Critical Analysis:

Data-structure:

* Array-List,

Tech Stack

* Java 11
* Spring-Boot 2.6.7
* Maven
* MySQL
* Angular front end (typescript)

(Architecture)

The Controller layer handles the CRUD request from the client front-end and retrieves the data from the SQL backend.

The model layer Is the Film class and DAO layer(DAO, is the intermediary to the SQL backend via the JDBC API). DAO class can be a Singleton using lazy instantiation in this particular case.

(REST vs SOAP)

REST API, model of distributed computing interaction based on the HTTP protocol and the way that web servers support clients.

REST is useful when you have a CRUD based web application: It uses HTTP methods GET, POST, PUT(Update) and Delete data. REST is useful when network capacity is limited, Client may make numerous requests for the same resource at times (eg. get all films). SOAP API on the other hand is stateless is designed to break traditional applications down into multi component, distributed form without losing the element of security.

(RESTful)

For this assignment I used a RESTful API; the rationale was limited network consumption, and use of HTTP methods with Spring-Boot.

(Code Quality)

Appropriate comments through-out the project have been made, methods are simple to follow and easily replicable (DAO class and filmdb Class http methods). Correct levels of indentation for readability purpose. Error messages have been coded for the UI convenience.