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I confirm that I understand my coursework needs to be submitted online Aula under the relevant module page before the deadline for my assignment to be accepted and marked.

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1.Introduction

This web-based application was created as part of the Chinook database's portfolio of practical work. The project's purpose is to create an intuitive and simple interface via which a Chinook employee can manage the company's music album records. The application is created by applying fundamental web technologies such as HTML, CSS, Tailwind CSS, JavaScript, PHP, and MariaDB, and it enables full CRUD activities (create, read, update, and delete) on the Album, Artist, Track table.

The program connects to the Chinook database, and allows users to:

- View a list of all albums, along with the associated artist information.
- Create new albums by selecting an artist.
- Edit album information such as title and artist.
- Delete albums with confirmation prompts to avoid accidental removal.

The system is developed with end-users in mind, with a clear user interface, simple navigation, and data validation to avoid input errors.

A full user manual is given to help non-technical users navigate and utilize the application efficiently.

2. Getting Started

This Music Library Management System allows you to easily manage your collection of **albums**, artists, and **tracks**. Follow these steps to get started:

2.1 Explore the Sidebar

Use the sidebar to navigate between key sections:

- Albums
- Artists
- Tracks

2.2 Collection Stats

The dashboard shows total counts of albums, artists, and tracks for a quick overview.

2.3 Add New Entries

Use the "Add" buttons in each section to create new albums, artists, or tracks.

2.4 Search & Filter Data

Every list page includes powerful tools to search, sort, and filter your content.

2.5 Edit or Delete Items

Use the action buttons next to each item in the list to view, update, or delete entries.

3.User Manual

3.1. Home page

The Home page (Figure 1) is your central hub for managing Chinook's music library. It provides a quick overview of your data and direct access to key management functions.

Key areas of the Home Page:

Sidebar Menu – Navigation links to Dashboard, Albums, Artists, and Tracks.

Welcome Section – Personalized greeting for the user.

Summary Tiles – Quick stats for total Albums, Artists, and Tracks.

Quick Actions – Shortcut buttons to manage Albums, Artists, and view Tracks.

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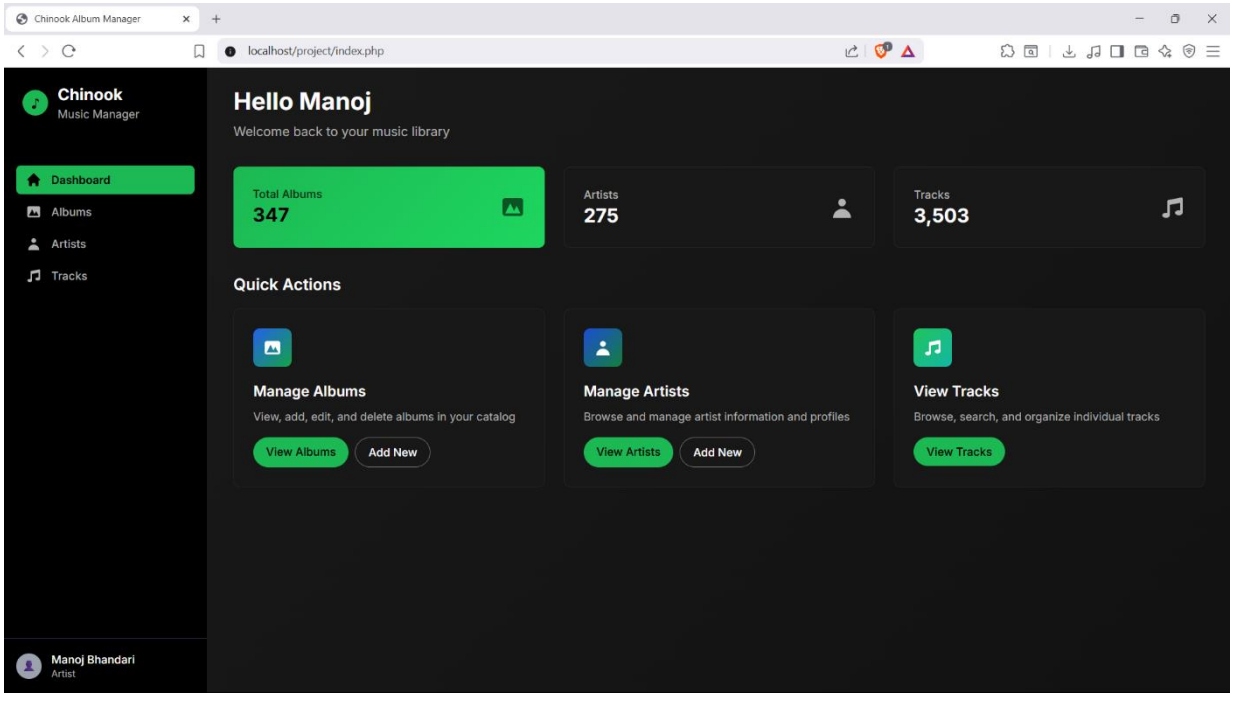

Figure 1:Home Page of the website

3.2.Navigation

The navigation system allows users to quickly access and manage different parts of the music library. Key navigation elements include:

Quick Actions Panel – Offers direct buttons for:

- **Manage Albums:** View or add new albums**.**
- **Manage Artists:** View or add new artists.
- **View Tracks:** Browse and organize tracks.

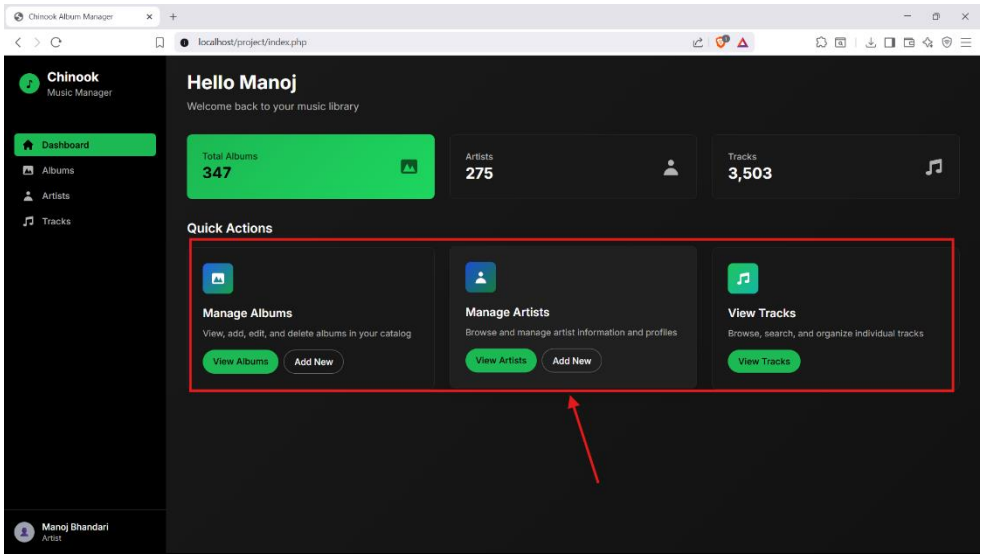

Figure 2: Quick Actions Navigation

Sidebar Menu – Provides links to the main sections:

- **Dashboard**
- **Albums**
- **Artists**
- **Tracks**

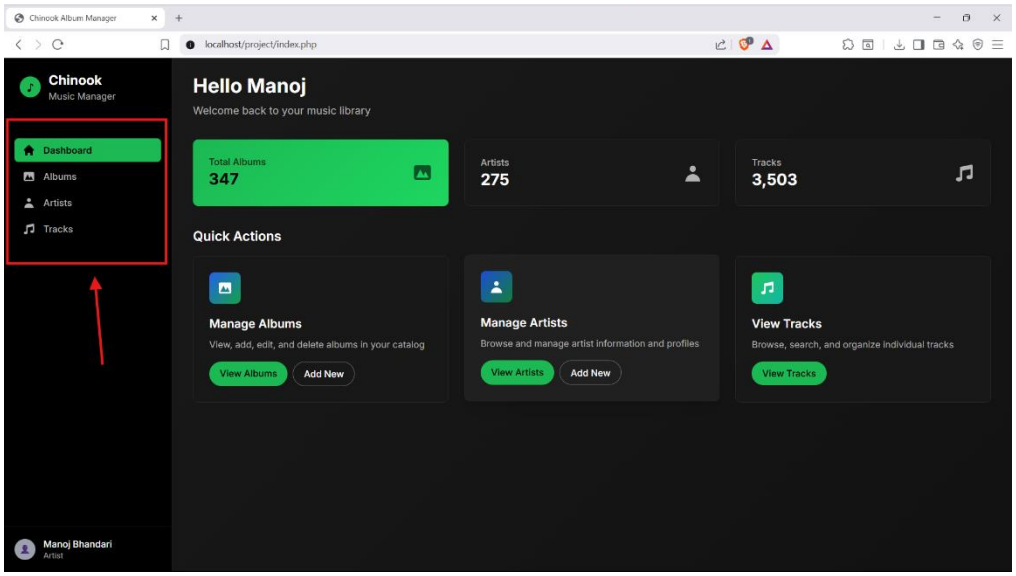

Figure 3:Sidebar Navigation

3.3. Dashboard Summary

This section displays a quick overview of the total content in the music library. It includes key statistics such as the total number of **Albums**, **Artists**, and **Tracks**. These figures give users an instant snapshot of their collection.

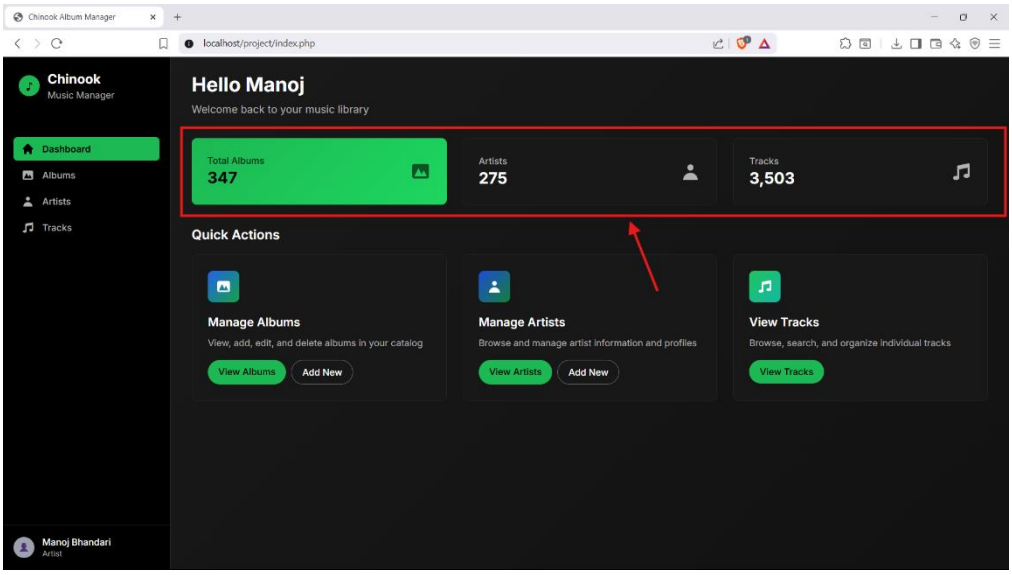

Figure 4:Dashboard Summary

3.4. Accessing View Pages (Gallery)

From the Home Page (Quick Actions)

The Quick Actions section includes buttons like:

- View Albums
- View Artists
- View Tracks

These buttons provide instant access to their respective galleries without needing to use the sidebar.

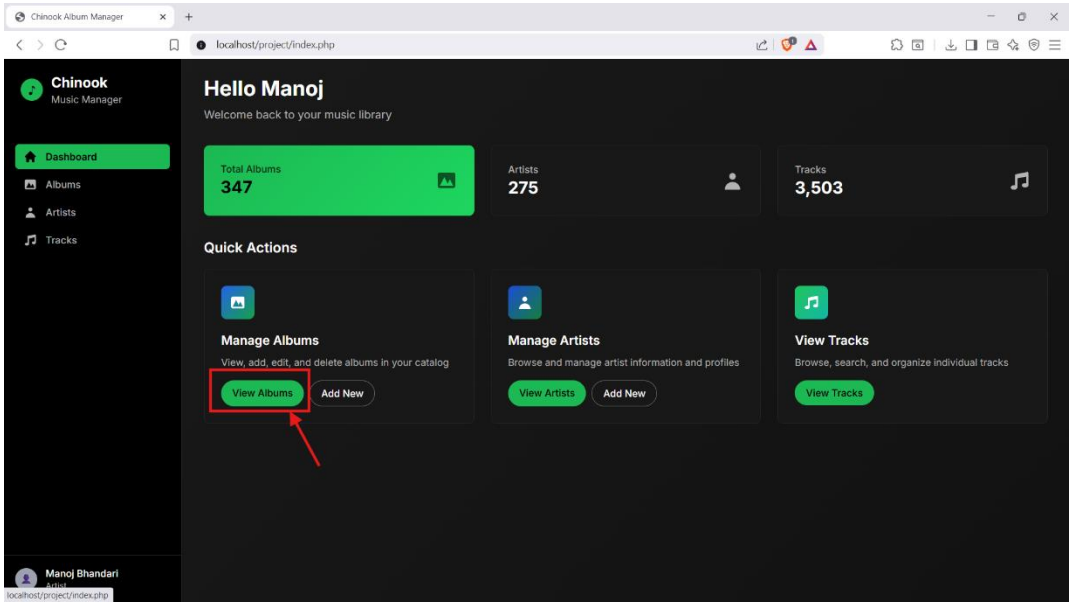

Figure 5:Open albums from dashboard

From the Sidebar Menu

The left-hand sidebar includes direct links to:

- **Albums** – Browse and manage album records.
- **Artists** – View artist profiles and info.
- **Tracks** – Search, sort, and organize music tracks.

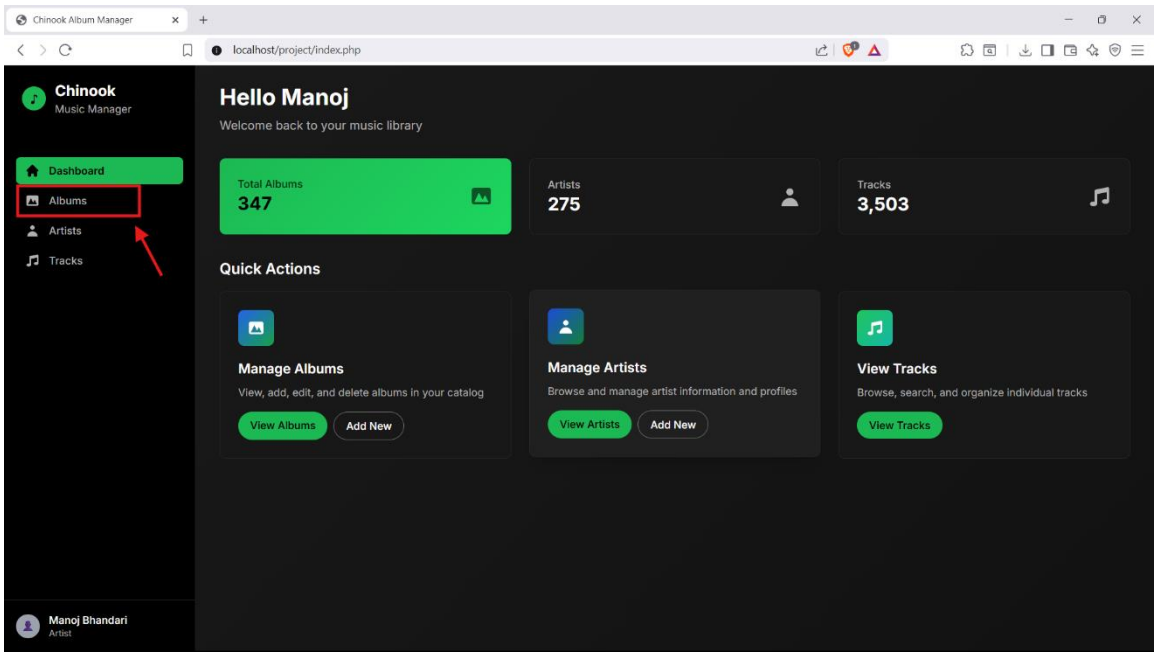

Figure 6:Opening albums from sidebar

3.5. Viewing the Albums List

Once you click "View Albums" from the Home page or select "Albums" from the sidebar, you will be taken to the "Albums" management page, as shown in Figure 7. This page displays a comprehensive list of all albums in your collection and provides tools to efficiently manage them.

Key areas of the Albums List page:

- Total Albums – Displays the total number of albums, consistent with the Home page.
- Pagination Info – Shows the current page number and total pages (e.g., "1 of 35").
- Showing – Lets you control how many albums appear per page.
- Search & Filter – Tools to search by title or artist, sort by ID or name, and set order (asc/desc).
- Albums Table – Lists each album with ID, Title, Artist, and action buttons (View, Edit, Delete).
- Add Album – Button at the top right to create a new album entry.

