MEDIA LIBRARY PROJECT PRESENTATION

INTRODUCTION

The Media Library is a desktop application built using PyQt5, Qt Designer and PyCharm. The application allows users to create personalized movie collections. Users can search movies via OMDB API, save movie posters to local storage, add personal notes and manage their library through an intuitive GUI. The application features user authentication, responsive UI navigation and offline poster viewing for a seamless experience.

TECHNOLOGY USED

Frontend: PyQt5 + Qt Designer (responsive GUI)

Database: SQLite3 (users/movies/notes)

API: OMDb (data+posters)

Core: Python 3.11

Images: QPixmap + requests (local JPGs)

Paths: os.path.join() (cross-platform)

CORE FUNCTIONALITY

- User Authentication: Secure login/signup with regex validation
- Movie Search: Title/Genre/Year/Rating search
- OMDb Integration: Real-time movie data fetching
- Local Poster Storage: Downloads posters to MEDIA LIBRARY PROJECT/posters/
- Personal Notes: Save/delete notes per movie
- Responsive Navigation: Login → Splash → Dashboard → Details

CHALLENGES

1. QTextEdit vs QLabel for Plot: In the Movie Details screen, QLabel was initially used to display plot data for the selected movie. However, QLabel could not handle long texts, and movie plots typically range from 100-400 words, so QTextEdit was employed instead as it is designed for longer content.

2. Poster Path Management: Managing the file path to store downloaded posters locally on the desktop was challenging. Upon discovering the os.path.join() method, this became feasible as it automatically generates the correct file path for the poster across different operating systems.

CONCLUSION

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The Media Library project is an effective application for movie management, delivering a complete workflow from user authentication through movie search, local poster storage, and personalized notes. This project can be further improved upon in many areas including adding movie ratings, watch history tracking, bulk import/export features, dark mode theming, and cloud synchronization for multi-device access.

THANK YOU