

Rock Legacy app 🎸

1. System information

The Rock Legacy app was developed in Python using Tkinter on Linux Ubuntu 24.04 LTS. To run the application, execute the attached .py file in a Python environment with Tkinter installed.

2. How to run

rock_legacy_json.py

Make sure you have Python 3.10+ and Tkinter installed. Open the file through Tkinter.

You can enter the app by logging in as user **AK** with password **Coder123**. Alternative users and their passwords are stored inside the code.

3. Background

The Rock Legacy app was designed as a practical tool for a real-life rock music group to build a collective musical legacy.

With 16 members aged 37–75, each brings a unique musical flavor. The app helps preserve and celebrate this diversity by cataloguing rock music across genres and decades, emphasizing discovery, inspiration, and appreciation of the genre.

4. Core features

Song management

- Users can add songs with title, artist, decade, and genre
- It was deliberate to have users enter as little free text as possible to make the app user-friendly and clear of spelling mistakes, double entries etc.
- Users can delete only their own songs
- Each song is automatically attributed to the user's color

Categorization

- Songs are automatically grouped by genre and decade
- All entries are color-coded by the user who added them, making contributions easy to identify

User features

Users can:

- change their username and password
- deactivate their account
- view all registered users and their assigned colors
- add new users (with unique colors)

Color-coding

- Each user has an individually assigned color that cannot be reused
- Color helps visually track contributions in the catalogue

5. Limitations by design

Users can't be deleted

- This is intentional to maintain the spirit of legacy
- Deactivated users remain in the system, and their songs remain visible

No sorting by song title or artist

- Sorting would require much more advanced filtering skills to handle alternate spellings (i.e. Guns N' Roses, GNR, Guns & Roses= all correct) and typos or inconsistent naming (i.e. Def Leppard, Deaf Leopard, Deaf Leppard → only one real)
- Free text is intentionally limited to keep the app looking clean

No filtering by user

- The focus is on the music, less on the contributor
- Songs remain identifiable anyway through color-assigning

Limited color choices

- The small group size (25 maximum) allows color assignment to remain manageable

6. Known limitations / Future improvements**User deactivation**

- Currently, deactivation only prevents login
- Future goal: hide inactive users from the login screen and allow admin reactivation

User management (admin panel)

- Right now, all users can access the "Manage Users" menu. This makes the app vulnerable to double or phony user creation
- Future improvement ideas:
 - Restrict this panel to admins only via password protected entry
 - Admin features:
 - reactivate deactivated users
 - delete inactive or empty accounts
 - create new users (right now everyone can)

Handling double entries

- User's entries aren't filtered and technically everyone can enter the same song. Future improvements would include scanning of user entries and removing duplicates

Color attribution

- Colors are currently hardcoded
- Next app version could allow users to themselves choose or change their color