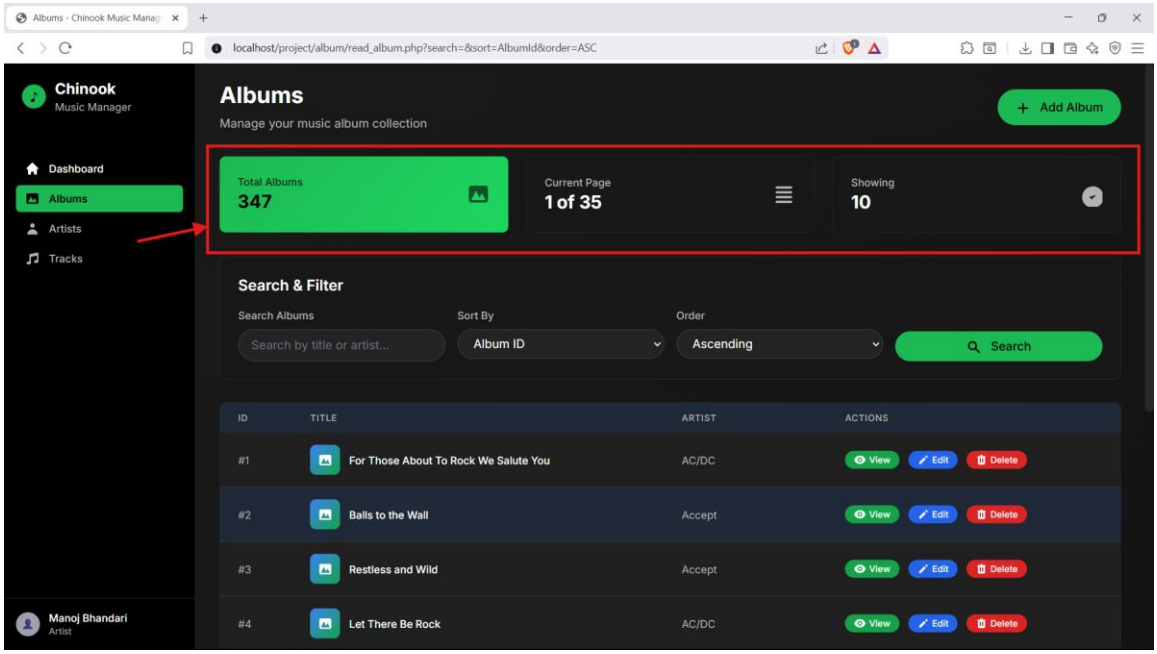

Figure 7:Viewing to albums

3.6. Searching and Filtering Albums

The "Search & Filter" section (as highlighted in the images) allows you to quickly locate specific albums within your collection.

Searching: Enter a keyword (e.g., album title or artist name) into the "Search Albums" field. In Figure 8, "Balls to the Wall" is entered, and the results are filtered accordingly.

Sorting: Use the "Sort By" dropdown to choose how the results are ordered (e.g., by "Title", "Album ID", or "Artist"), as shown in Figure 8.

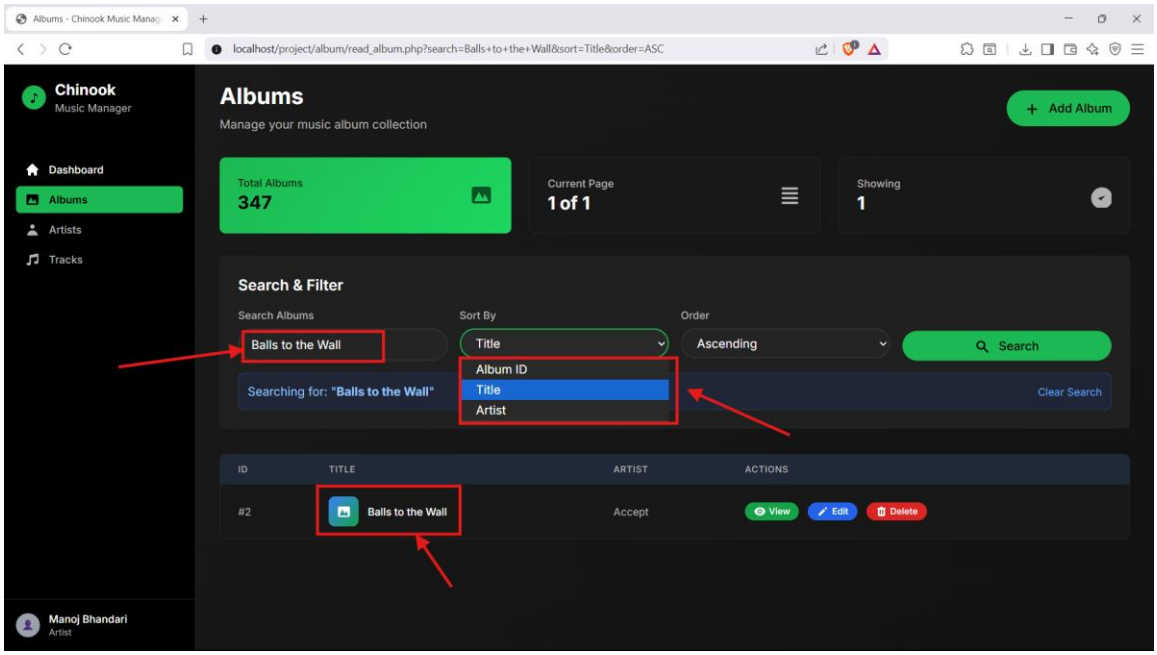

Figure 8:Searching and sorting

Ordering: Select "Ascending" or "Descending" from the "Order" dropdown to specify the sort of direction (Figure 9).

Applying Filters: After entering your search term and selecting your sort/order preferences, click the "Search" button to apply the filters and update the album list. To clear your search, click "Clear Search.

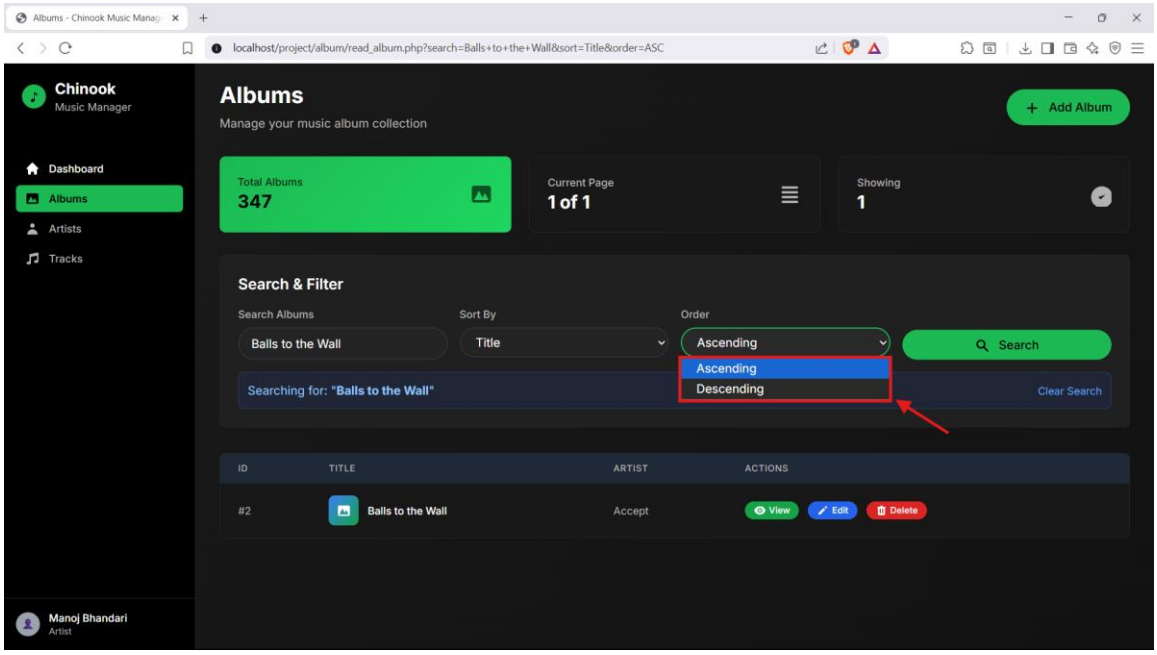

Figure 9:Ordering and filtering

3.7. Viewing Album Details and Tracks

To view the complete details of a specific album, navigate to the "Albums" list and click the "View" button next to the desired album (Figure 10). This action will take you to the "View Album" page, which provides a comprehensive overview of the album and its associated tracks.

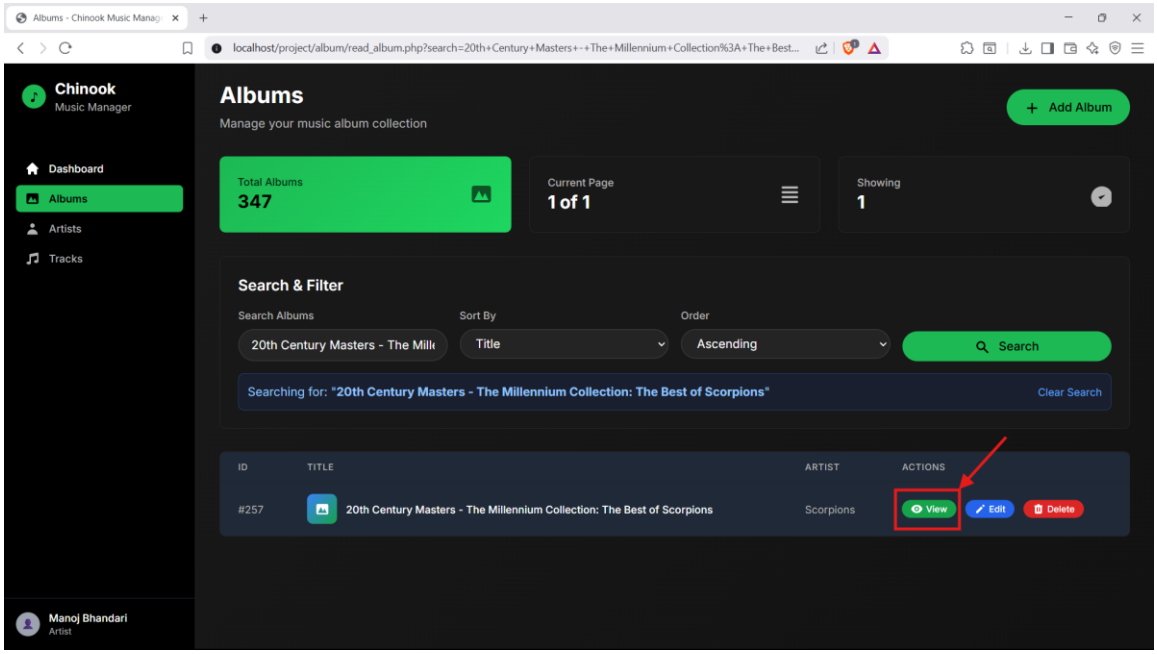

Figure 10:Viewing albums

Album Information (Figure 11): At the top of the "View Album" page, you'll find the album's title, artist, Album ID, and the total number of tracks. You also have direct options to "Edit Album" or "Delete Album" from this view.

Summary Statistics: Below the album information, a summary panel provides key statistics for the album's tracks:

- **Total Tracks:** The total count of songs on the album (e.g., 12 tracks).
- **Total Duration:** The combined length of all tracks.
- **Total Size:** The combined file size of all tracks.
- **Avg Price:** The average price per track on the album.

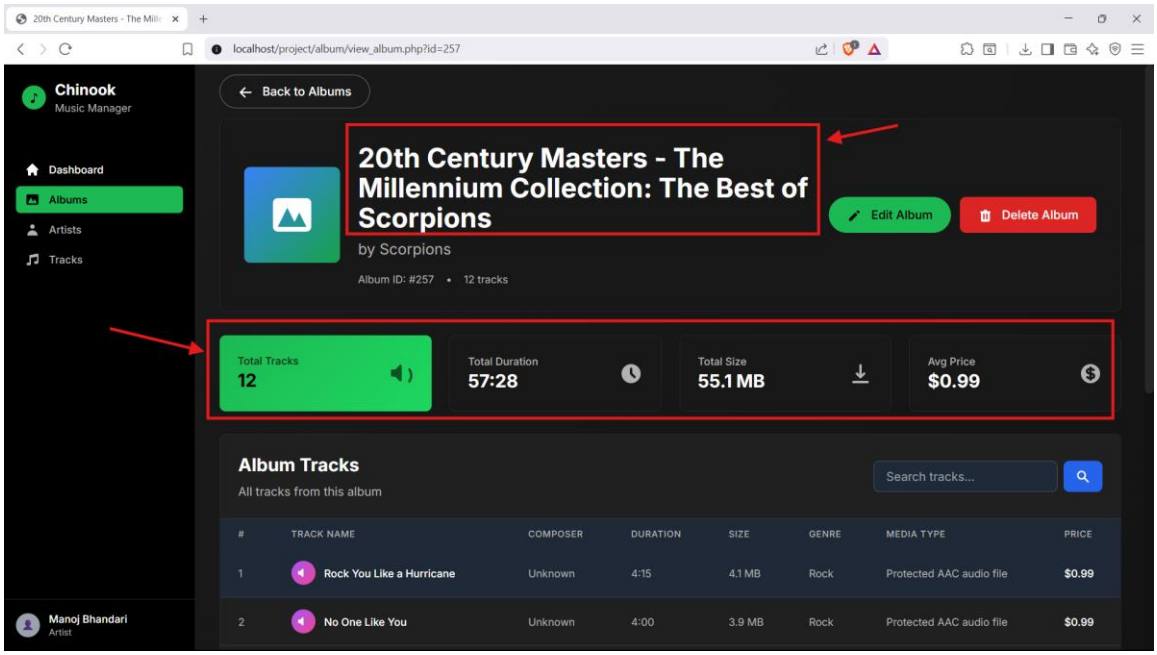

Figure 11:Summary Statistics

Album Tracks List (Figure 12): This section displays a detailed list of all tracks belonging to the selected album. For each track, you can see:

- **Track Name:** The title of the song.
- **Composer:** The composer(s) of the track.
- **Duration:** The length of the track.
- **Size:** The file size of the track.
- **Genre:** The musical genre of the track.
- **Media Type:** The format of the audio file.
- **Price:** The individual price of the track.

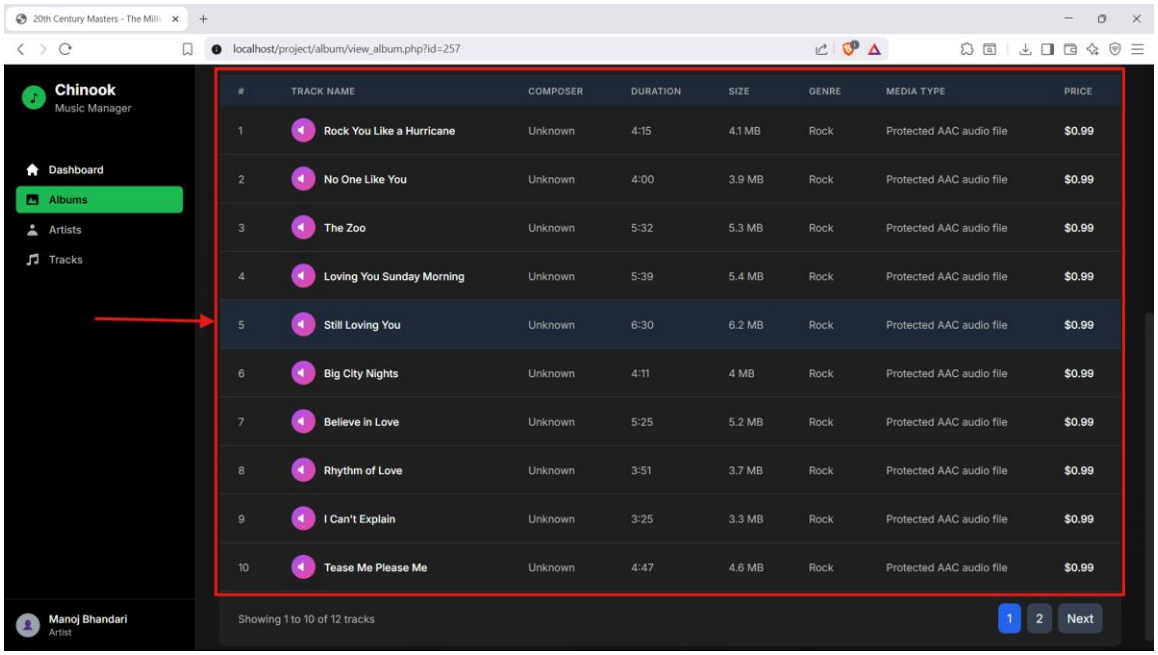

Figure 12:Album track list

3.8. Searching Tracks within an Album

Within the "View Album" page, you can efficiently search for specific tracks belonging to that album.

Search Bar (Figure 13): To find a track, type its name into the "Search tracks..." field.

