|  |  |  |
| --- | --- | --- |
| **Functional requirement** | **Class Name** | **Method name** |
| **R-F1:** Register a Producer User (Artist; Content Creator) | Class User | User(…): User |
| Class Producer | Producer(…): Producer |
| Class Artist | Artist(…): Artist |
| Class ContentCreator | ContentCreator(…): ContentCreator |
| Class NeoTunesManager | showMainMenu(): void.  userConfig(): void  registerUser(): void  registerProducer(): void |
| Class NeoTunesController | registerArtist(): boolean  registerContentCreator(): boolean |
| **R-F2:** Register a Consumer User (Premium, Standard) | Class User | User(…): User |
| Class Consumer | Consumer(…): Consumer |
| Class Premium | Premium(…): Premium |
| Class Standard | Standard(…): Standard |
| Class NeoTunesManager | showMainMenu(): void  userConfig(): void  registerUser(): void  registerConsumer(): void |
| Class NeoTunesController | registerPremium(): boolean  registerStandard(): boolean |
| **R-F3:** Register Songs and Podcasts | Class Audio | Audio(…): Audio |
| Class Songs | Song(…): Song |
| Class Podcast | Podcast(…): Podcast |
| Class NeoTunesManager | showMainMenu(): void  audioConfig(): void  registerAudio(): void  registerSong(): void |
| Class NeoTunesController | registerPodcast(): boolean  checkArtistExistence(): int  checkContentCreatorExistence(): int |
| **R-F4:** Create a Playlist | Class Playlist | Playlist(…): Playlist |
| Class Consumer | Consumer(…): Consumer |
| Class Premium | Premium(…): Premium  addPlaylist(): boolean |
| Class Standard | Standard(…): Standard  addPlaylist(): boolean |
| Class NeoTunesManager | showMainMenu(): void  playlistConfig(): void  registerPlaylist(): void  registerSong(): void |
| Class NeoTunesController | registerPlaylist(): boolean  checkConsumer(): int |
| **R-F5:** Edit a Playlist | Class Playlist | Playlist(…): Playlist |
| Class Consumer | Consumer(…): Consumer |
| Class Premium | Premium(…): Premium  addToPlaylist(): boolean  addAudio(): boolean  deletefromPlaylist(): boolean  SeeAllPlaylist(): String |
| Class Standard | Standard(…): Standard  addToPlaylist(): boolean  addAudio(): boolean  deletefromPlaylist(): boolean  SeeAllPlaylist(): String |
| Class NeoTunesManager | showMainMenu(): void  playlistConfig(): void  editAPlaylist(): void  addAudio(): void  deleteAudio(): void |
| Class NeoTunesController | checkConsumer(): int  checkPlaylistExistence(): int  seeAddedAudio(): String  seeAudioinPlaylist(): String  removefromPlaylist(): boolean  addToPlaylist(): boolean  checkAudioExistence(): int |
| **R-F6:** Share a Playlist | Class NeoTunesManager | showMainMenu(): void  playlistConfig(): void |
| Class Premium | SeeAllPlaylist(): String |
| Class Standard | SeeAllPlaylist(): String |
| Class NeoTunesController | checkConsumer(): int  showAllplayList(): String |
| **R-F7:** Simulate playing a song or podcast | Class Premium | playAudio(): boolean  checkExistence(): Audio |
| Class Standard | playAudio(): boolean  checkExistence(): Audio |
| Class Song | Play(): String  Pause(): String  calculateDuration(): String |
| Class Podcast | Play(): String  Pause(): String  calculateDuration(): String |
| Class Reproducer | Play(): String  Pause(): String |
| Class NeoTunesManager | showMainMenu()  audioConfig(): void  simulatedAudio(): void |
| Class NeoTunesController | checkConsumer(): int  checkStandard(): int  seeAddedAudio(): String  checkAudioExistence(): int  searchPodcast(): int  showAnnouncement(): String  hearAudio(): boolean |
| **R-F8:** Buy a Song | Class Song | addPlayback(): int |
| Class Premium | addAudio(): boolean |
| Class Standard | addAudio(): boolean |
| Class NeoTunesManager | showMainMenu()  audioConfig(): void  buyAsong (): void |
| Class NeoTunesController | showAudioList(): String  checkAudioExistence(): int  checkConsumer(): int  checkAudioExistence(): int |
