Movie Collection

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Abstract

This project is a movie interface that allows the user to store and access information about movies contained in a collection that are stored in a database. The system allows searching for information about the movies and also adding new movies to the collection.

1. Introduction

The Movie Collection interface is designed to give the user a way to search for information about movies in the database and to add new movies to the collection including personal information about each movie.

The screen interface gives the user the ability to do searches based upon the title, the actors, the director, the release date, the rating, the production company, and the genre and to print the information for any movie or list of movies.

This interface will be a simple visual screen presentation that a movie collector can use as a way to manage their movie collection.

1.1. Background

The movie collector needs to have some way to find information about the movies in their collection. The design of the Movie Collection interface will provide a way to view information connected to movie titles stored in a database. Access will be through a user interface (UI) screen. The information will be retrieved from the IMDb website since it is a reliable source for movie facts.

1.2. Impacts

A well thought out movie database interface system can offer a means of allowing the user to create searches based on the title, the actors, the director, the release date, the time length, the rating, the production company, and the genre. This will make it convenient to find information on a particular movie or to find movies that are connected to a particular attribute.

1.3. Challenges

One challenge will be to allow a search using multiple filters. Another challenge is to have search suggestions pop-up when a user begins to type in a search.

2. Scope

The movie database interface provides a simple screen clearly showing the available search and entry options. The system must have a way to enter movie title into a database to store a collection of movies. The database allow searching the movie collection by the title, the actors, the director, the release date, the rating, the production company, and the genre.

2.1. Requirements

When a user has a movie collection the user needs an organized way to store what movie titles are included in the collection and needs a way to search for information about each title and to search for movies that have certain attributes in common such as actor or genre.

2.1.1. Functional.
- System will allow a user to enter the title of a movie to store in the collection database.
- System will allow user to search movie information connected to the title.

2.1.2. Non-Functional.
- System will show information in an organized layout through user interface.

Use Case ID	Use Case Name	Primary Actor	Complexity	Priority
1	Enter movie title in collection database	User	Med	1
2	Search for movie information by title	User	Med	1
3	Search for movies by actor	User	Med	1
4	Search for movies by director	User	Med	1
5	Search for movies by release date	User	Med	1
6	Search for movies by rating	User	Med	1
7	Search for movies by production company	User	Med	1
8	Search for movies by genre	User	Med	1

TABLE 1. USE CASE TABLE

2.2. Use Cases

Use Case Number: 1
Use Case Name: Enter movie title
Description: A user enters the title for a movie that is to be added to their collection.

   1) User enters the movie title.

Termination Outcome: The user has entered the title of a movie to be added to the user's collection database.

Use Case Number: 2
Use Case Name: Search for a movie by title
Description: A user searches the movie collection for a particular title to view information for the movie such as the actors, the director, the release date, the rating, the production company, and the genre.

   1) User enters a movie title in the search box.
   2) User clicks the search button.

Termination Outcome: The user views the information returned from the IMDb website for the movie title that was searched for.

Use Case Number: 3
Use Case Name: Search for movies included in the collection starring a particular actor
Description: A user searches for movies by actor.

   1) User enters the name of an actor in the search box.
   2) User clicks the search button.

Termination Outcome: The user views the movies in the collection starring the particular actor.

