



Movie Search Console Application

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        < Here is where the presentation begins >
```

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}
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Objective < /1 > {



< Develop a console application that allows users to search for movies in the Sakila database.

>

}

Goals < /2 > {



< - Enable keyword-based movie searches.
- Provide search by genre and release year.
- Display popular queries for improved usability.

>

}



Technology Stack

Programming Language:

- * - Python 3.12

Database Management System:

- * - MySQL (Sakila database).

Modules Used:

- * - pymysql: For database interaction.
- * - dotenv: For secure configuration management.
- * - os: For environment setup.

Development Environment:

- * - PyCharm.



Project Files Structure

- 1 | — `main.py` # Main entry point of the application. It contains the core logic
2 | and user interface for interacting with the database.
- 3 | — `db.py` # Module for managing database connections and executing queries
4 | related to the database.
- 5 | — `queries.py` # Module containing SQL queries for searching and recording
6 | search data.
- 7 | — `ui.py` # Contains the user interface code, such as functions for displaying
8 | menus and interacting with users.
- 9 |
- 10 | — `.env` # Environment configuration file that contains sensitive information
11 | such as database credentials (to be kept secret).
- 12 | — `.gitignore` # Specifies which files and directories to ignore in version
13 | control (e.g., `.env`, compiled Python files).
- 14 | — `requirements.txt` # A list of dependencies that the project needs.



Workflow {

01

< User selects an action from the menu. >

02

< Query generation and database execution occur. >

03

< Results are displayed to the user. >

}

Challenges {

01

Setting up and connecting to the database.

02

Optimizing SQL queries for performance.

03

Ensuring input validation to prevent SQL injection.

04

Maintaining modularity and adhering to coding standards.

}

Conclusions; {



Application

< Successfully implemented a modular console application for movie search >



Python&MySQL

< Gained hands-on experience with Python and MySQL integration >



Practice

<Improved skills in modular design, error handling, and user interaction>

}



'Thank You'