| **R-F9:** Add A Podcast | Class NeoTunesManager | showMainMenu()  audioConfig(): void  buyAsong (): void |
| Class NeoTunesController | checkAudioExistence(): int  showAudioList(): String  checkConsumer(): int  addPodcast(): Boolean  addAPodcastRep(): boolean |
| Class Premium | addAudio(): boolean |
| Class Standard | addAudio(): boolean |
| **R-F10:** Report the total accumulated reproductions for each type of audio | Class Song | getNumberOfPlaybacks(): int |
| Class Podcast | getNumberOfPlaybacks(): int |
| Class NeoTunesManager | showMainMenu(): void  generateReport(): void |
| Class NeoTunesController | reportAcumulatePlays(): String  checkConsumer(): int |
| **R-F11:** Report the most listened song genre for a user | Class Consumer | calculateMostListenedGenre(): void  getMostListenedGenre(): String  getPlaysMostListenedGenre():int |
| Class Song | getNumberOfPlaybacks(): int |
| Class NeoTunesManager | showMainMenu(): void  generateReport(): void  reportGenre(): void |
| Class NeoTunesController | reportMostListenedGenre(): String  checkConsumer(): int |
| **R-F12:** Report the most listened song genre for the entire platform | Class Consumer | calculateMostListenedGenre(): void  getMostListenedGenre(): String  getPlaysMostListenedGenre():int |
| Class Song | getNumberOfPlaybacks(): int |
| Class NeoTunesManager | showMainMenu(): void  generateReport(): void  reportGenre(): void |
| Class NeoTunesController | reportMostListenedGenre(): String  checkConsumer(): int |
| **R-F13:** Report the most listened podcast category for a user | Class Consumer | calculateMostListenedCategory(): void  getMostListenedCategory(): String  getPlaysMostListenedCategory ():int |
| Class Podcast | getNumberOfPlaybacks(): int |
| Class NeoTunesManager | showMainMenu(): void  generateReport(): void  reportCategory(): void |
| Class NeoTunesController | reportMostListenedCategory(): String  checkConsumer(): int |
| **R-F14:** Report the most listened podcast category for the entire platform**.** | Class Consumer | calculateMostListenedCategory(): void  getMostListenedCategory(): String  getPlaysMostListenedCategory ():int |
| Class Podcast | getNumberOfPlaybacks(): int |
| Class NeoTunesManager | showMainMenu(): void  generateReport(): void  reportCategory(): void |
| Class NeoTunesController | reportMostListenedCategory(): String  checkConsumer(): int |
| **R-F15:** Report the Top 5 Artist and Top 5 Content Creators (Name and total views) | Class Artist | calculatePlaybacks(): void  getAcumulatedPlaybacks(): int |
| Class ContentCreator | calculatePlaybacks(): void  getAcumulatedPlaybacks(): int |
| Class NeoTunesManager | showMainMenu(): void  generateReport(): void |
| Class NeoTunesController | reportAcumulatePlays(): String  getTopFiveArtist(): String  getTopFiveContentCreator()  getTopProducer(): int |
| **R-F16:** Report the Top 10 Songs and Top 10 Podcasts (Name and total views) | Class Song | calculatePlaybacks(): void  getAcumulatedPlaybacks(): int |
| Class Podcast | calculatePlaybacks(): void  getAcumulatedPlaybacks(): int |
| Class NeoTunesManager | showMainMenu(): void  generateReport(): void |
| Class NeoTunesController | reportAcumulatePlays(): String  getTopTenSongst(): String  getTopTenPodcasts()  getTopAudio(): int |
| **R-F17:** Report the Songs sold and the total sales value (by genre) | Class Song | getAllSales(): int  getSaleValue(): int |
| Class NeoTunesManager | showMainMenu(): void  generateReport(): void |
| Class NeoTunesController | reportByGenre(): String |
| **R-F18:** Report the number of sales and the total sales value of the best-selling song | Class Song | calculatePlaybacks(): void  getAcumulatedPlaybacks(): int |
| Class NeoTunesManager | showMainMenu(): void  generateReport(): void |
| Class NeoTunesController | reportAcumulatePlays(): String  getTopTenSongst(): String  getTopAudio(): int |