

Final Assessment 5008

Solve the following.

DVD store application:

For a family or an individual, a favorite place to go on weekends or holidays is to a DVD store to rent movies. A new DVD store in your neighborhood is about to open. However, it does not have a program to keep track of its DVDs. The store managers want someone to write a program for their system so that the DVD store can function. The program should be able to perform the following operations, for example:

1. Create a list of DVDs owned by the store.
2. Show the details of a particular DVD.
3. Check whether a particular DVD is in the store.

To achieve the above, you must implement the DVD class with the following details: Details of the DVD is as follows:

- Name of the movie (This is the DVD title as well)
- Names of the stars
- Name of the producer
- Name of the director
- Name of the production company
- Number of copies in the store

The program should have the following menu options:

Menu Options: for the user

- 1) Add a new DVD to the list of DVDs.
- 2) Remove a DVD from the list of DVDs.
- 3) Search for a DVD, given the title of the DVD and display details.
- 4) To list all the titles of the DVDs in the store in an alphabetical sequence of the title
- 5) Update details of a particular DVD
- 6) To exit

Write a C++ program to implement the above application with the menu options stated above:

- a) Create a DVD class with appropriate attributes, getters/setters, and the other relevant methods.

Use appropriate data structures to store the list of DVDs Justify your choice of the data structures used and search techniques.

Upload the source code in GITHUB,

Upload a single pdf file with the following:

- 1) Title of the application
- 2) Summary explaining the application.
- 3) Source code
- 4) Screen shots of the testing.
- 5) Explain your choice of the data structure, design and search algorithms.
- 6) State any assumptions made clearly.

Provide a conclusion in the report explaining the limitations of your program, what is not working etc.