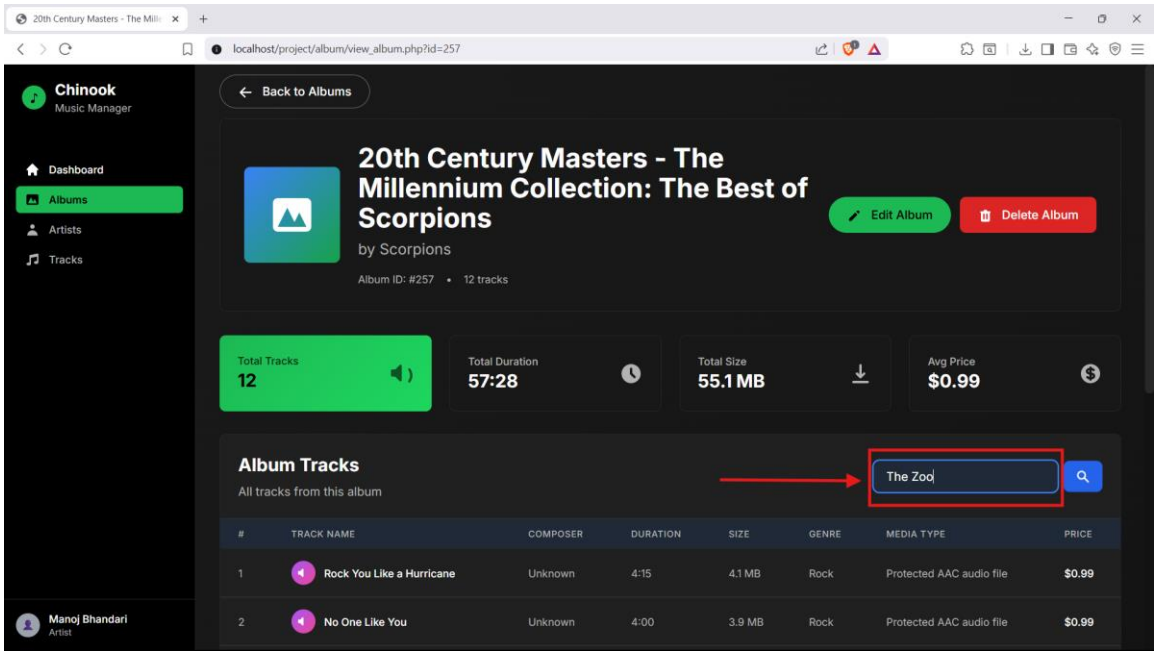

Figure 13:Searching

Applying Search (Figure 14): After entering your search term, click the magnifying glass icon or press Enter. The "Album Tracks" list will then filter to show only the matching results. For example, searching for "The Zoo" will display only that track if it exists on the album.

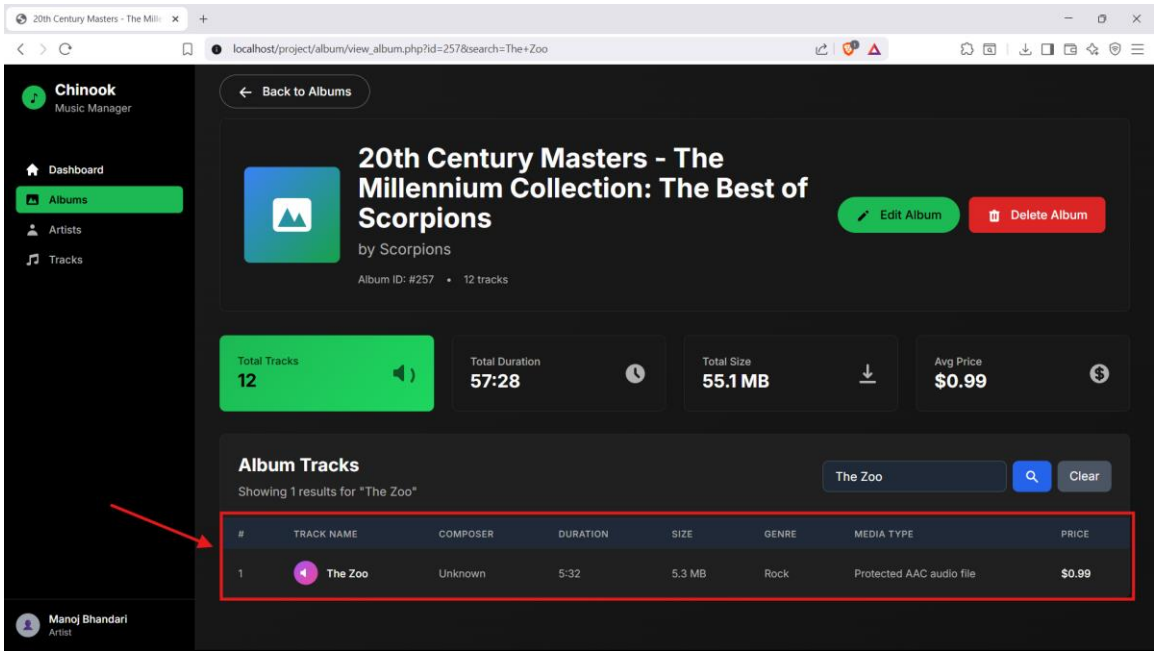

Figure 14:Applying search

3.9. Editing Albums

The Chinook Album Manager allows you to easily update existing album information, including the album title, artist, and even individual tracks.

Accessing the Edit Page (Figure 15): From the "View Album" page, click the green "Edit Album" button to access the album's editing interface.

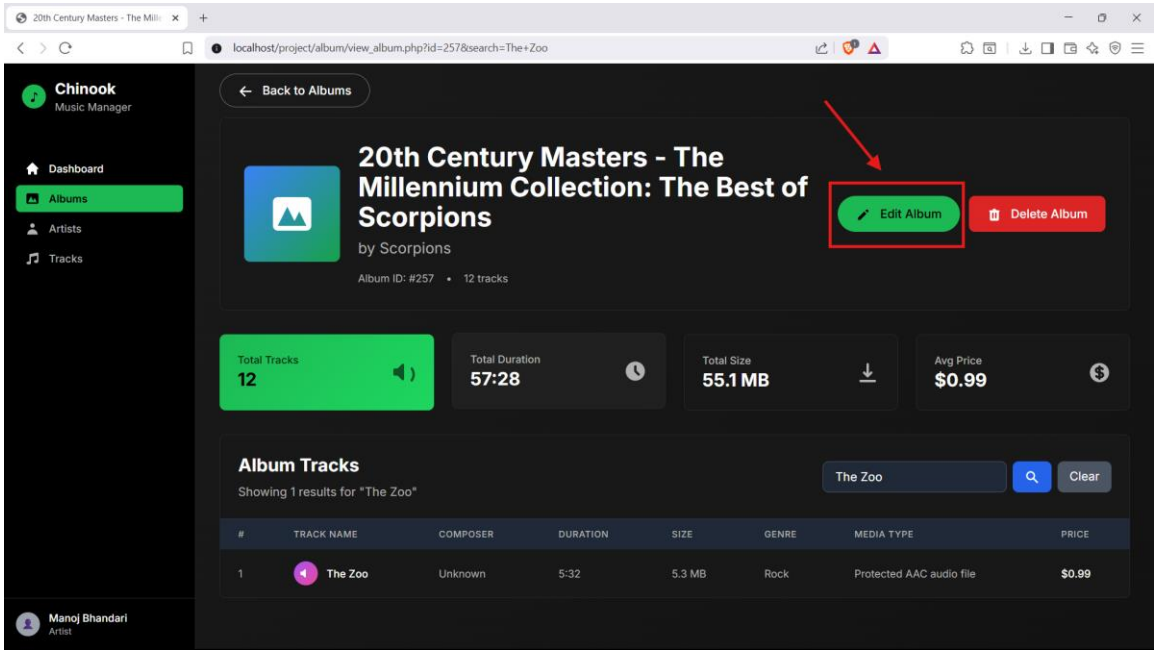

Figure 15:Accessing the edit

Update Album Information (Figure 16):

- **Album Title:** Modify the album's title by typing into the "Album Title" field.
- **Artist:** Select a new artist for the album from the "Artist" dropdown.
- **Album Tracks:** You can also manage individual tracks directly on this page:
  - **Remove Tracks:** Click the red 'X' icon next to a track to remove it from the album.
  - **Add New Tracks:** Type a new track name into the empty field provided or click "Add Another Track" to add more fields for new songs.

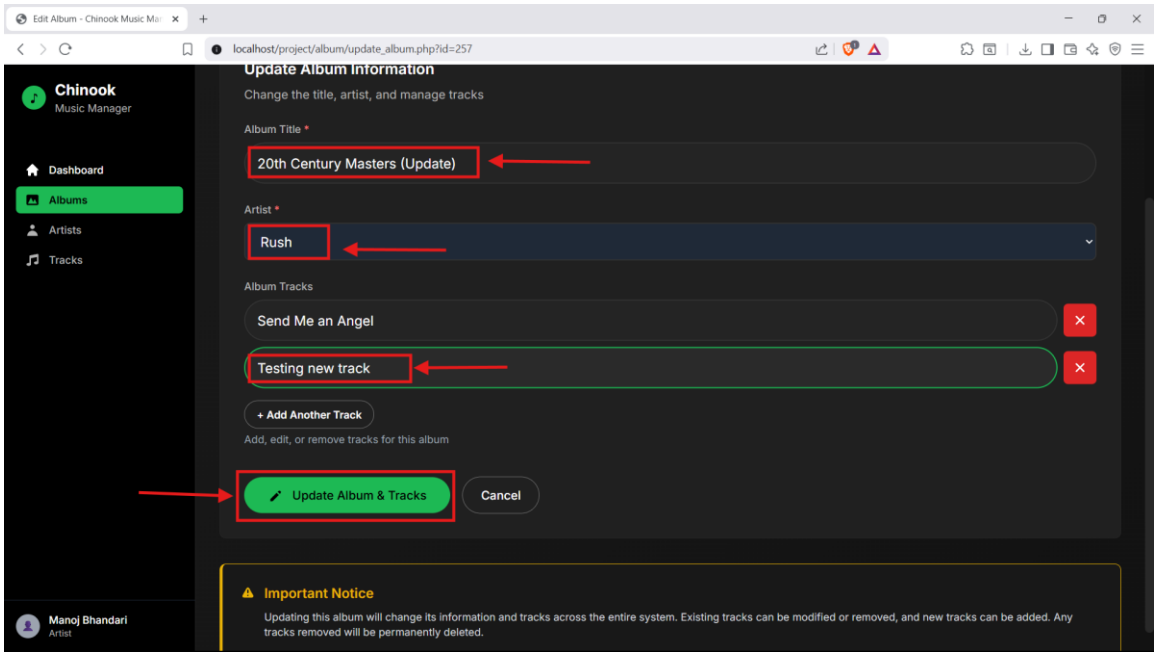

Figure 16:Update album

Saving Changes (Figure 17): Once you have made your desired modifications, click the "Update Album & Tracks" button to save your changes. A green success message ("Album and tracks updated successfully!") will appear at the top of the page, confirming the update.

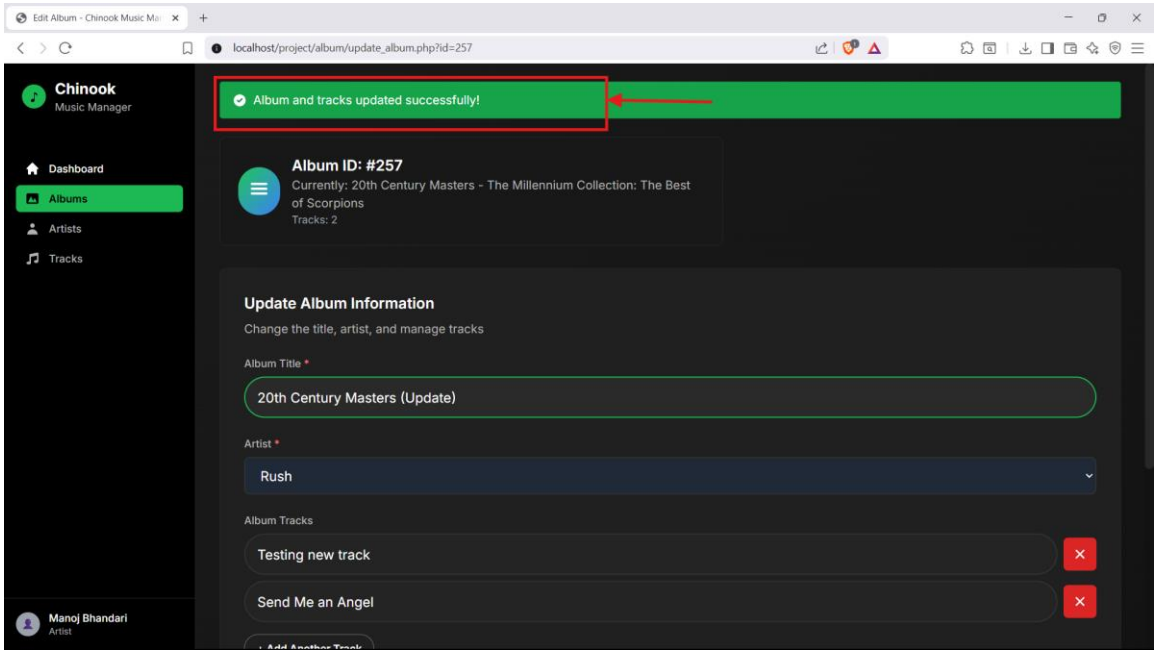

Figure 17:Saving changes

Verification (Figure 18): After a successful update, you can return to the "Albums" list. You will see that the album's information (e.g., title and artist) has been updated to reflect your changes.

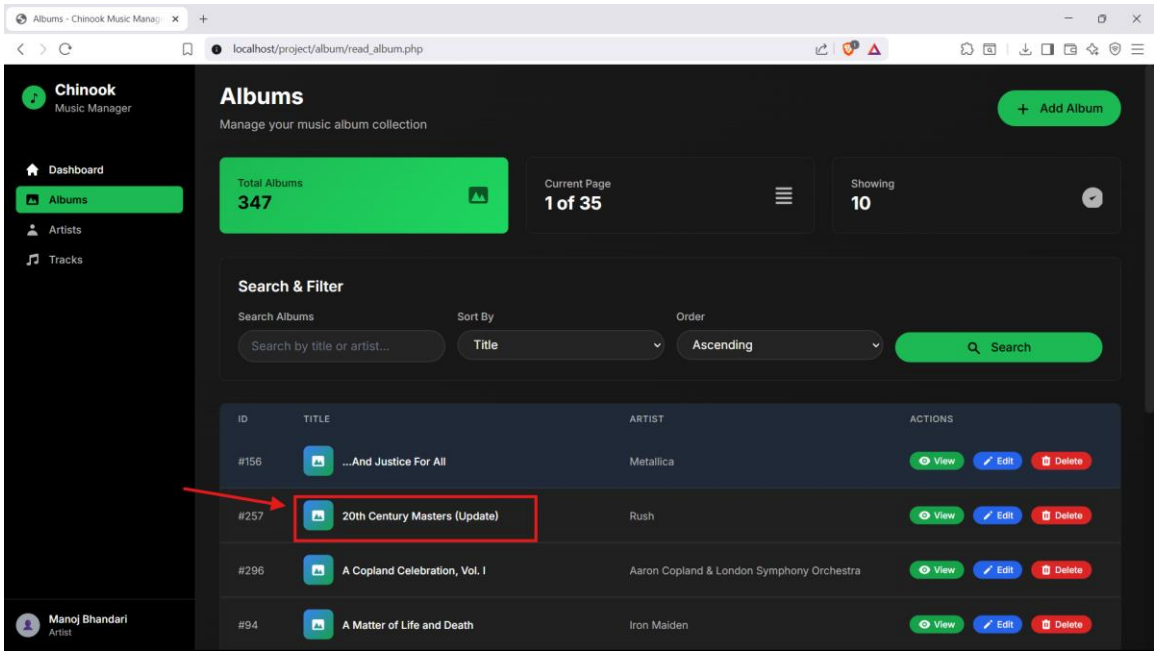

Figure 18:Verification

3.10. Deleting Albums

The Chinook Album Manager allows you to remove albums from your collection, along with all their associated tracks. **Please note: This action is permanent and cannot be undone.**

Initiating Deletion (Figure 19): From the main "Albums" list, locate the album you wish to delete and click the red "Delete" button in the "Actions" column.