2.3. Interface Mockups

The first screen shows the Movie Collection titles to select a movie to view. The second screen show where the movie information will display. The third screen is the search screen to search for movies according to a particular attribute.
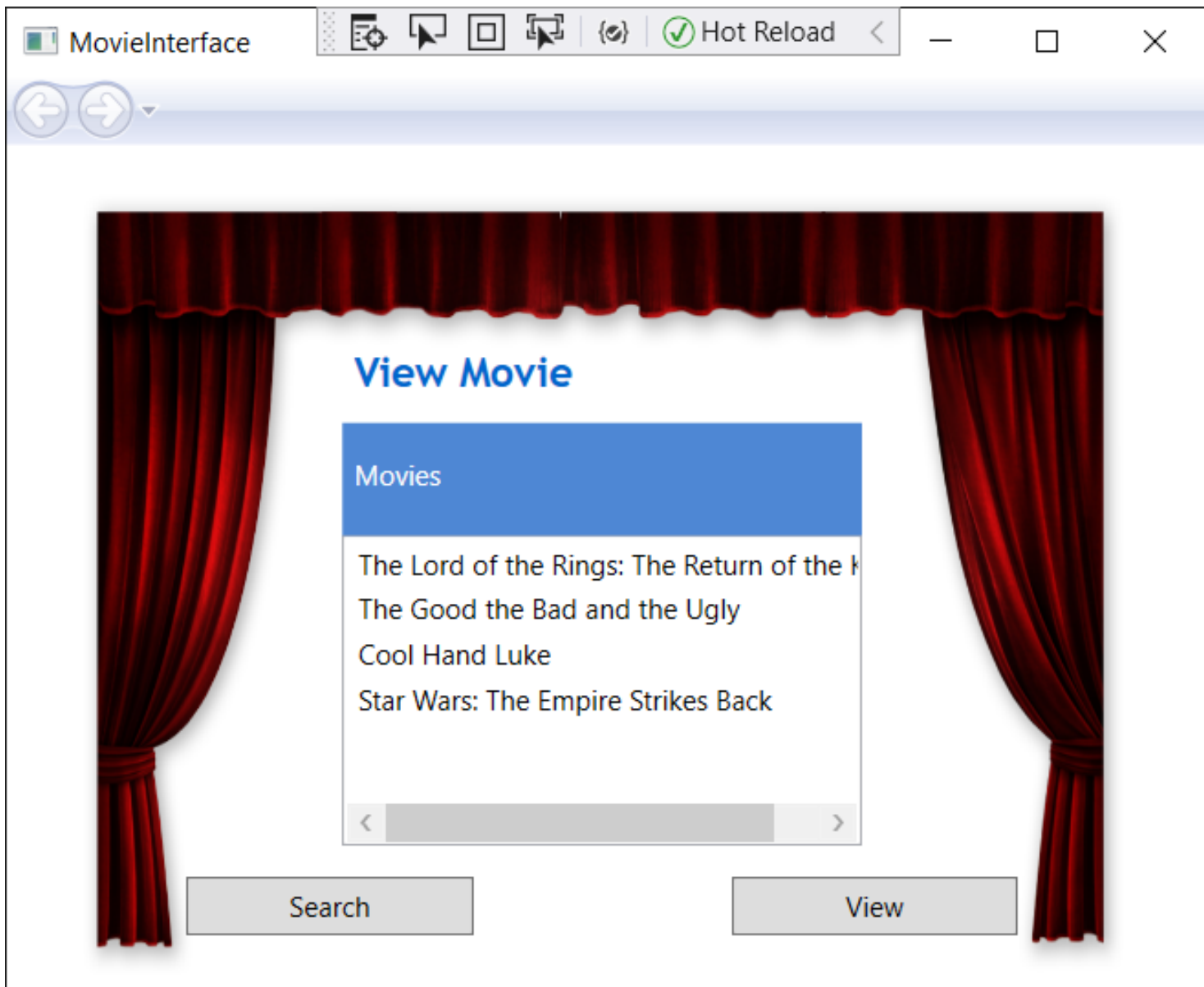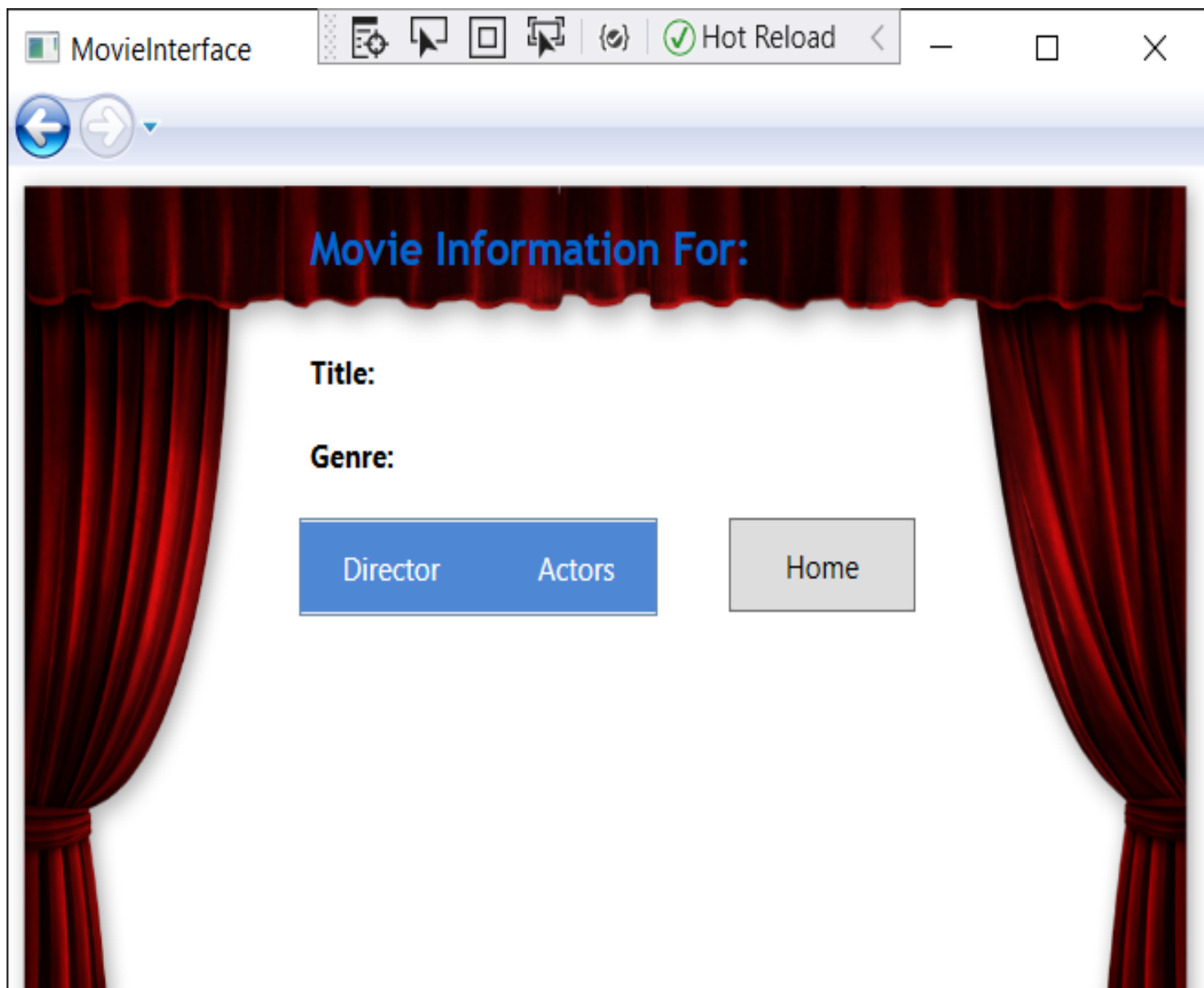

