**Usage instructions for Spotify Streaming data management Application**

The Spotify Streaming Data Management Application is an advanced application set up to help customers in collecting and analysing their Spotify listening habits. Users can save and manage information about their experiences with the Spotify platform with this app, including the songs, playlists, artists, and other data they have listened to or used in various ways.

1. A screenshot of a computer menu

   Description automatically generatedStarting from the Main Menu, we'll explore the Application’s Features, uncovering a range of dynamic functionalities and capabilities.
   1. The first option, "Manage Users," enables users to perform functions such as adding or removing users.
   2. The second option, "Find Albums and Artists by Genre," facilitates the exploration of albums and artists based on music genres.
   3. The third option, "Display Song History," allows users to view the history of songs played by users.
   4. The final option is "Exit," allowing users to exit the application.
2. **Managing User Data (First Choice)**

If you want to find the data about the users, click on the first choice

* 1. Ensure the interface presents options as follows:

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* 1. A blue background with white squares and arrows

     Description automatically generatedYou can navigate through user records using the next or previous record buttons to view detailed user information.
  2. To save or delete records, utilize the respective buttons:

The left button adds a new record.

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Description automatically generatedThe right button deletes the selected user.

1. **A screenshot of a computer

   Description automatically generatedFinding Albums Based on Genre (Second Choice)**
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      Description automatically generatedUtilize the dropdown list to select the desired music genre.
   2. Click the "Refresh" button to reload data.
   3. The application includes a "Print Report" button for a detailed report. Remember to click "Refresh All" to reload if you seek different information.
2. A blue and white rectangular object with a white rectangle

   Description automatically generated **Displaying User's Listening History (Third Choice)**
   1. Like the above feature, select a username from the drop-down list to view their listening history.
   2. A blue square with a logo and arrows

      Description automatically generatedClick the "Refresh All" button to generate results.
   3. Additional buttons, such as "Show Report" and "Back to Main Menu," enhance user interaction and functionality.
3. Additionally, we have incorporated forms named ALBUMSTITLEHISTORY, ARTISTSNAMEHISTORY, and GENRESNAMEHISTORY for the ALBUMS, ARTISTS, and GENRES entities, respectively. This design ensures that whenever the values of TITLE in ALBUMS, NAME in ARTISTS, or NAME in GENRES undergo modifications, a detailed history of these changes is recorded in the corresponding history forms. Timestamps accompany these updates, providing a chronological record of when each value was valid.

For instance, when you access the ALBUMS FORM and navigate to the **TITLE FIELD**, you'll find a button. Clicking this button will seamlessly transition you to the ARTISTSNAMEHISTORY FORM. Here, you can observe the changes made to ARTISTS NAME along with the associated timestamps.

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