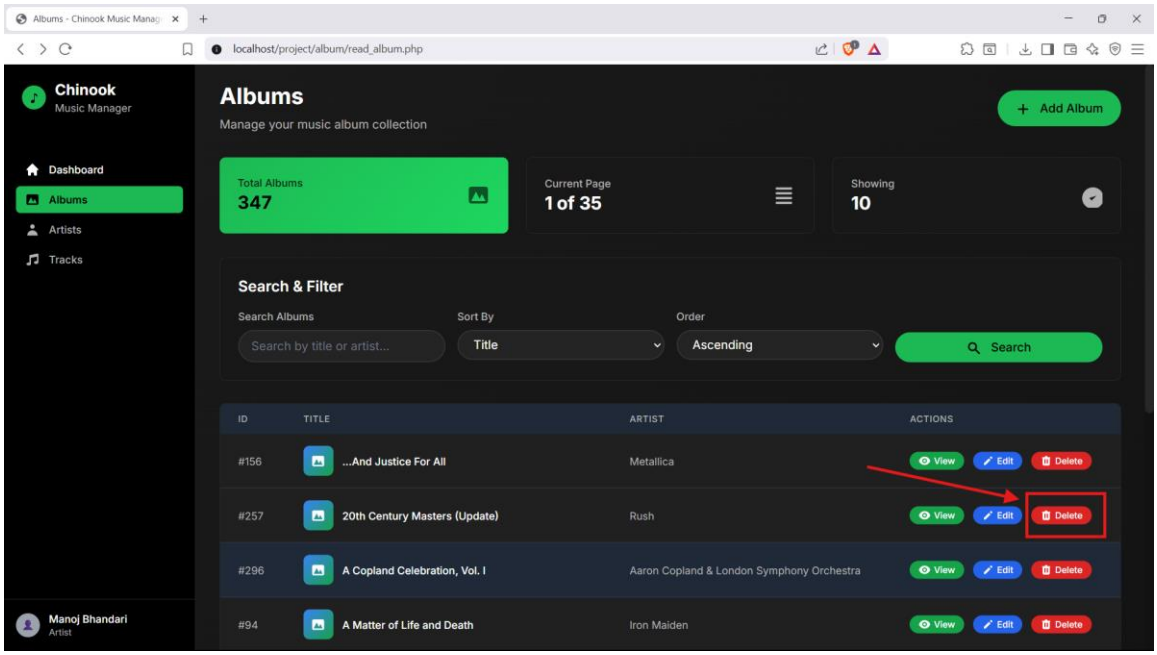

Figure 19:Initiating Deletion

Confirmation Prompt (Figures 20 & 21):

- You will first be redirected to a "Delete Album" confirmation page (Figure 20). This page displays the album's name and ID, along with a warning that all associated tracks will also be deleted.
- Clicking the red "Delete Album" button on this page will trigger a final browser-level confirmation pop-up (Figure 21). This second prompt ensures you are fully aware of the irreversible nature of the deletion.

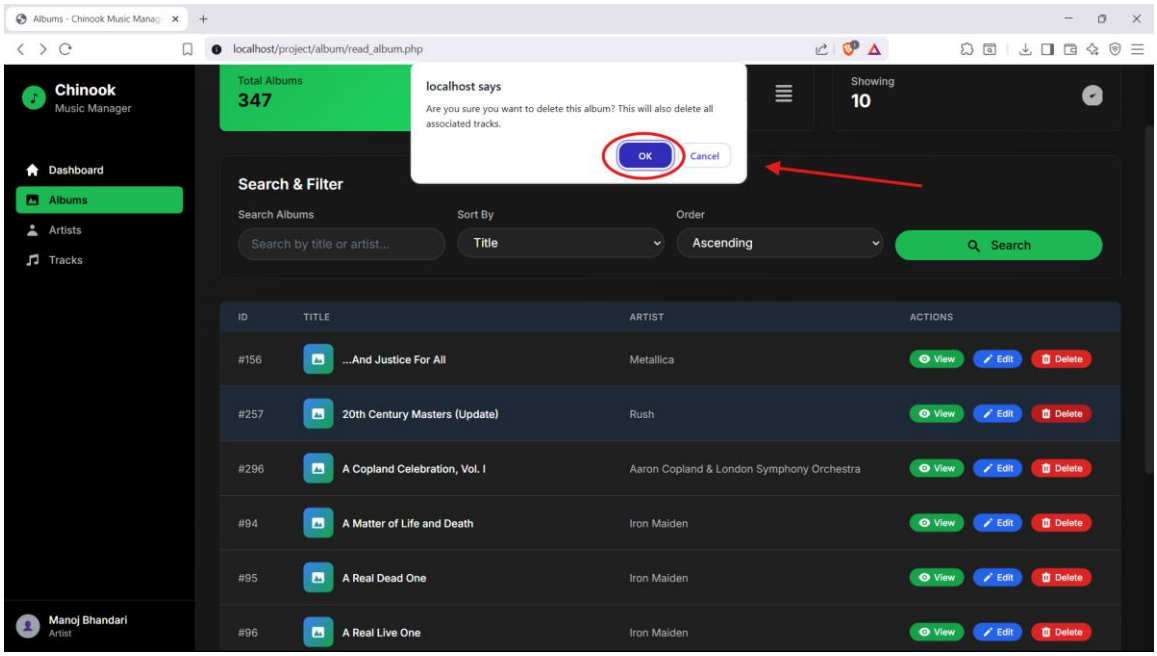

Figure 20:Confirmation

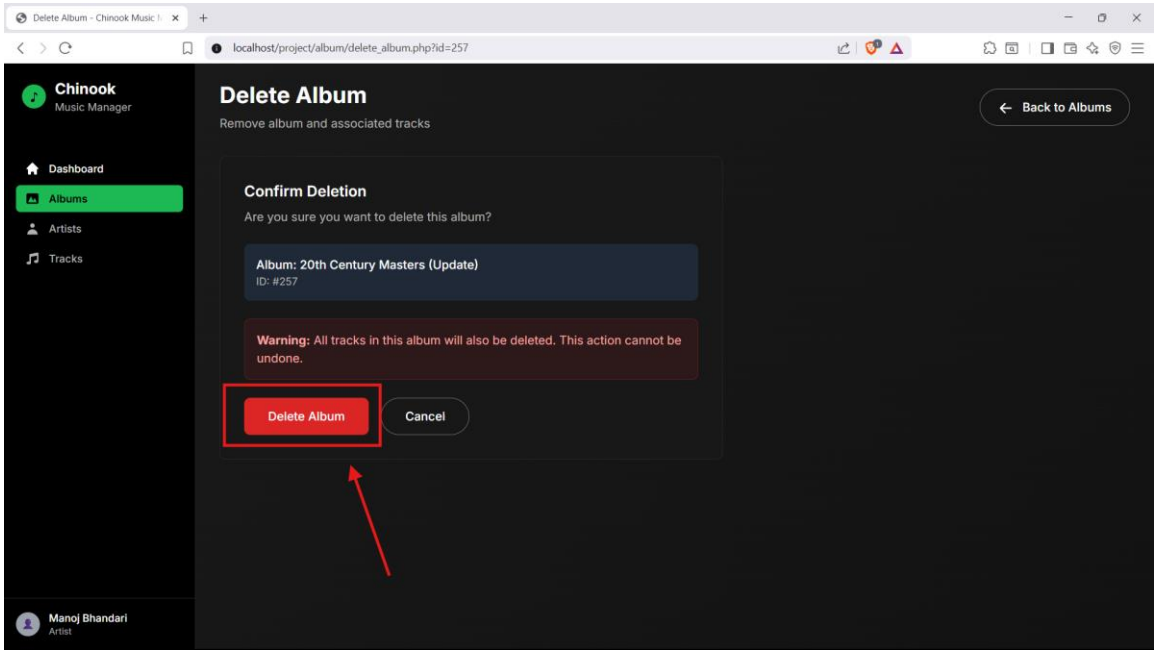

Figure 21:Delete album

Confirming Deletion: To proceed with the deletion, click "OK" on the browser confirmation pop-up. If you change your mind, click "Cancel" at either stage.

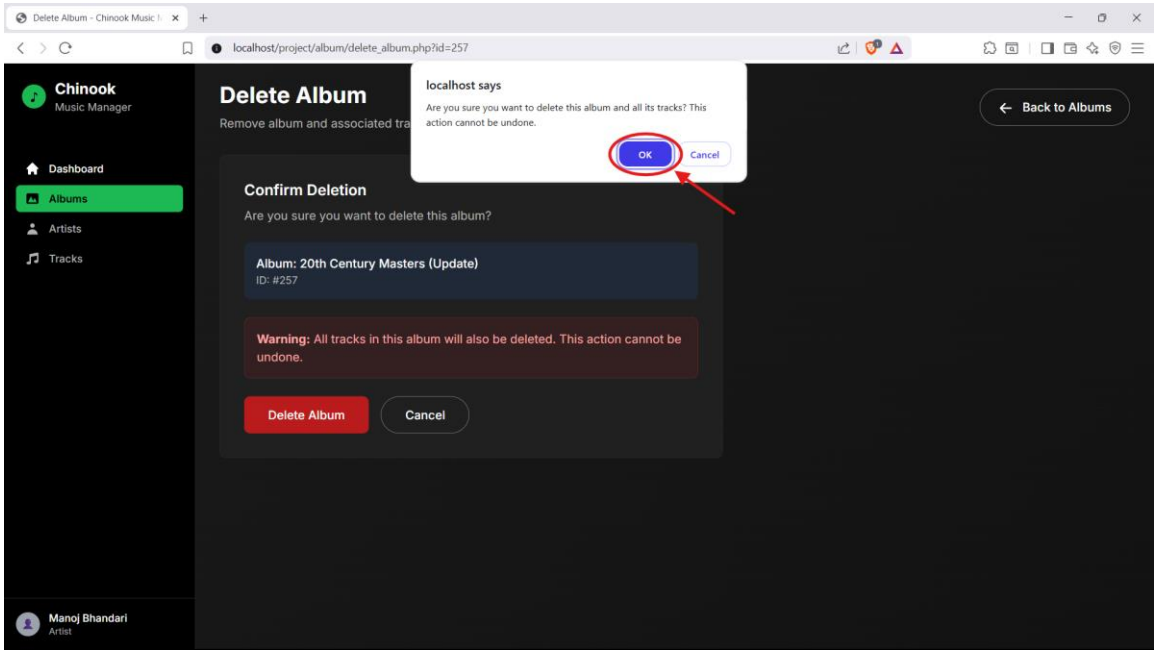

Figure 22:Confirmation

Deletion Success (Figure 23): Upon successful deletion, you will be redirected back to the "Albums" list. A green success message will appear at the top of the page, confirming that the album has been deleted. You will also notice that the "Total Albums" count has been updated, and the deleted album no longer appears in the list.

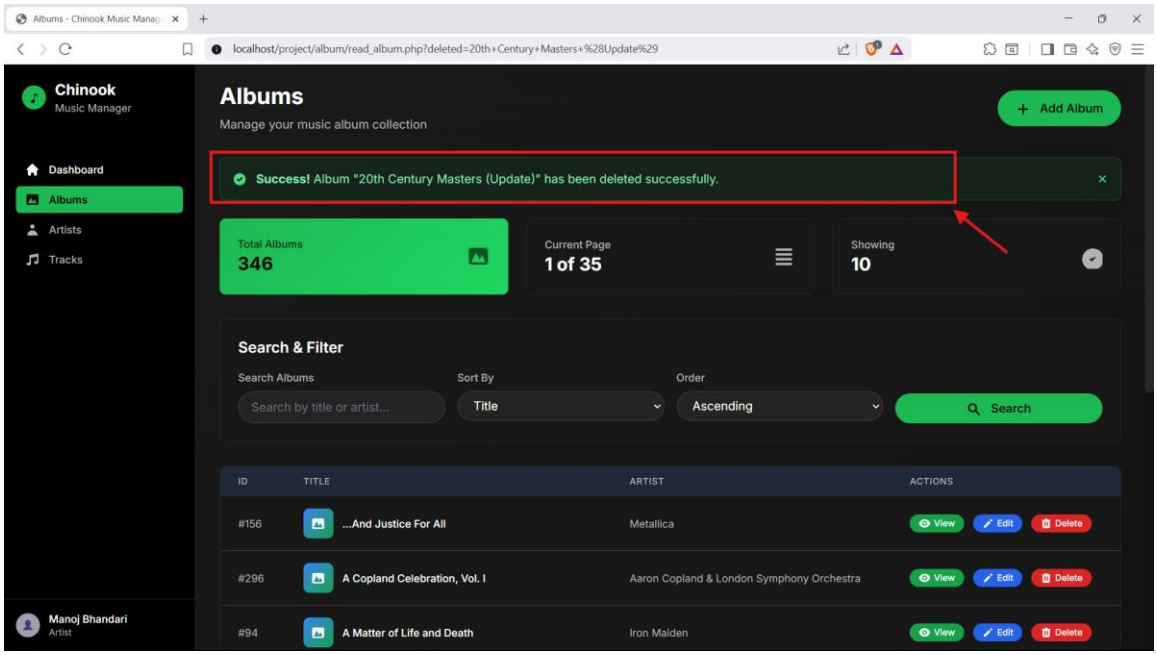

Figure 23:Deletion Success

3.11. Creating New Albums

The Chinook Album Manager allows you to easily add new albums to your music collection, including their titles, artists, and associated tracks.

Accessing the Add Album Page (Figure 24): From the main "Albums" list, click the green "Add Album" button located at the top right of the page. This will take you to the "Add New Album" form (Figure 25).

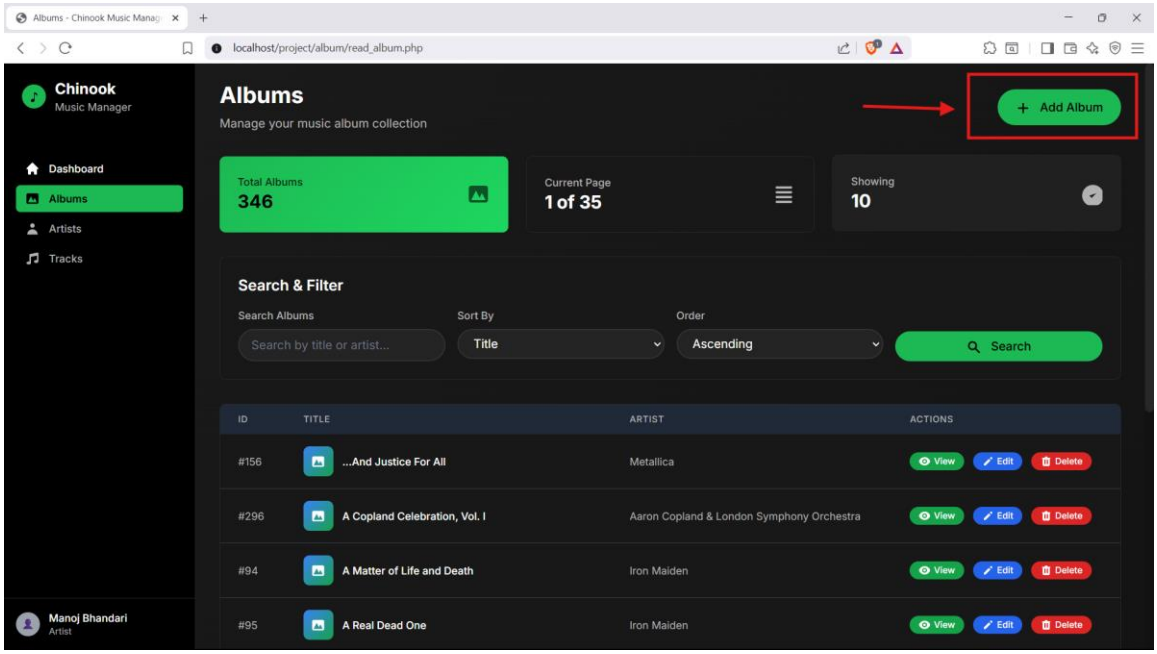

Figure 24:clicking add albums

Entering Album Information (Figure 25):

- **Album Title:** Enter the full name of the new album in the "Album Title" field.
- **Artist:** You have two options for assigning an artist:
  - **Select Existing Artist:** Choose an artist from the "Select an Artist" dropdown menu.
  - **Add New Artist:** If the artist is not listed, you can enter their name in the "Enter new artist name..." field.
- **Adding Tracks:** Enter the title of each track in the "Track Title" fields. Click "Add Another Track" to add more input fields for additional songs.