Figure 1. Movie Collection: Select Movie

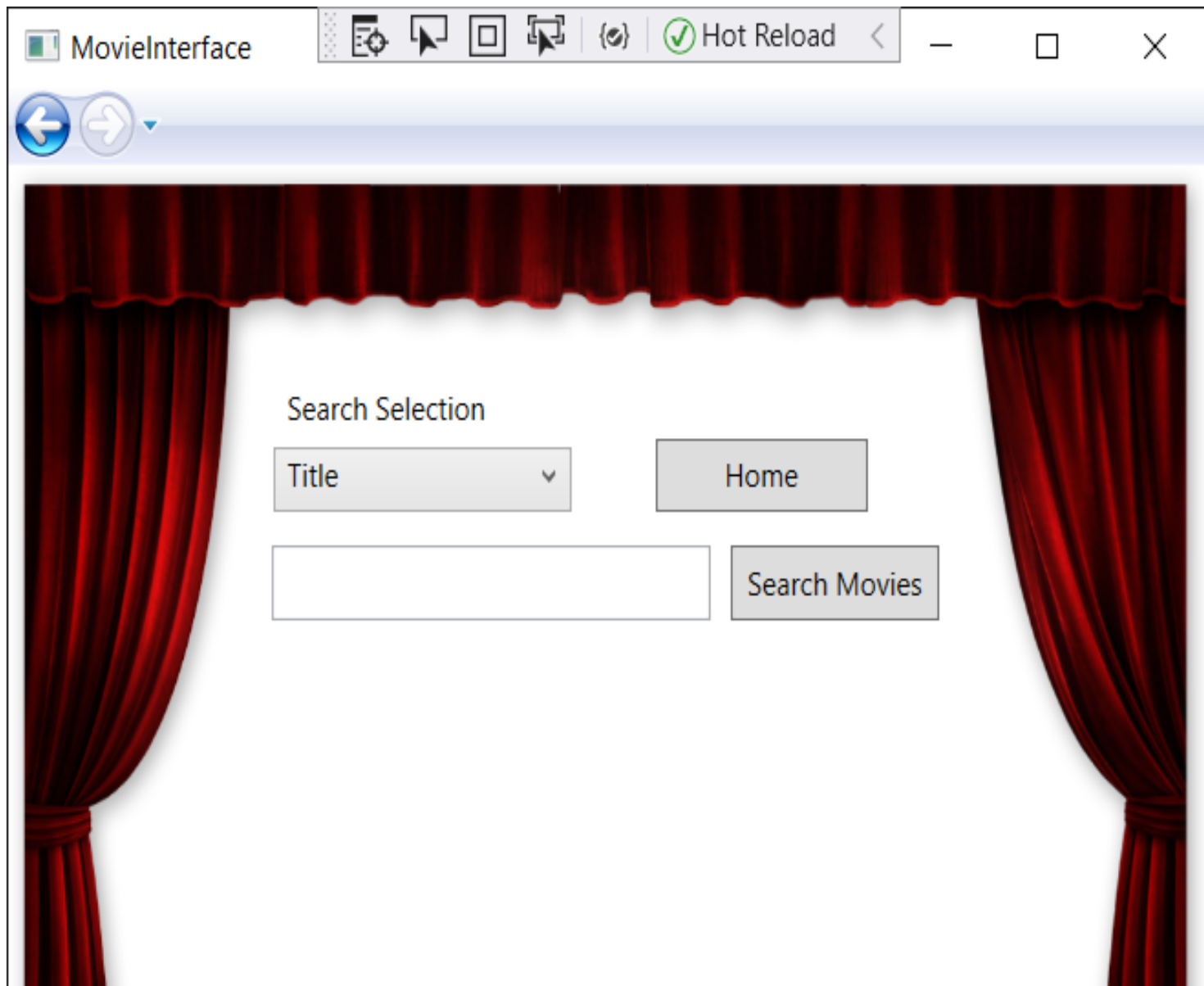Figure 2. Movie Collection: View Movie

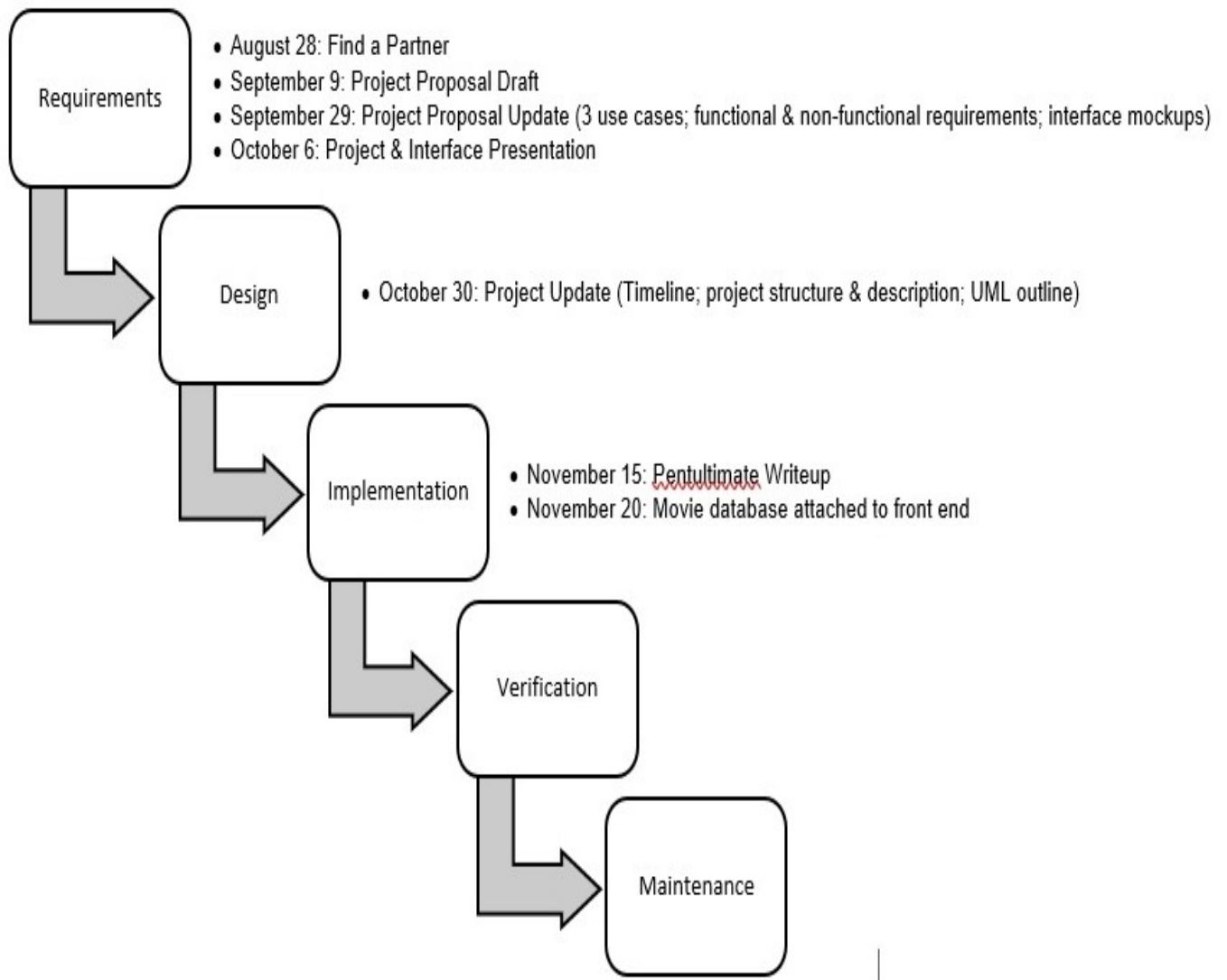Figure 3. Movie Collection: Search Movie Attribute

3. Project Timeline

Requirements
- August 28: Find a Partner
- September 9: Project Proposal Draft
- September 29: Project Proposal Update (3 use cases; functional & non-functional requirements; interface mockups)
- October 6: Project & Interface Presentation

Design
- October 30: Project Update (Timeline; project structure & description; UML outline)

Implementation
- November 15: Pentultimate Writeup
- November 20: Movie database attached to front end

