

Unit Test: Searching Tracks, Genres, and Artists for Selected List; Selection of a Combination of Tracks, Genres, and Artists; and Generating a Playlist

## **Searching Tracks, Genres, and Artists:**

### **Functional Testing:**

#### **Searching up track not in the tree:**

Typed in "Problem" into the track search. Found the track "Problem" by Ariana Grande in the search results as expected. Clicked on the track and it was added to the selected list as expected. Search Track bar now displays "Last Selected: Problem - Ariana Grande" as expected.

#### **Searching up track that is in the tree:**

Typed in "Payphone" into the track search. Found the track "Payphone" by Maroon 5 in the search results as expected. Clicked on the track and it was added to the selected list as expected. Search Track bar now displays "Last Selected: Payphone - Maroon 5" as expected. The node for Payphone in the tree is outlined in green as expected.

#### **Searching up artist not in the tree:**

Typed in "Ariana Grande" into the track search. Found Ariana Grande in the search results as expected. Clicked on the artist and she was added to the selected list as expected. Search Artist bar now displays "Last Selected: Ariana Grande" as expected.

#### **Searching up artist that is in the tree:**

Typed in "Maroon 5" into the track search. Found Maroon 5 in the search results as expected. Clicked on the artist and they were added to the selected list as expected. Search Artist bar now displays "Last Selected: Maroon 5" as expected. The node for Maroon 5 in the tree is outlined in green as expected.

#### **Searching up genre:**

Clicked on search genre bar. Drop down list with genres appeared as expected. Clicked on the genre pop. Pop showed up in a small box with a gray "x" next to it in the search bar as expected.

## **Selection of a Combination of Tracks, Genres, and Artists:**

### **Functional Testing:**

#### **Selecting Tracks, Genres, and Artists:**

Selected the artists Maroon 5 and Jason Derulo from the tree. Selected the tracks "Her Diamonds" by Rob Thomas and "Hall of Fame" by The Script. The four selections appeared in the selected list as expected. Searched up pop in the search genre list. Unable to search or select any more tracks, artists, or genres as expected.

#### **Selecting Tracks and Genres:**

Selected the tracks "Her Diamonds" by Rob Thomas and "Hall of Fame" by The Script. The two selections appeared in the selected list as expected. Searched up pop in the search genre list. Able to click on search genre bar to add rock and R&B as expected. Unable to search or select any more tracks or genres as expected.

#### **Selecting Artists and Genres:**

Selected the artists Maroon 5 and Jason Derulo from the tree. The two selections appeared in the selected list as expected. Searched up pop in the search genre list. Able to click on search genre bar to add rock and R&B as expected. Unable to search or select any more tracks or genres as expected.

## **Generating a Playlist:**

### **Functional Testing:**

#### **Creating a playlist with at least one track, genre, and artist:**

Inserted the artists Maroon 5 and Jason Derulo into the selected list. Inserted the tracks "Her Diamonds" by Rob Thomas and "Hall of Fame" by The Script into the selected list. Selected the Pop genre from the list of genres. All filter sliders are set to a range of 30 - 70. Clicked "Generate Playlist" button at the bottom of the generate tab which brought up a dialogue box as expected. Name of playlist set to "New Playlist" and maximum number of tracks was set to 25. "Generate Playlist" button in dialogue box was clicked. Dialogue box disappeared after displaying the message "Playlist Created!" as expected. List of tracks in the created playlist appeared underneath filter sliders with "Her Diamonds" and "Hall of Fame" as first two tracks in the list. Went onto Spotify and found a new created playlist titled "New Playlist" with the same tracks as those that appeared in the list under the filter sliders on Rootify as expected. Counted 25 tracks in the playlist as expected. All tracks fulfill the criteria set by the sliders except for the popularity slider.

**Creating a playlist with at least one genre and artist:**

Inserted the artists Maroon 5 and Jason Derulo into the selected list. Selected the Pop genre from the list of genres. All filter sliders are set to a range of 30 - 70. Clicked "Generate Playlist" button at the bottom of the generate tab which brought up a dialogue box as expected. Name of playlist set to "New Playlist" and maximum number of tracks was set to 10. "Generate Playlist" button in dialogue box was clicked. Dialogue box disappeared after displaying the message "Playlist Created!" as expected. List of tracks in the created playlist appeared underneath filter sliders as expected. Went onto Spotify and found a new created playlist titled "New Playlist" with the same tracks as those that appeared in the list under the filter sliders on Rootify as expected. Counted 10 tracks in the playlist as expected. All tracks fulfill the criteria set by the sliders except for the popularity slider.

**Creating a playlist with at least one genre and track:**

Inserted the tracks "Her Diamonds" by Rob Thomas and "Hall of Fame" by The Script into the selected list. Selected the Pop genre from the list of genres. All filter sliders are set to a range of 30 - 70. Clicked "Generate Playlist" button at the bottom of the generate tab which brought up a dialogue box as expected. Name of playlist set to "New Playlist" and maximum number of tracks was set to 15. "Generate Playlist" button in dialogue box was clicked. Dialogue box disappeared after displaying the message "Playlist Created!" as expected. List of tracks in the created playlist appeared underneath filter sliders with "Her Diamonds" and "Hall of Fame" as first two tracks in the list as expected. Went onto Spotify and found a new created playlist titled "New Playlist" with the same tracks as those that appeared in the list under the filter sliders on Rootify as expected. Counted 15 tracks in the playlist as expected. All tracks fulfill the criteria set by the sliders except for the popularity slider.