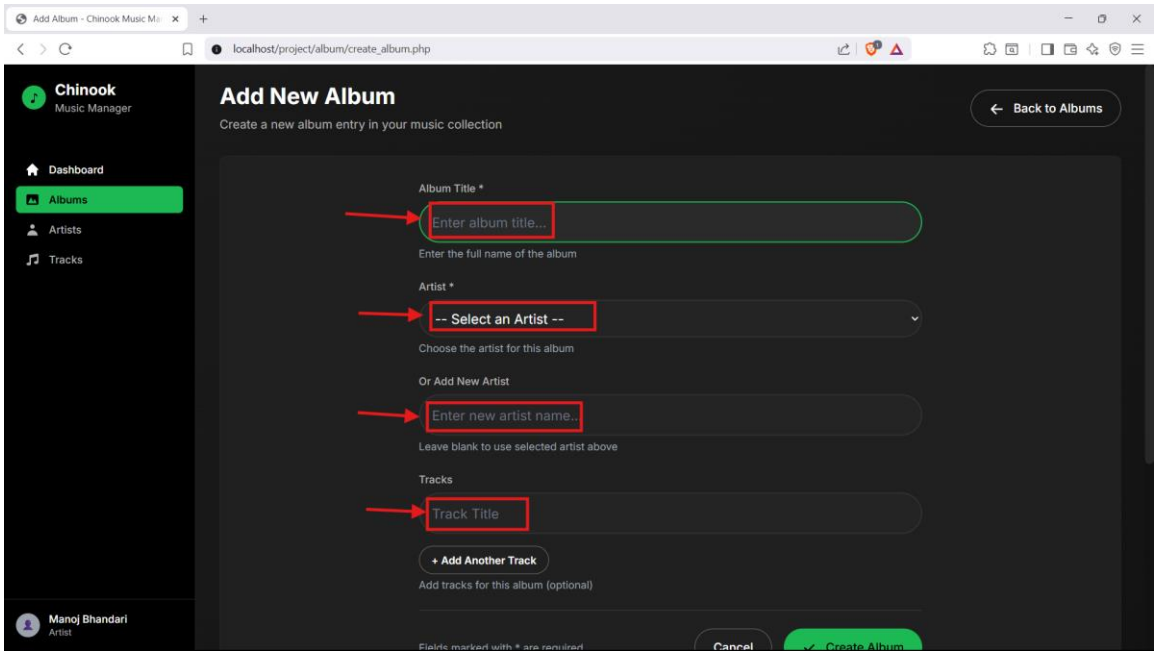

Figure 25:Empty field where user need to add details

Creating the Album (Figure 26): Once you have filled in all the required information, click the green "Create Album" button at the bottom of the form.

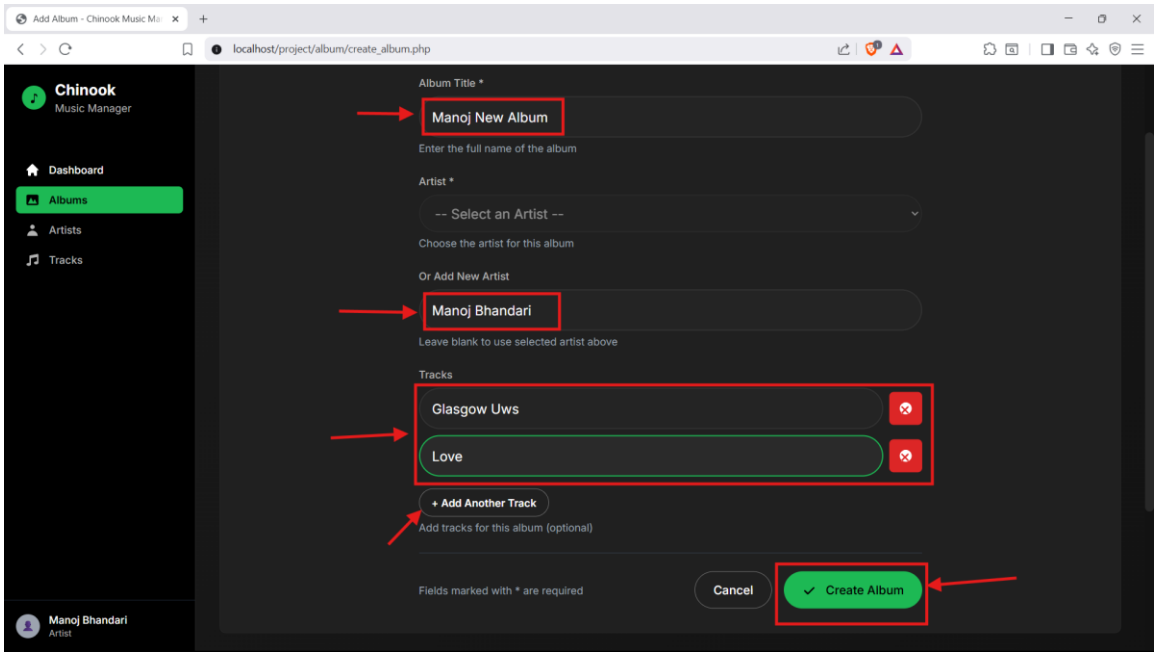

Figure 26:Entering the user details

Success Confirmation (Figure 27): A green success message will appear at the top of the "Albums" list, confirming that your new album was created successfully (e.g., "Success! Album "Manoj New Album" was created successfully.").

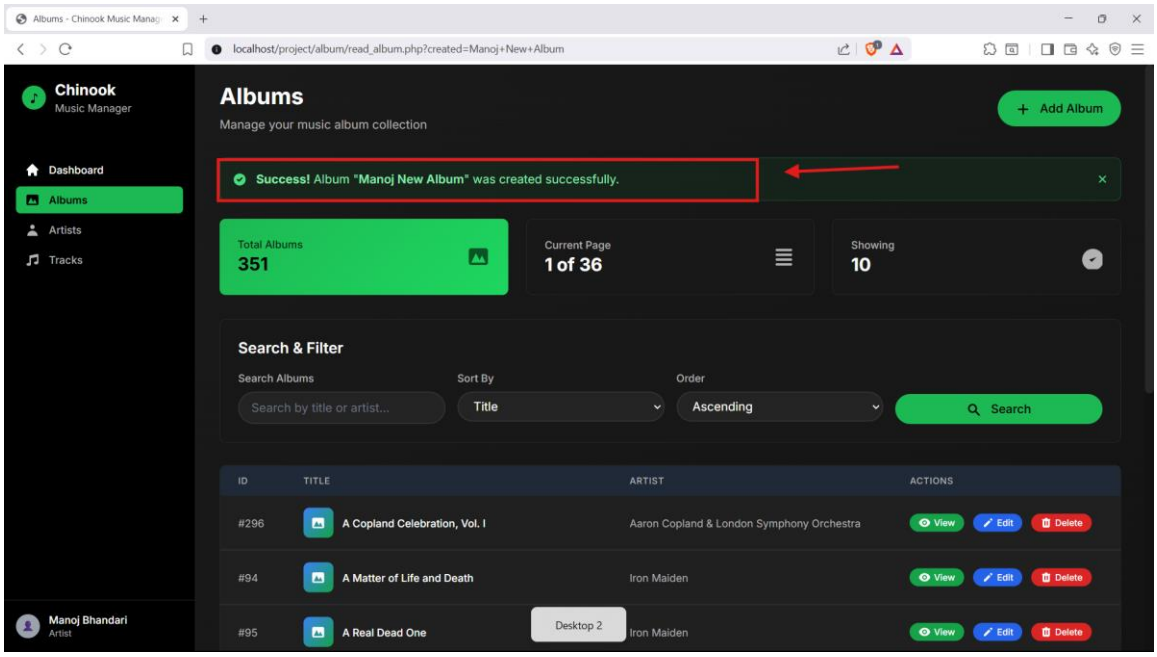

Figure 27:Success Confirmation

Verification (Figure 28): You can verify that the album has been added by looking for it in the "Albums" list. The "Total Albums" count will also increase to reflect the new addition. You can also use the "Search Albums" feature to quickly find your newly added album.

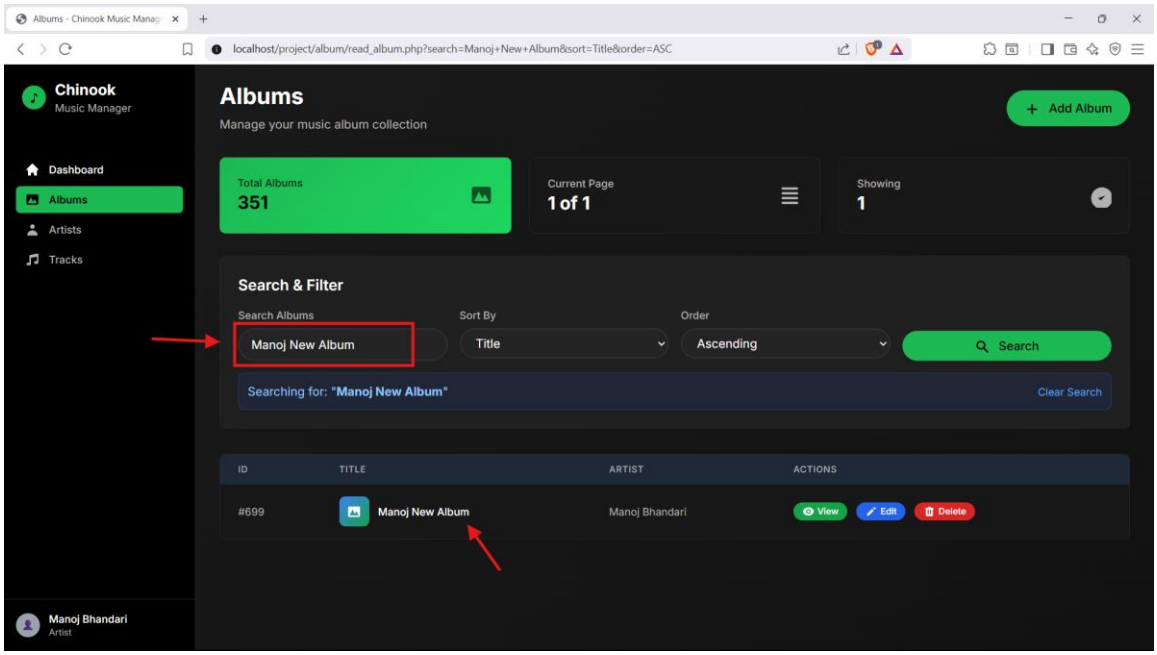

Figure 28:Verification

This process ensures that your music collection remains comprehensive and up-to-date.

Figure 23: Clicking "Add Album" from the Albums list.
Figure 24: The "Add New Album" form.
Figure 25: Entering new album details and tracks.
Figure 26: Clicking "Create Album" to save.
Figure 27: Success message after album creation.
Figure 28: Verifying the newly created album in the list.

3.12. Managing Artists

The Chinook Album Manager also allows you to view and manage artists associated with your music collection.

Accessing the Artists List (Figure 29): You can access the "Artists" management page by clicking on "Artists" in the left-hand navigation sidebar (or from the "Manage Artists" Quick Action on the Home page).

Total Artists – Shows the total count of artists in the system.

Pagination & Showing – Indicates the current page and controls how many artists are displayed per page.

Search & Filter – Search by name, sort by ID or name, and choose ascending or descending order.

Search Button – Applies the selected search and filter options.

Add Artist – Button at the top right to add a new artist to the collection.

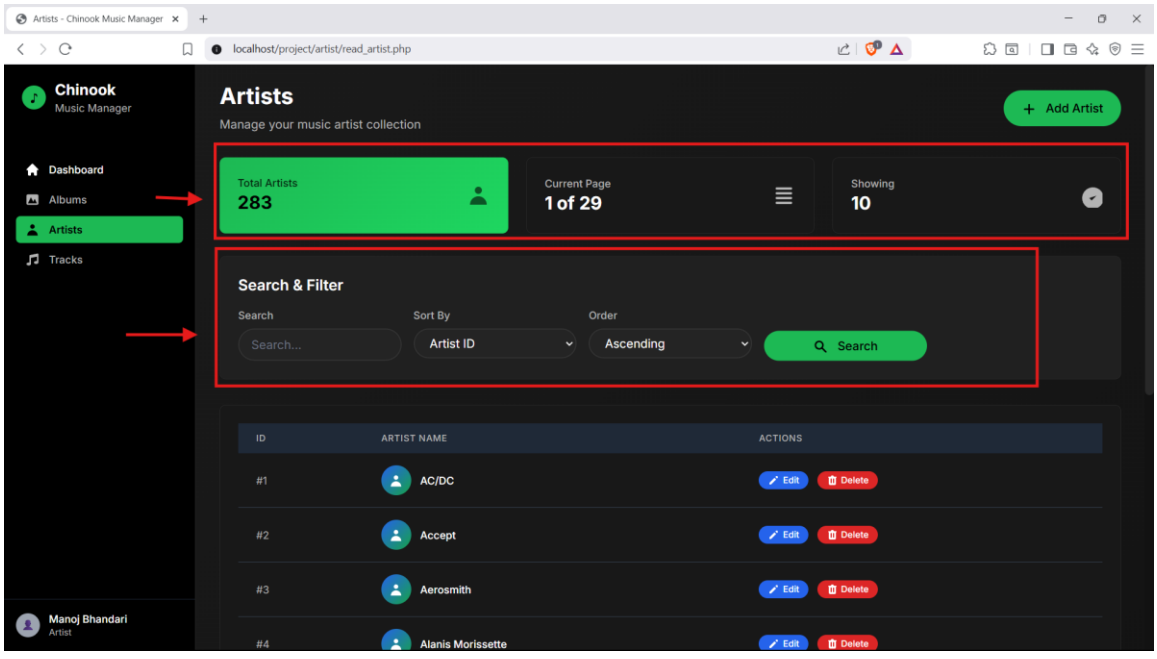

Figure 29:Accessing the artist list

- **Artists Table (Figure 30):** The main part of the page lists all artists with the following columns:
    - **ID:** The unique identifier for each artist.
    - **Artist Name:** The name of the artist.
    - **Actions:** For each artist, you have options to:
        - **Edit:** Modify the artist's information.
        - **Delete:** Remove the artist from the system. (Note: Deleting an artist may affect associated albums; proceed with caution.)

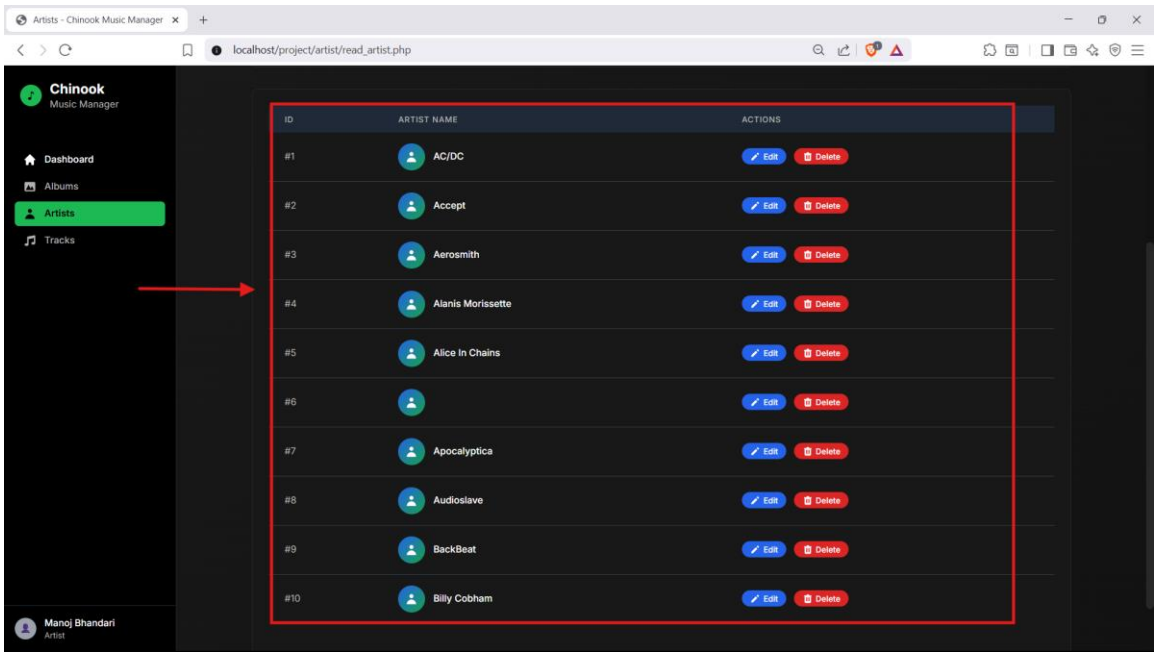

Figure 30:Artist table

3.13. Creating New Artists

The Chinook Album Manager allows you to easily add new artists to your music collection. This is useful when you have albums by artists not yet present in your database.

Accessing the Add Artist Page (Figure 31): From the "Artists" management page, click the green "Add Artist" button located at the top right of the page. This will take you to the "Add New Artist" form (Figure 32).

