | Must meet all conditions proposed in the attributes |
|  | Name | String | Show the name of the songs |
|  | Name | String | Displays the name of the podcast |

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| Name or identifier | RF5: Edit a playlist. | | |
| Summary | It allows us to add songs or podcast, you can also add both options | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
| name | String | Must be at least 5 characters long |
| listAudio | Boolean | You must select whether it is song or podcast |
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| General activities required to achieve results | 1. Register the new name. 2. Record the type of audio list. | | |
| Result or postcondition | Show new changes made to the playlist | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
|  | ConfirmationEditlistPlaylist | Boolean | Must meet the conditions proposed in the attributes |

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| Name or identifier | RF6: Share a playlist. | | |
| Summary | It allows us to share with other users our playlist with the id of the generated playlist. With what I have the user in the playlist | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
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| General activities required to achieve results | 1. Show the array 2. Show the code | | |
| Result or postcondition | Display the code and the array made | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
|  | listIDreproduction | Int | Visualize the code with 16 characters |

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| Name or identifier | RF7: Simulate the playback of a song or podcast (standard and premium). | | |
| Summary | It allows us to listen to the recorded songs and podcasts. After 2 songs or podcast the user will have an ad | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
| Name | String | You need to enter the name of the song or podcast |
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| General activities required to achieve results | 1. Show the podcast or song list   1. The user must enter the name of song or podcast 2. The user is shown the playback of the podcast or song | | |
| Result or postcondition | Show the playback song | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
|  | ConfirmationSimluraReproduction | Boolean | You must have entered the names correctly |

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| Name or identifier | RF8: Buy a song | | |
| Summary | The user can buy songs, the only one who has a limit is the standard user who can only buy 100 songs | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
| Name | String | You need to enter the name of the song that seems available to you |
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| General activities required to achieve results | 1. Show the song to purchase 2. Show price 3. Enter the name of the song where the purchase is made | | |
| Result or postcondition | Show new changes made to the playlist | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
|  | ConfirmationPurchase | Boolean | You must have entered the names correctly |
|  | ValueSale | Int | Must be 5 characters long |

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| Name or identifier | RF9: For each type of audio, songs, and podcast, report the cumulative total streams across the platform. | | |
| Summary | Will report the songs and podcast with the total views | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
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| General activities required to achieve results | 1. View the songs and podcast with the playback number. | | |
| Result or postcondition | Show the song and podcast with the play number | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
|  | NumberReproductions | Int | Show the song and podcast with the number of plays |

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| Name or identifier | RF10: Report the most listened song genre (name and number of plays) for a specific user and for the entire platform and its number of plays. | | |
| Summary | Report the most listened genre in the songs with the name and number of plays, It must be for a specific user and the entire platform | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
| Name | String | The user must enter the name under which they registered. |
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| General activities required to achieve results | 1. Select the user or any platform  2. In case of selecting user type the username  3. Show the user the most listened song.  4. In case of selecting platform, the most listened song will be displayed on the platform | | |
| Result or postcondition | Show the most listened song on the platform or by the user. | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
|  | NumberReproductions | Int | Show the song and podcast with the number of plays |
|  | Name | String | It should display the most listened song recorded in the system. |

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| Name or identifier | RF11: Report the most listened to podcast category (name and number of views) for a specific user and for the entire platform. | | |
| Summary | Report the most listened to podcast with the following attributes name and number of views. | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
| Name | String | You need to enter the username that was registered. |
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| General activities required to achieve results | 1. Select whether you are a user or platform 2. If in case you are a user you must enter the name 3. It will show the user the most listened to podcast. 4. If in case it is the platform, only the most listened podcast is displayed on the platform. | | |
| Result or postcondition | Show the most listened to podcast | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
|  | NumberReproductions | Int | Show the number of views |
|  | Name | String | Registered podcast name |

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| Name or identifier | RF12: From each of the members of the Top 5 artists and the Top 5 content creators on the platform, report the name and number of total views. | | |
| Summary | Show the top 5 of artist and content creators with the following attributes name and number of total views. | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
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| General activities required to achieve results | 1. View top 5 artists and content creators. | | |
| Result or postcondition | View top 5 artists and content creators with names and total views. | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
|  | NumberReproductions | Int | Show number of artist reproductions |
|  | Name | String | Artist Name |
|  | NumberReproductions | Int | Number of Content Creator views |
|  | Name | String | Content creator name |
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| Name or identifier | RF13: For each of the members of the Top 10 songs and the Top 10 podcast, report the name, genre or category and total number of views. | | |
| Summary | View each of the members the top 10 songs and podcast with the following attributes name genre or category and the total number of views | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
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| General activities required to achieve results | 1. View members 2. View song and podcast names 3. View the category or genres 4. View the total number of views | | |
| Result or postcondition | View podcast song members, category, genre and total number of views | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
|  | name | String | Member's name |
|  | Name | String | Song name |
|  | Name | String | Podcast name |
|  | Podcast | Typepodcast | You must select the podcast category type |
|  | Genre | TypeGenre | Select the type of genre |
|  | NumberReproductions | Int | The number of song plays |
|  | NumberReproductions | Int | The number of podcast views |

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| Name or identifier | RF14: For each genre, report the number of songs sold and the total sales value ($). | | |
| Summary | Show by genre the songs only and the value of sales | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
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| General activities required to achieve results | 1. View songs by genre 2. Visualize the value of sales. | | |
| Result or postcondition | View songs by genre and sales value | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
|  | Genre | TypeGenere | Show songs by genre. This is an enum |
|  | ValueSale | Int | Number of sales for songs |

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| Name or identifier | RF15: From the best-selling song on the platform, report the total number of sales and the total sales value ($). | | |
| Summary | Show the best-selling song with the following attributes the total number of sales and the total sales value | | |
| Tickets | Entry name | Data type | Selection or repetition condition |
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| General activities required to achieve results | 1. View the song 2. View the total number of sales 3. View total sales value | | |
| Result or postcondition | View songs by genre and sales value | | |
| Outputs | Entry name | Data type | Selection or repetition condition |
|  | name | String | Show the song name |
|  | ValueSale | Int | Number of sales for songs |
|  | TotalValueSales | Int | Total number of sales |