Verification

Maintenance

Figure 4. Waterfall SDLC Timeline

4. Project Structure

Movie collection interface database design using the structural respository pattern and possibly the specification pattern.
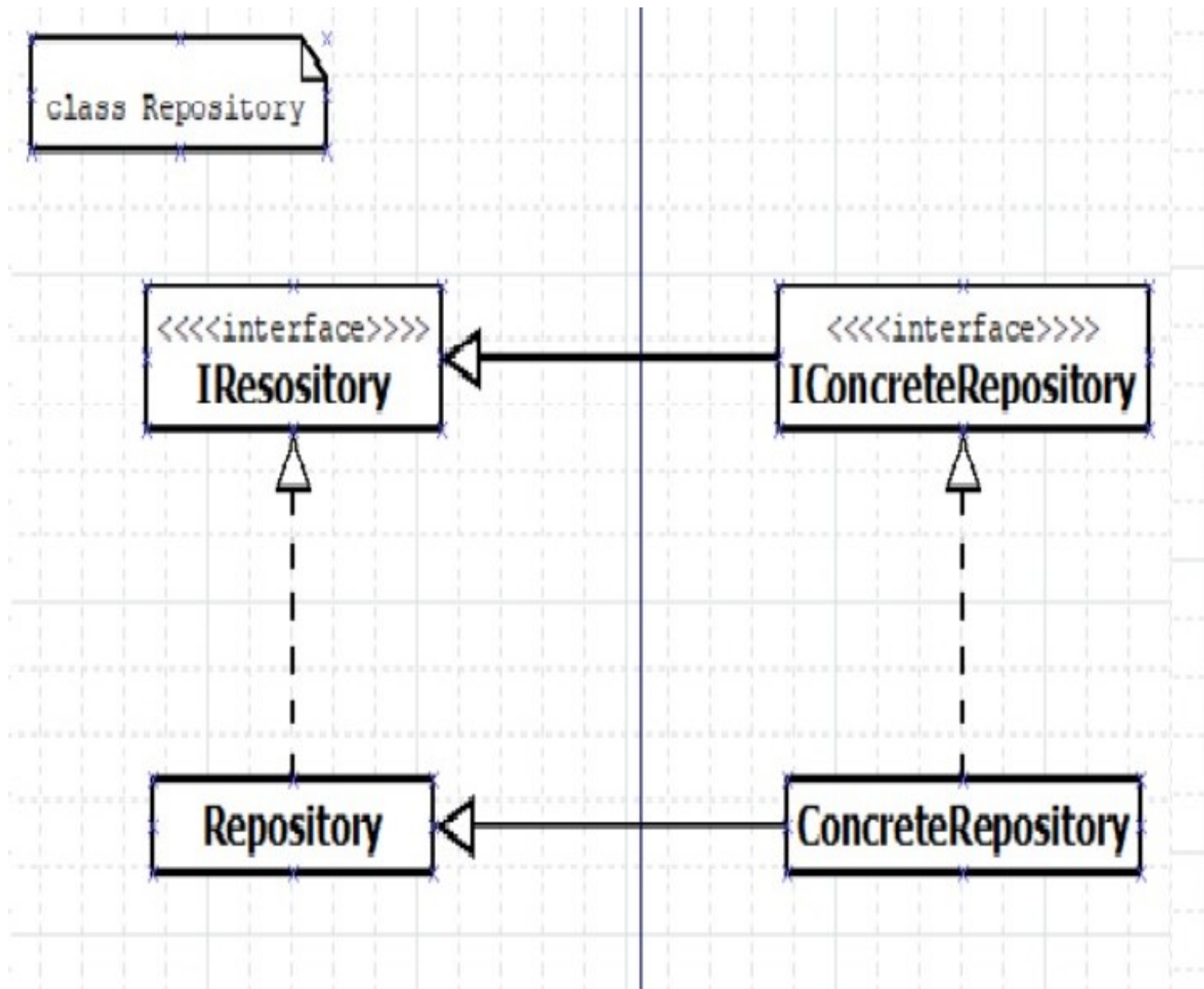
4.1. UML Outline

Figure 5. Repository Pattern: Movie Database Interface

4.2. Design Patterns Used

Make sure to actually use at least 2 design patterns from this class. This is not normally part of such documentation, but largely just specific to this class – I want to see you use the patterns!

5. Results

This section will start out a little vague, but it should grow as your project evolves. With each deliverable you hand in, give me a final summary of where your project stands. By the end, this should be a reflective section discussing how many of your original goals you managed to attain/how many desired use cases you implemented/how many extra features you added.

5.1. Future Work

Where are you going next with your project? For early deliverables, what are your next steps? (HINT: you will typically want to look back at your timeline and evaluate: did you meet your expected goals? Are you ahead of schedule? Did you decide to shift gears and implement a new feature?) By the end, what do you plan on doing with this project? Will you try to sell it? Set it on fire? Link to it on your resume and forget it exists?