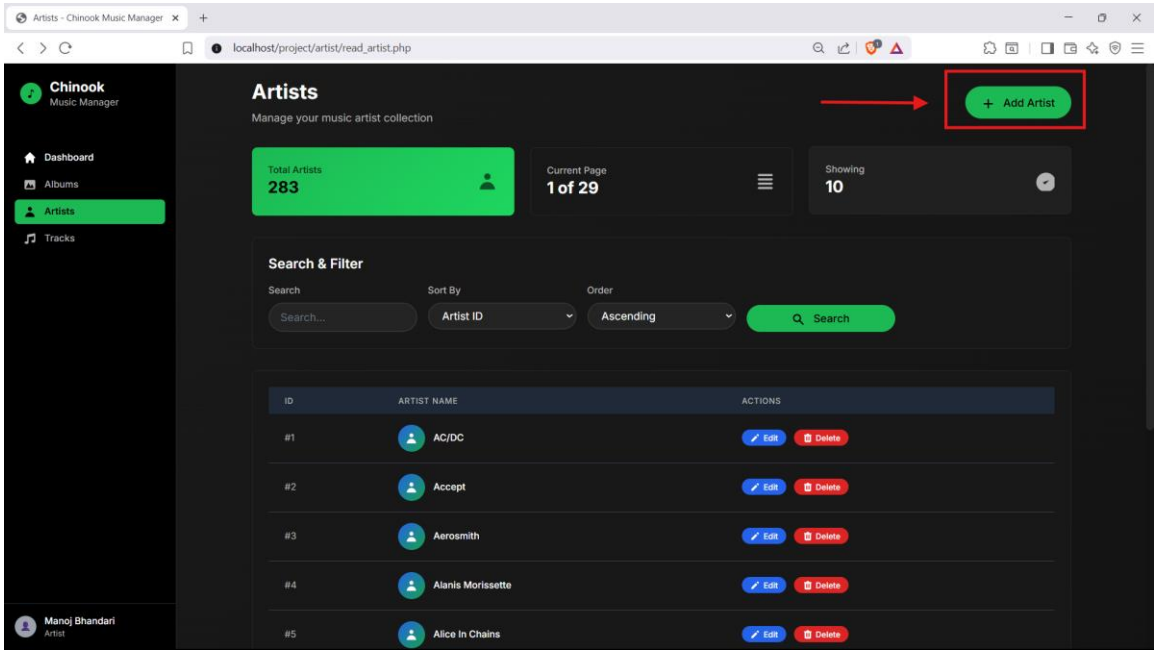

Figure 31:Adding Artist

Entering Artist Information (Figure 33):

- **Artist Name:** Enter the full name of the new artist in the "Artist Name" field. This will be the display name for the artist throughout the application.

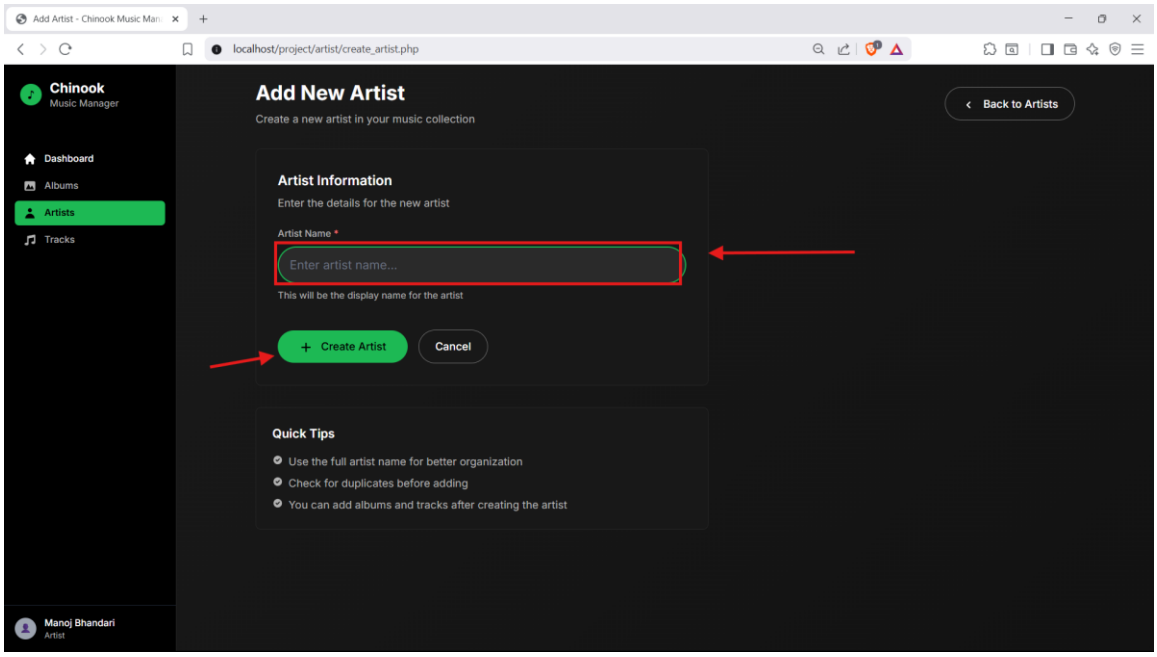

Figure 32:Entering artist

Creating the Artist: Once you have entered the artist's name, click the green "Create Artist" button at the bottom of the form

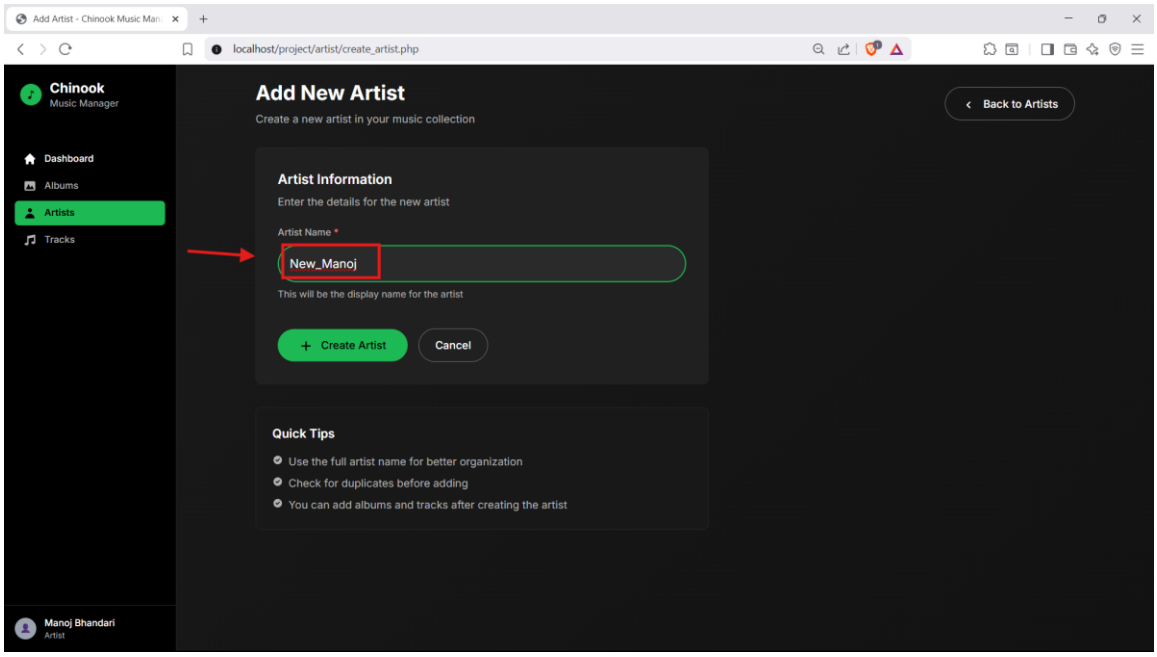

Figure 33:creating artist

Success Confirmation (Figure 34): A green success message will appear at the top of the "Artists" list, confirming that your new artist was created successfully (e.g., "Success! Artist "New_Manoj" was created successfully.").

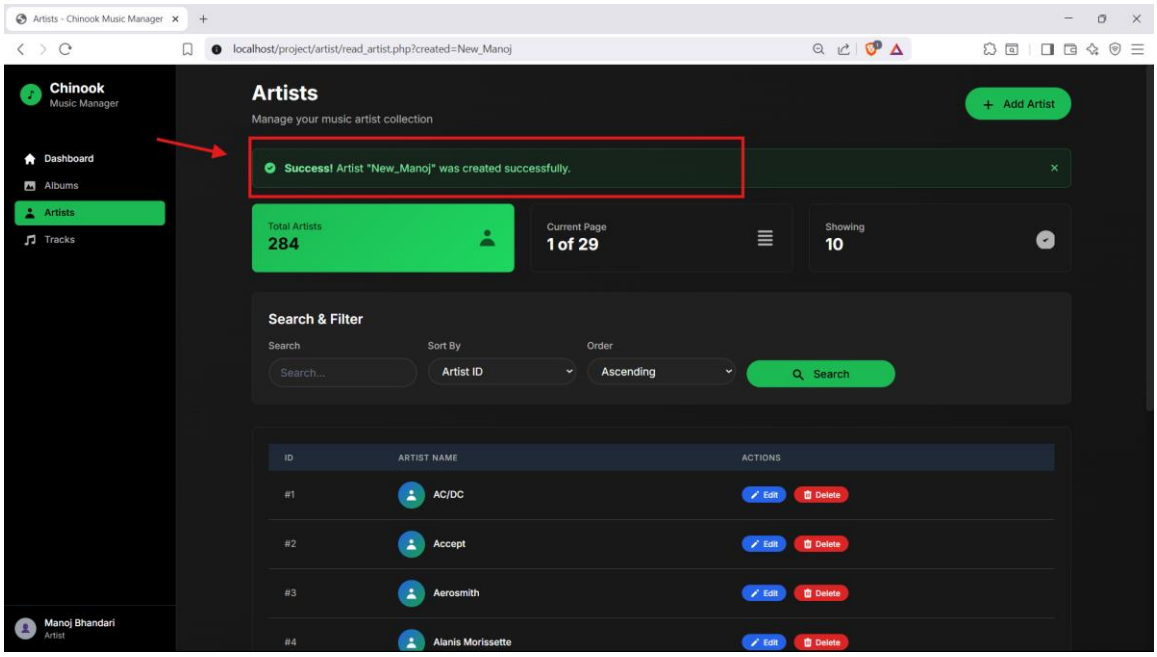

Figure 34:Success Confirmation

Verification (Figure 35): You can verify that the artist has been added by looking for them in the "Artists" list. The "Total Artists" count will also increase to reflect the new addition. You can also use the "Search & Filter" feature to quickly find your newly added artist by searching for their name (Figure 35).

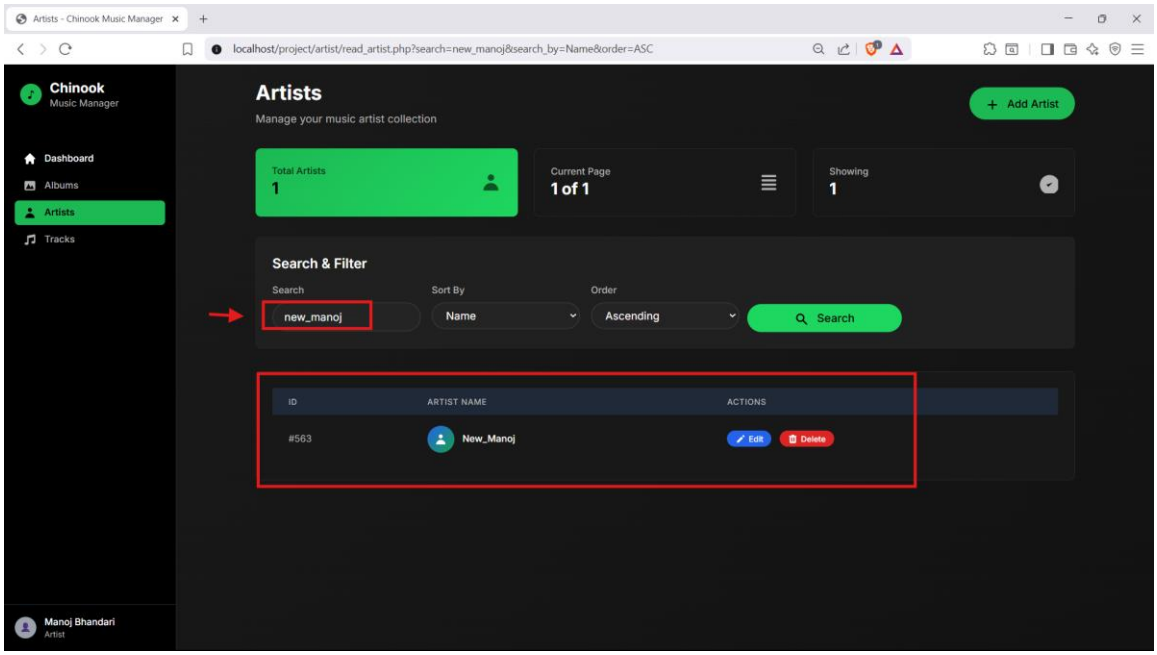

Figure 35:Verificattion of artist

3.14. Searching and Filtering Artists

Like albums, the "Search & Filter" section on the Artists page (Figures 36 & 37) allows you to efficiently locate specific artists.

- **Searching:** Enter a keyword (e.g., artist's name) into the "Search" field (Figure 37).
- **Sorting:** Use the "Sort By" dropdown to choose how the results are ordered. You can sort by "Name" or "Artist ID" (Figure 36).
- **Ordering:** Select "Ascending" or "Descending" from the "Order" dropdown to specify the sort direction.
- **Applying Filters:** After entering your search term and selecting your sort/order preferences, click the "Search" button to apply the filters and update the artist list. To clear your search, click "Clear Search."

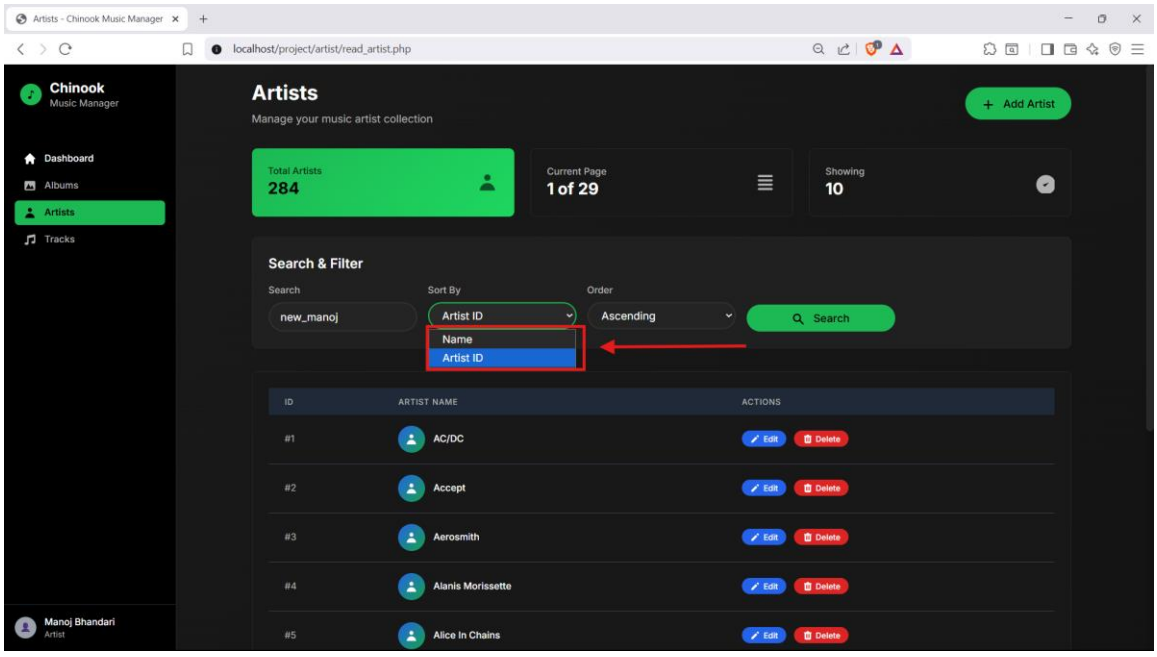

Figure 36:Filtering

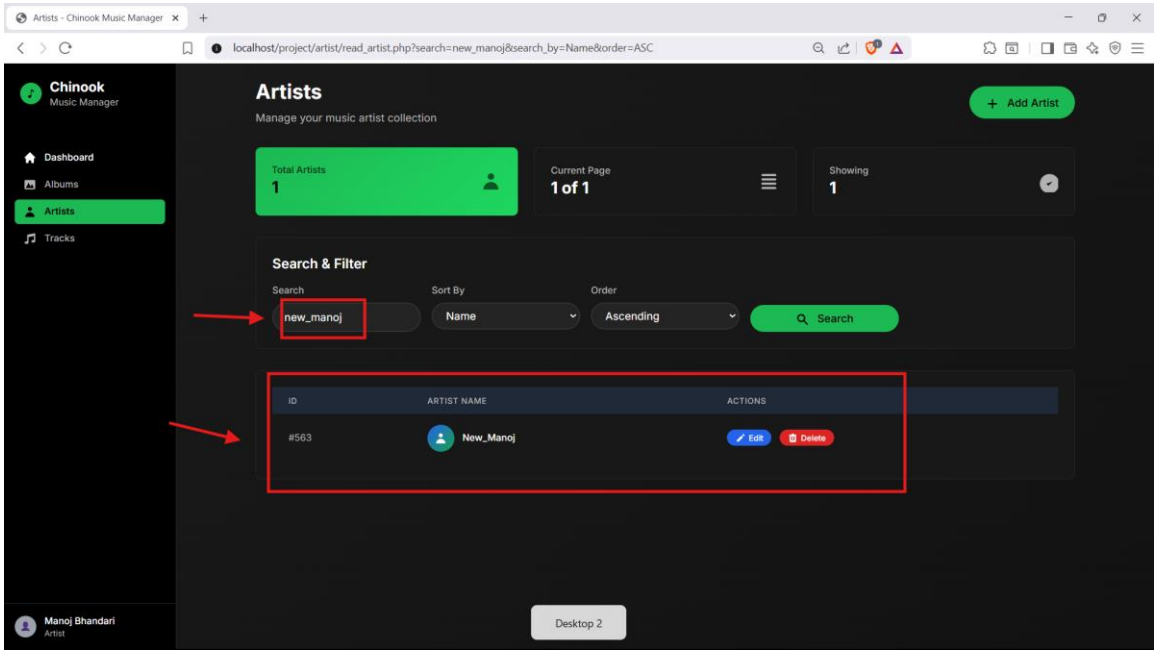

Figure 37:Filtering the artists

3.15. Editing Artists

The Chinook Album Manager allows you to easily update existing artist information.

