

Digital Media Collection

Masterclass in Java

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Class Book

The class DigitalMedia should have several fields, including title and creator. This class can be implemented in the following way:

```
package library;

public class DigitalMedia {
    private String title;
    private String creator;

    public String getTitle() {
        return title;
    }

    public void setTitle(String title) {
        this.title = title;
    }

    public String getCreator() {
        return creator;
    }

    public void setCreator(String creator) {
        this.creator = creator;
    }
}
```

Pay attention to the setters and getters of the fields. In general, all the fields are private (unless the special requirements are stated) and the access functions are implemented such as setters and getters. Read about toString() function and implement it for DigitalMedia class.

Class DigitalMediaCollection

The digital media collection management system is designed to efficiently organize and manage a library of digital media items such as movies, music albums, and TV shows. It incorporates an inner structure for storing digital media items and provides methods for adding new items to the collection, removing old ones, and printing the entire content of the collection.

Class structure:

```

package library;

import java.util.ArrayList;
import java.util.List;

public class DigitalMediaCollection {
    private List<DigitalMedia> collection = new ArrayList<>();

    public void addItem(DigitalMedia mediaItem) {
        collection.add(mediaItem);
    }

    public boolean removeItem(DigitalMedia mediaItem) {
        return collection.remove(mediaItem);
    }

    public void printCollection() {
        if (collection.isEmpty()) {
            System.out.println("The collection is empty");
        } else {
            for (DigitalMedia item : collection) {
                System.out.println(item.getCreator() + ", " + item.getTitle());
                System.out.println();
            }
        }
    }
}

```

DMC tester class

Now let's test our management system. First, create some albums. Then create LLM and add those albums to the library using the LLM. Then try to remove some of the books..

```

package library;

public class MediaCollectionTester {
    public static void main(String[] args) {
        DigitalMedia movie1 = new DigitalMedia();
        movie1.setTitle("Inception");
        movie1.setCreator("Christopher Nolan");

        DigitalMedia music1 = new DigitalMedia();
        music1.setTitle("Abbey Road");
        music1.setCreator("The Beatles");

        DigitalMediaCollection dmc = new DigitalMediaCollection();
    }
}

```

```
dmc.addItem(movie1);  
dmc.addItem(music1);  
dmc.addItem(movie1); // Adding duplicate to test  
  
dmc.removeItem(movie1); // Removing one instance of Inception  
  
dmc.printCollection();  
}  
}
```