**A Hobbit's Library Manager Project Document**

Wolfgang Eslinger

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Project Overview:

The "A Hobbit's Library Manager" is a GUI application designed to allow users to search for books, view their borrowed books, and manage book borrowing and returning in a digital library system.

**Completed Tasks:**

Database Setup:

Created an SQLite database named library.db.

Set up two tables: books for storing book details and borrowed\_books for tracking borrowed books.

GUI Design:

Designed the main window with labels, a search bar, and buttons for searching, viewing borrowed books, and exiting the application.

Designed a secondary window for displaying borrowed books with options to return books and navigate back to the main menu.

Function Placeholders:

Added placeholder functions for searching books and returning borrowed books. These functions are yet to be implemented.

**Current Problems:**

Incomplete Functionality:

The search functionality for books is not yet implemented.

The functionality to return borrowed books is also pending.

GUI Enhancements:

The application currently uses placeholder images. Actual images for the library logo and search icon need to be integrated.

The design is basic and might benefit from additional styling and user-friendly enhancements.

Database Population:

The database is currently empty. We need to populate it with book data for the search functionality to be meaningful.

**Next Steps:**

Implement Search Functionality:

Connect the search bar to the database to allow users to search for books by title, author, or genre.

Implement Borrow and Return Functions:

Allow users to borrow available books and return borrowed books.

Update the database accordingly when books are borrowed or returned.

Enhance GUI:

Integrate actual images for the library logo and search icon.

Improve the design and layout for a more user-friendly experience.

Populate Database:

Add a collection of books to the database for testing and demonstration purposes.

Testing:

Once all functionalities are implemented, conduct thorough testing to ensure the application works as expected and is free of bugs.

Documentation:

Document the source code thoroughly.

Create a user manual to guide users on how to use the application.