Accessing the Edit Artist Page (Figure 38): From the "Artists" management page, locate the artist you wish to modify and click the blue "Edit" button in the "Actions" column. This will take you to the "Edit Artist" form (Figure 39).

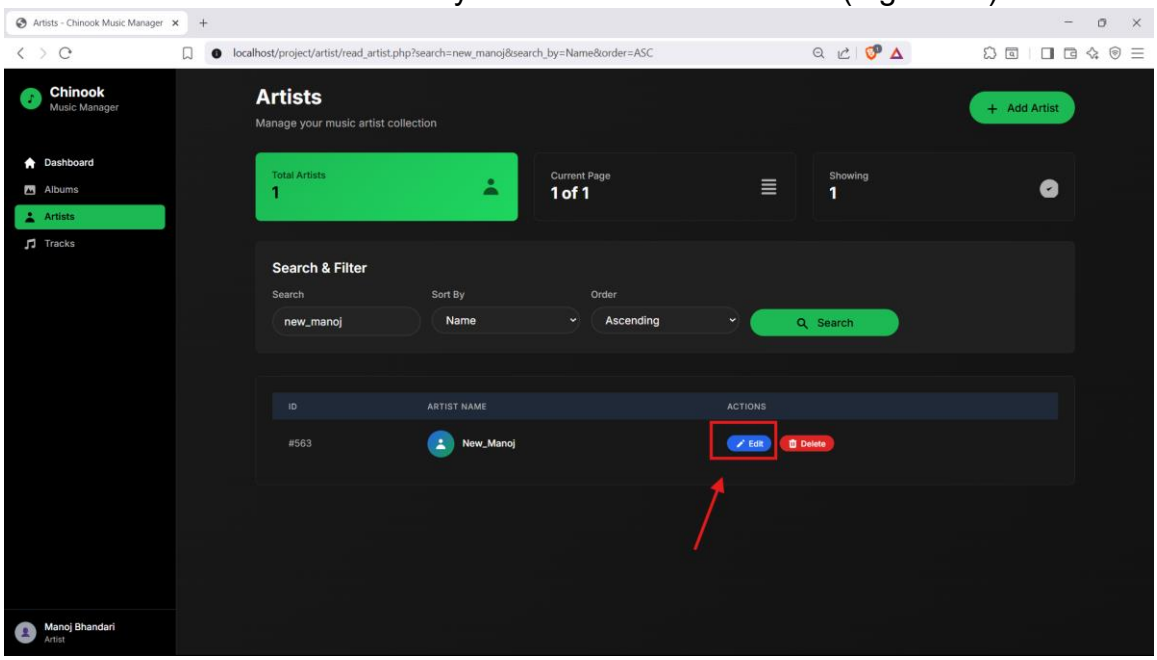

Figure 38:Accesing the edit

Updating Artist Information (Figure 39):

- **Artist Name:** Modify the artist's name by typing into the "Artist Name" field. This is the primary piece of information you can change for an artist.
- **Important Notice:** Please read the "Important Notice" at the bottom of the page (Figure 39). Updating an artist's name will reflect across all associated albums and tracks throughout the system.

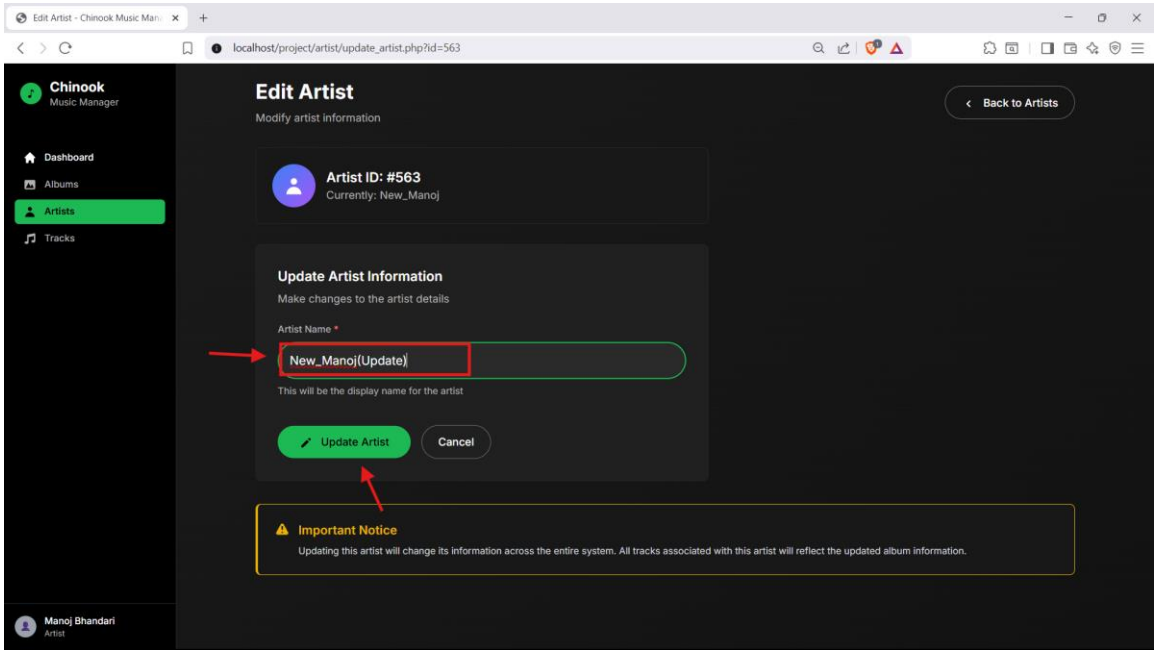

Figure 39:Updating artist information

Saving Changes (Figure 40): Once you have made your desired modifications, click the green "Update Artist" button to save your changes. A green success message ("Artist updated successfully!") will appear at the top of the page, confirming the update.

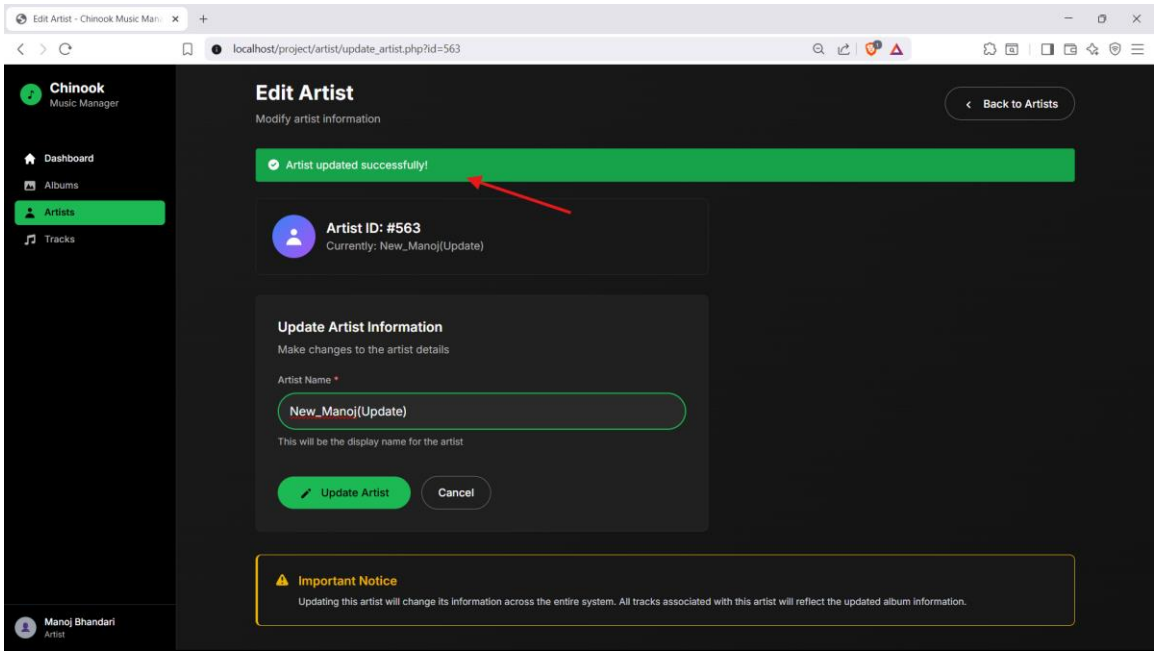

Figure 40:Update Sucess

Verification (Figure 41): After a successful update, you will be redirected back to the "Artists" list. You will see that the artist's name has been updated to reflect your changes (e.g., "New_Manoj(Update)" in Figure 41).

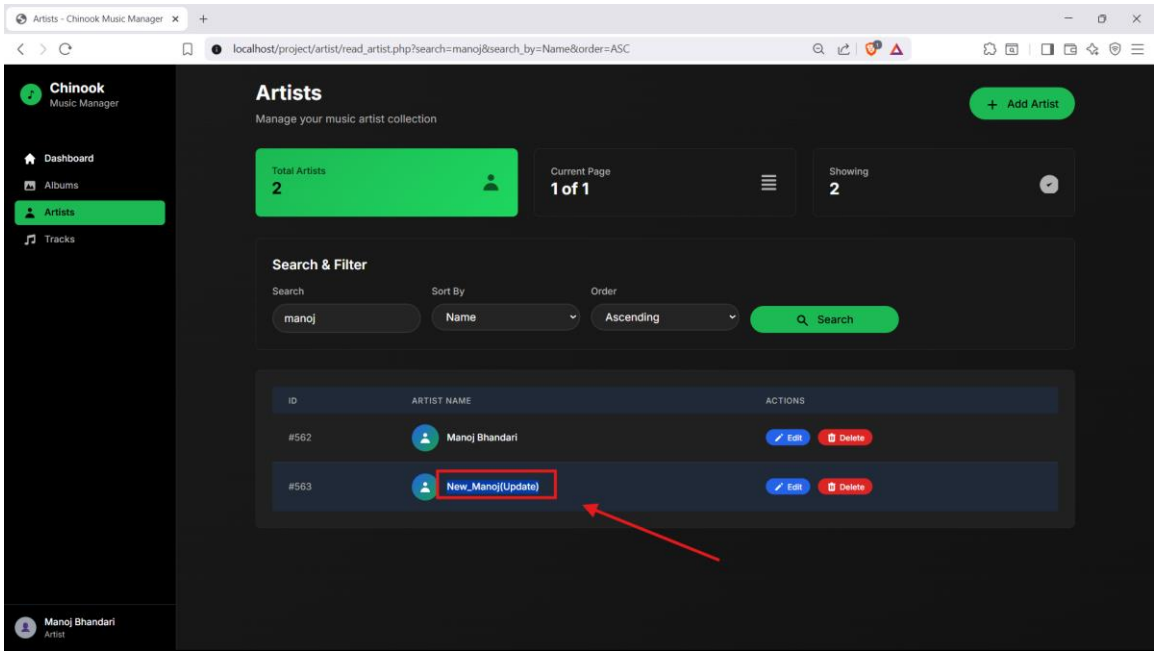

Figure 41:Verification of update

3.16. Deleting Artists

The Chinook Album Manager allows you to remove artists from your collection.

Initiating Deletion (Figure 42): From the "Artists" management page, locate the artist you wish to delete and click the red "Delete" button in the "Actions" column.

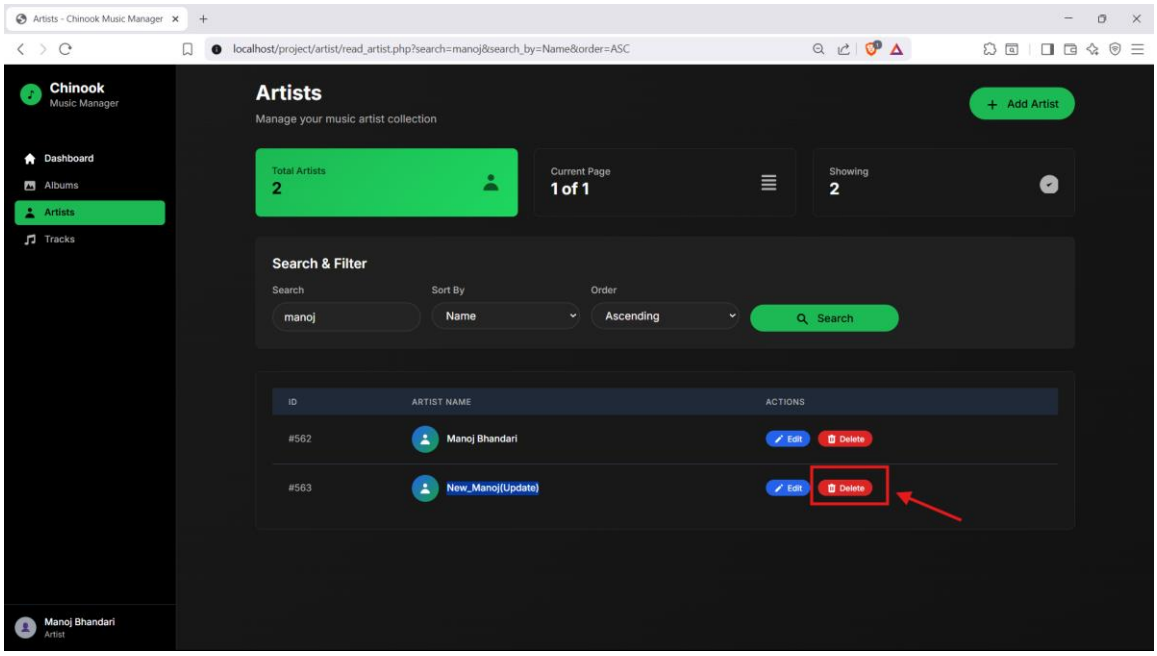

Figure 42:Initiating Deletion

Confirmation Prompt (Figures 43 & 44):

- You will first be redirected to a "Delete Artist" confirmation page (Figure 43). This page displays the artist's name and ID, along with a critical warning that this action is irreversible and may delete associated albums and tracks.
- Clicking the red "Delete Artist" button on this page will trigger a final browser-level confirmation pop-up (Figure 44). This second prompt ensures you are fully aware of the impact of the deletion.

