**TABLA DE ESPECIFICACIÓN DEL PROBLEMA DE INGENIERÍA DE SOFTWARE, identificando los siguientes elementos**

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| CLIENTE | NeoTunes |
| USUARIO | Consumers and producers of audio content. |
| REQUERIMIENTOS FUNCIONALES | **R1.** Register of producers and content creators.  **R2.** Register of consumers.  **R3**. Register of song.  **R4**. Register of podcasts.  **R5**. Creation of a playlist.  **R6**. Editing of a playlist.  **R7**. Sharing a playlist id.  **R8**. Simulate reproduction of a song or podcast.  **R9**. Accumulate reproductions  **R10**. Ad reproduction.  **R11**. Buy a song.  **R12**. Generation of reports.  **R13**. Most listened musical genre.  **R14**. Most listened podcast category.  **R15**. Top five of producers.  **R16**. Benefits for a song.  **R17**. Total sold songs. |
| CONTEXTO DEL PROBLEMA | A Danish company wants to develop a prototype which allow them to entry in the audio content streaming market. Their business model is based on subscriptions and sells of songs by the platform. |
| REQUERIMIENTOS NO FUNCIONALES |  |
| REQUERIMIENTOS DE PROCESO | - The creation of new types of users should be contemplated  - The creation of new types of audios should be contemplated |

**Tabla de análisis de requerimientos funcionales (Nota: Una tabla por cada requerimiento funcional)**

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| Nombre o identificador | **R1. Register of producers.** | | |
| Resumen | The system will register a new producer user into the database. | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| name | String | Must not be empty |
| imageUrl | String | Must be a valid image format URL. |
| type | ProducerType | Must be a supported producer type. |
| Actividades generales necesarias para obtener los resultados | Create a customer object with provided data.  Assign the date of binding.  Add it into the database. | | |
| Resultado o postcondición | The new user will be registered. | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| msg | String |  |

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| Nombre o identificador | **R2. Register of consumers.** | | |
| Resumen | The system will register a new consumer user into the database. | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| nickname | String | Must not be empty |
| id | String | Must be a unique id (non-registered). |
| type | ConsumerType | Must be a supported consumer type. |
| Actividades generales necesarias para obtener los resultados | Create a customer object with provided data.  Assign the date of binding.  Add it into the database. | | |
| Resultado o postcondición | The new user will be registered. | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| msg | String |  |

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| Nombre o identificador | **R3. Register of a song.** | | |
| Resumen | The system will receive and register a new song. | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| name | String | Must not be empty |
| albumId | String | Must be a unique id (non-registered). |
| genre | SongGenre | Must be a supported genre |
| duration | Int | Must be in milliseconds and a valid time duration. |
| cost | double |  |
| Actividades generales necesarias para obtener los resultados | Create a song Object.  Check the existence of the specified album. Add the song into it in case it exists. Otherwise, create the album first.  Add it into the database. | | |
| Resultado o postcondición | The new song will be registered and assigned to its respective album. | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| msg | String |  |

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| Nombre o identificador | **R4. Register of a podcast.** | | |
| Resumen | The system will receive and register a new podcast. | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| name | String | Must not be empty |
| description | String |  |
| category | PodcastCategory | Must be a supported category |
| imageUrl | String | Must be a valid image format URL. |
| duration | Int | Must be in milliseconds and a valid time duration. |
| Actividades generales necesarias para obtener los resultados | Create a podcast Object.  Add it into the database. | | |
| Resultado o postcondición | The new podcast will be registered. | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| msg | String |  |

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| Nombre o identificador | **R5. Creation of a playlist.** | | |
| Resumen | The system will create an empty playlist with the specified name and type of audios. | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| name | String | Must not be empty |
| Actividades generales necesarias para obtener los resultados | Create a playlist Object.  Assign its autogenerated and unique id code.  Add it into the database. | | |
| Resultado o postcondición | The new podcast will be registered. | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| msg | String |  |

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| Nombre o identificador | **R6. Editing a playlist.** | | |
| Resumen | The system will add or delete an audio from a specified existing playlist. | | |
| Entradas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| playlistId | String | Must be a 16 long characters string. |
| audioId | String |  |
| request | RequestType | Must be a “put” or “delete” request. |
| Actividades generales necesarias para obtener los resultados | Validate the existence of the playlist.  Validate the request type and execute it.  Verify the existence or inexistence of the song in the playlist. | | |
| Resultado o postcondición | The specified audio will be registered into the playlist. | | |
| Salidas | Nombre entrada | Tipo de dato | Condición de selección o repetición |
| msg | String |  |