**Creating a playlist with at least one track:**

Inserted the tracks "Her Diamonds" by Rob Thomas and "Hall of Fame" by The Script into the selected list. All filter sliders are set to a range of 30 - 70. Clicked "Generate Playlist" button at the bottom of the generate tab which brought up a dialogue box as expected. Name of playlist set to "New Playlist" and maximum number of tracks was set to 25. "Generate Playlist" button in dialogue box was clicked. Dialogue box disappeared after displaying the message "Playlist Created!" as expected. List of tracks in the created playlist appeared underneath filter sliders with "Her Diamonds" and "Hall of Fame" as first two tracks in the list. Went onto Spotify and found a new created playlist titled "New Playlist" with the same tracks as those that appeared in the list under the filter sliders on Rootify as expected. Counted 25 tracks in the playlist as expected. All tracks fulfill the criteria set by the sliders except for the popularity slider.

**Creating a playlist with at least one artist:**

Inserted the artists Maroon 5 and Jason Derulo into the selected list. All filter sliders are set to a range of 30 - 70. Clicked "Generate Playlist" button at the bottom of the generate tab which brought up a dialogue box as expected. Name of playlist set to "New Playlist" and maximum number of tracks was set to 25. "Generate Playlist" button in dialogue box was clicked. Dialogue box disappeared after displaying the message "Playlist Created!" as expected. List of tracks in the created playlist appeared underneath filter sliders as expected. Went onto Spotify and found a new created playlist titled "New Playlist" with the same tracks as those that appeared in the list under the filter sliders on Rootify as expected. Counted 25 tracks in the playlist as expected. All tracks fulfill the criteria set by the sliders except for the popularity slider.

**Creating a playlist with at least one genre:**

Selected the Pop genre from the list of genres. All filter sliders are set to a range of 30 - 70. Clicked "Generate Playlist" button at the bottom of the generate tab which brought up a dialogue box as expected. Name of playlist set to "New Playlist" and maximum number of tracks was set to 25. "Generate Playlist" button in dialogue box was clicked. Dialogue box disappeared after displaying the message "Playlist Created!" as expected. List of tracks in the created playlist appeared underneath filter sliders as expected. Went onto Spotify and found a new created playlist titled "New Playlist" with the same tracks as those that appeared in the list under the filter sliders on Rootify as expected. Counted 25 tracks in the playlist as expected. All tracks fulfill the criteria set by the sliders except for the popularity slider.

**Creating a playlist without specifying a name with a least one track and artist:**

Inserted the artists Maroon 5 and Jason Derulo into the selected list. Inserted the tracks "Her Diamonds" by Rob Thomas, "Hall of Fame" by The Script, and "Castle of Glass" by Linkin Park into the selected list. All filter sliders are left at ranges of 30-70. Clicked "Generate Playlist" button at the bottom of the generate tab which brought up a dialogue box as expected. Playlist name was left blank and maximum number of tracks was set to 15. "Generate Playlist" button in dialogue box was clicked. Dialogue box disappeared after displaying the message "Playlist Created!". List of tracks in the created playlist appeared underneath filter sliders with "Her Diamonds", "Hall of Fame", and "Castle of Glass" as the first three tracks in the list. Went onto Spotify and found a new created playlist titled "[Rootify] Playlist" with the same tracks as those that appeared in the list under the filter sliders on Rootify as expected. Counted 15

tracks in the playlist as expected. All tracks fulfill the criteria set by the sliders except for the popularity slider.

**Trying to create a playlist in which no songs meet filter criteria using at least one artist and one genre:**

Inserted the artists Maroon 5, Jason Derulo, and The Script into the selected list. Selected the Pop and R&B genres from the list of genres. All filter sliders are set to a range of 99-100. Clicked "Generate Playlist" button at the bottom of the generate tab which brought up a dialogue box as expected. Name of playlist set to "New Playlist" and maximum number of tracks was set to 25. "Generate Playlist" button in dialogue box was clicked. Dialogue box disappeared after displaying the message "No Tracks Found!" as expected. No tracks appeared underneath the filter sliders and no new playlist was created on Spotify as expected.

**Trying to create a playlist in which no songs meet filter criteria using at least one artist, genre, and track:**

Inserted the artists Maroon 5 and Jason Derulo into the selected list. Inserted the tracks "Her Diamonds" by Rob Thomas and "Hall of Fame" by The Script into the selected list. Selected the Pop genre from the list of genres. All filter sliders are set to a range of 99-100. Clicked "Generate Playlist" button at the bottom of the generate tab which brought up a dialogue box. Name of playlist set to "New Playlist" and maximum number of tracks was set to 25. "Generate Playlist" button in dialogue box was clicked. Dialogue box disappeared after displaying the message "Playlist Created!". List of tracks in the created playlist appeared underneath filter sliders with "Her Diamonds" and "Hall of Fame" as the only tracks in the list. Went onto Spotify and found a new created playlist titled "New Playlist" with the same tracks as those that appeared in the list under the filter sliders on Rootify. Counted 2 tracks in the playlist as expected.