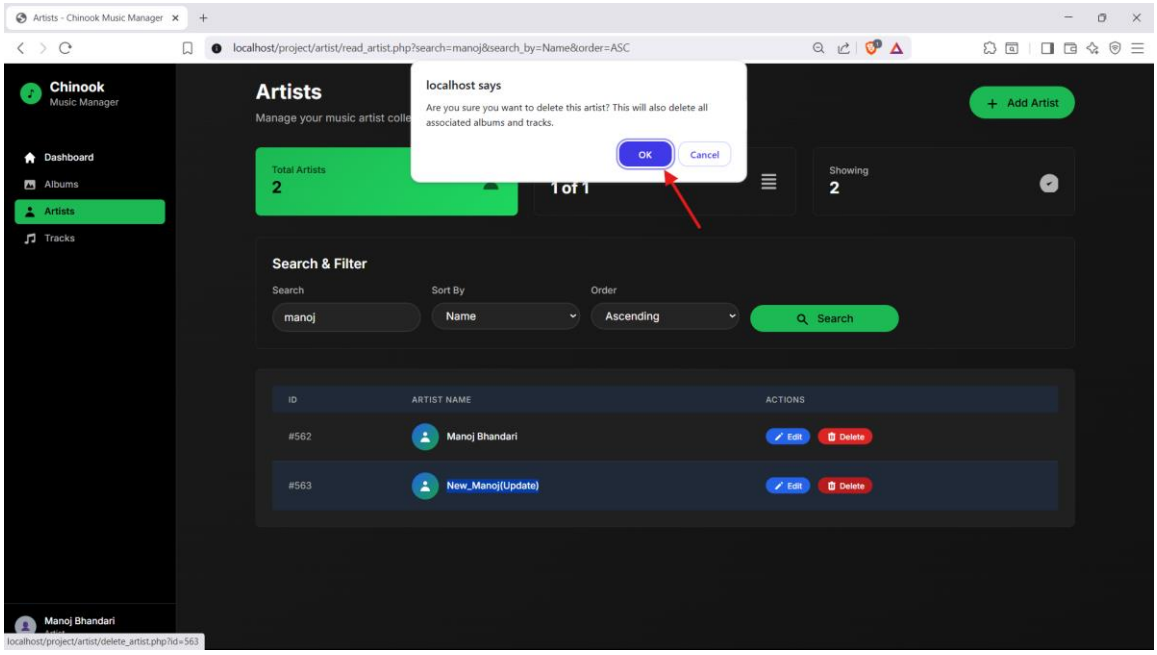

Figure 43:Confirmation

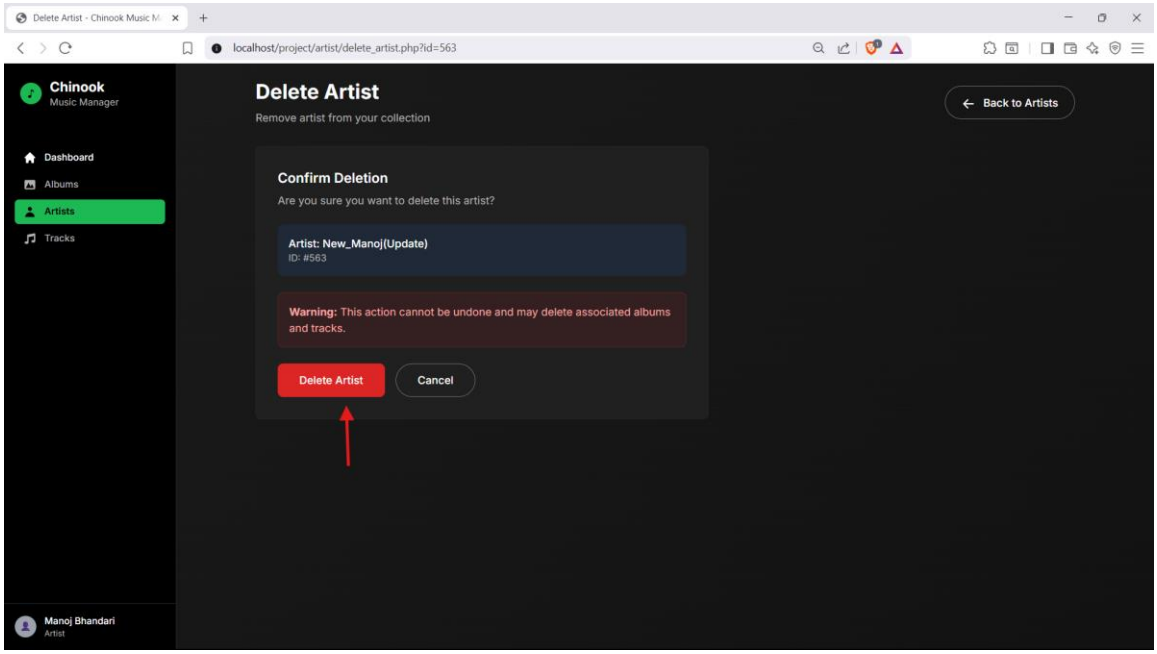

Figure 44:Clicking Delete Artist

Confirming Deletion: To proceed with the deletion, click "OK" on the browser confirmation pop-up. If you change your mind, click "Cancel" at either stage.

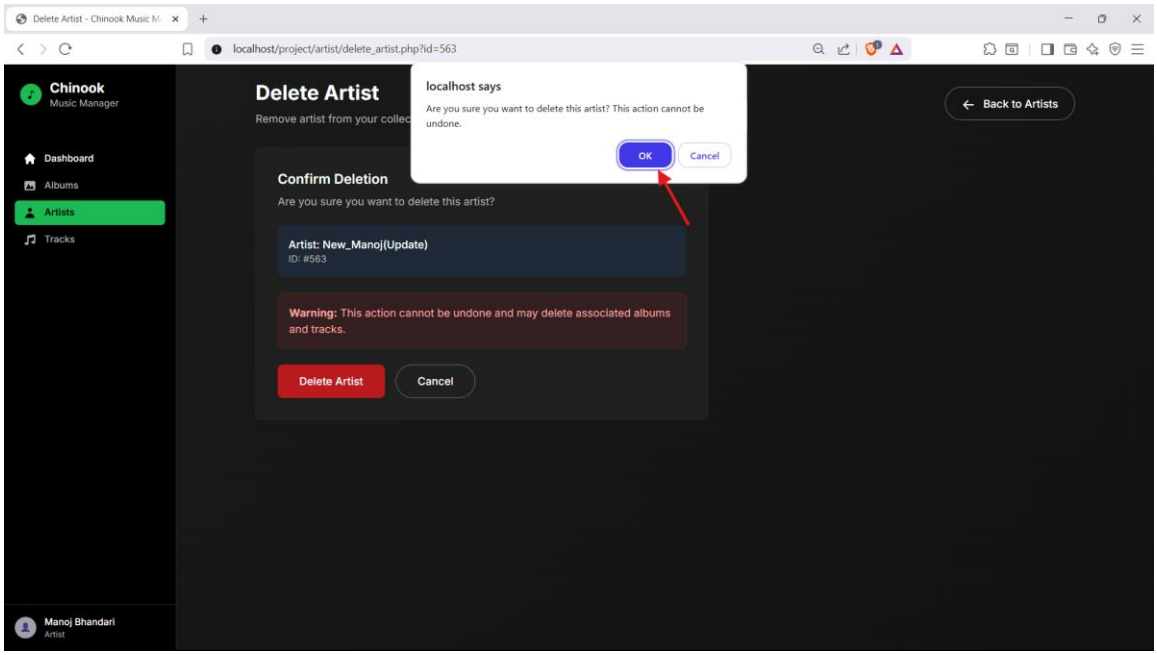

Figure 45:Confirmation

Deletion Success (Figure 45): Upon successful deletion, you will be redirected back to the "Artists" list. A green success message will appear at the top of the page, confirming that the artist has been deleted (e.g., "Success! Artist "New_Manoj(Update)" has been deleted successfully."). You will also notice that the "Total Artists" count has been updated, and the deleted artist no longer appears in the list

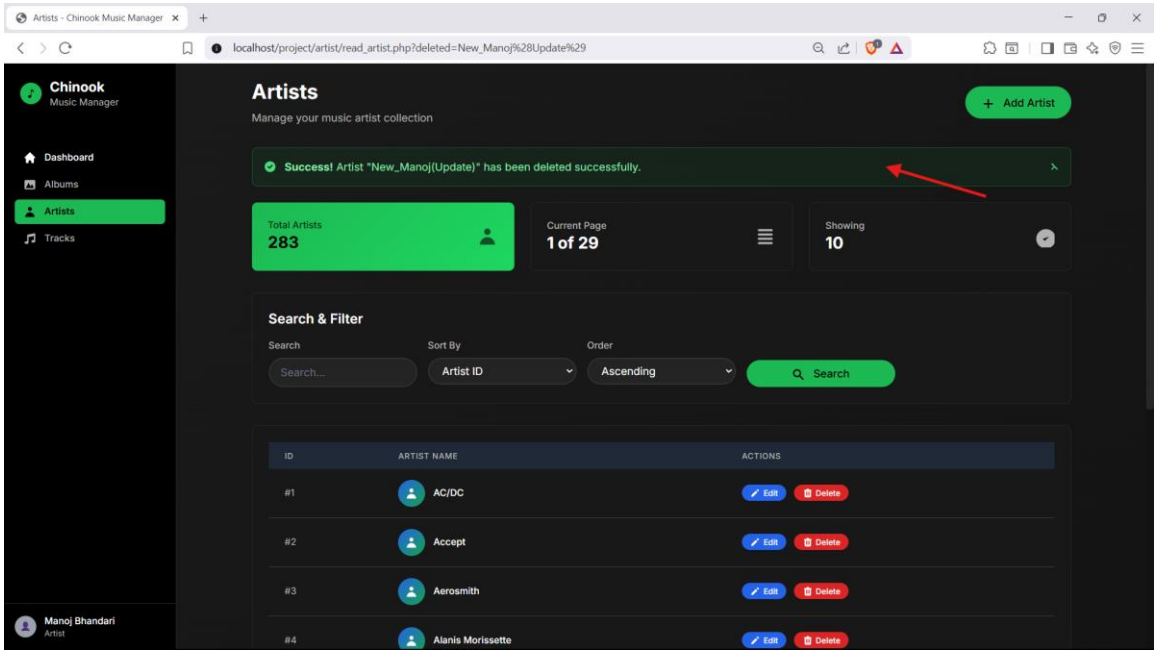

Figure 46:Delete Sucess

3.17 Managing Tracks

The Chinook Album Manager provides a dedicated section to view, search, and manage individual music tracks.

Accessing the Tracks List (Figure 47): You can access the "Tracks" management page by clicking on "Tracks" in the left-hand navigation sidebar (or from the "View Tracks" Quick Action on the Home page).

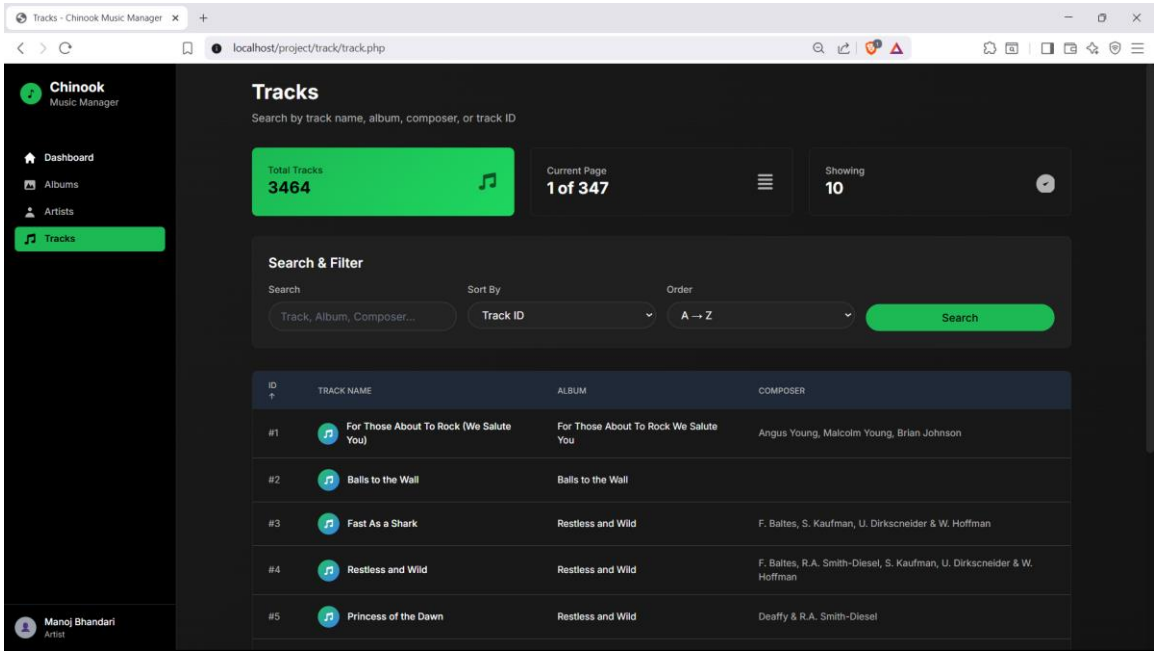

Figure 47:Accessing tracks

Tracks Page Overview (Figure 48): This page provides an overview of all tracks in your collection and tools to find specific ones.

- **Total Tracks** – Displays the full number of tracks in your library.
- **Pagination & Showing** – Shows your current page and lets you choose how many tracks appear per page.
- **Search & Filter** – Search by track name, album, composer, or ID.
- **Sort By** – Organize results by Track ID, Name, Album, or Composer.
- **Order** – Choose ascending (A–Z) or descending (Z–A) order.
- **Search Button** – Click to apply your selected search and sort options.

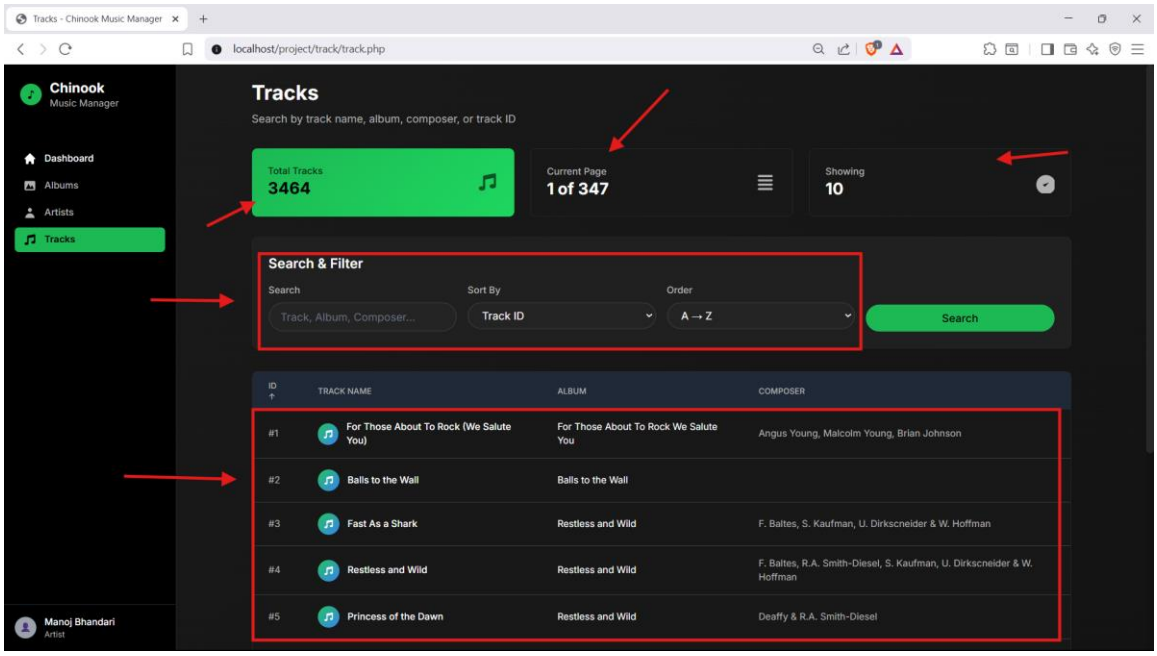

Figure 48:Tracks page overview

Tracks Table (Figure 49): The main part of the page lists all tracks with the following columns:

- **ID:** The unique identifier for each track.
- **Track Name:** The title of the song.
- **Album:** The album the track belongs to.
- **Composer:** The composer(s) of the track.

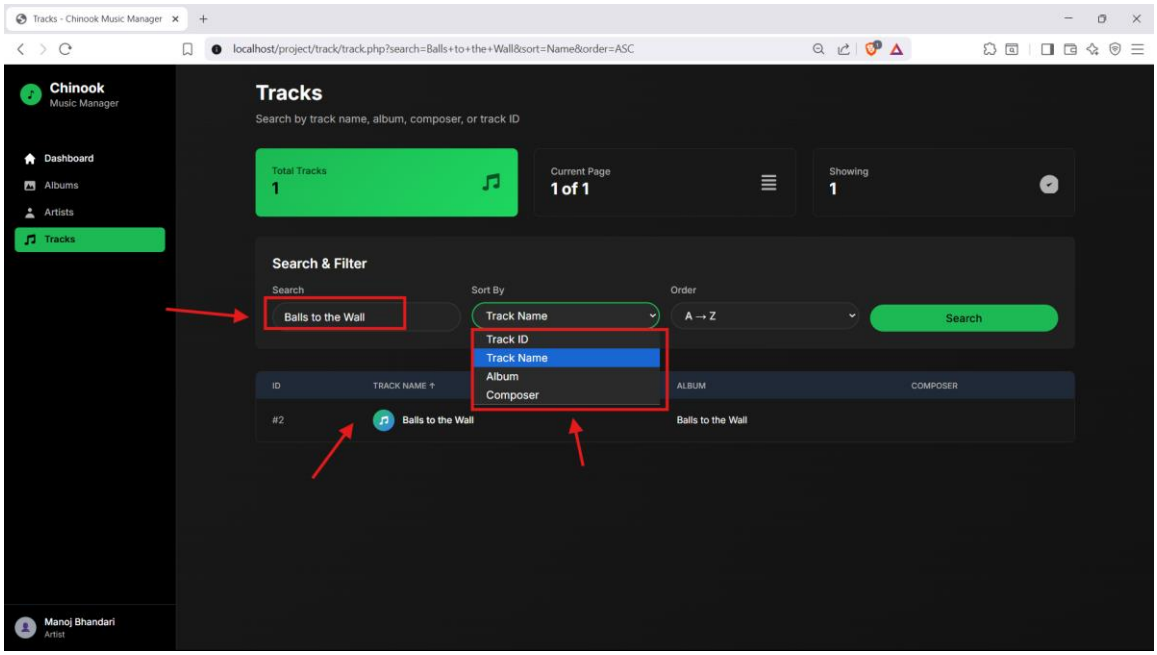

Figure 49:Track table

4. Conclusion

The Chinook Album Manager provides a comprehensive and user-friendly platform for managing Chinook's extensive music collection. This manual has guided you through its core functionalities, including:

Album Management: You can easily view, search, filter, add new albums, edit existing album details and their tracks, and delete albums from the system.

Artist Management: The application enables you to view, search, filter, add new artists, edit artist names, and delete artists from the database.

Track Viewing and Searching: You can efficiently browse and search through all individual tracks within the system.

By utilizing the features outlined in this manual, Chinook employees can effectively manage the music catalog, ensuring data accuracy and accessibility.