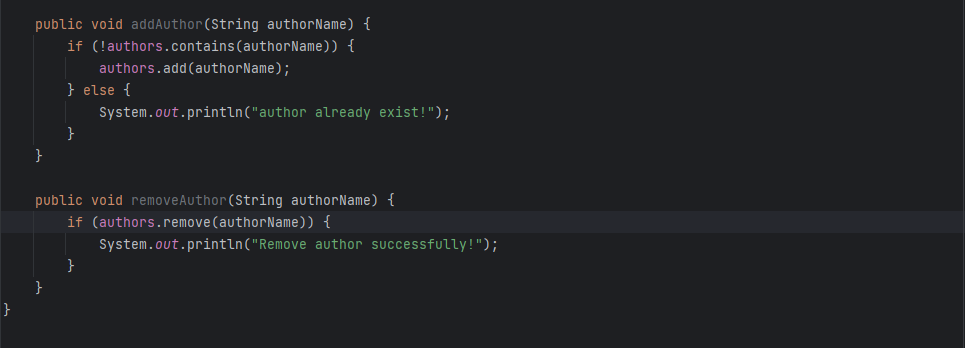
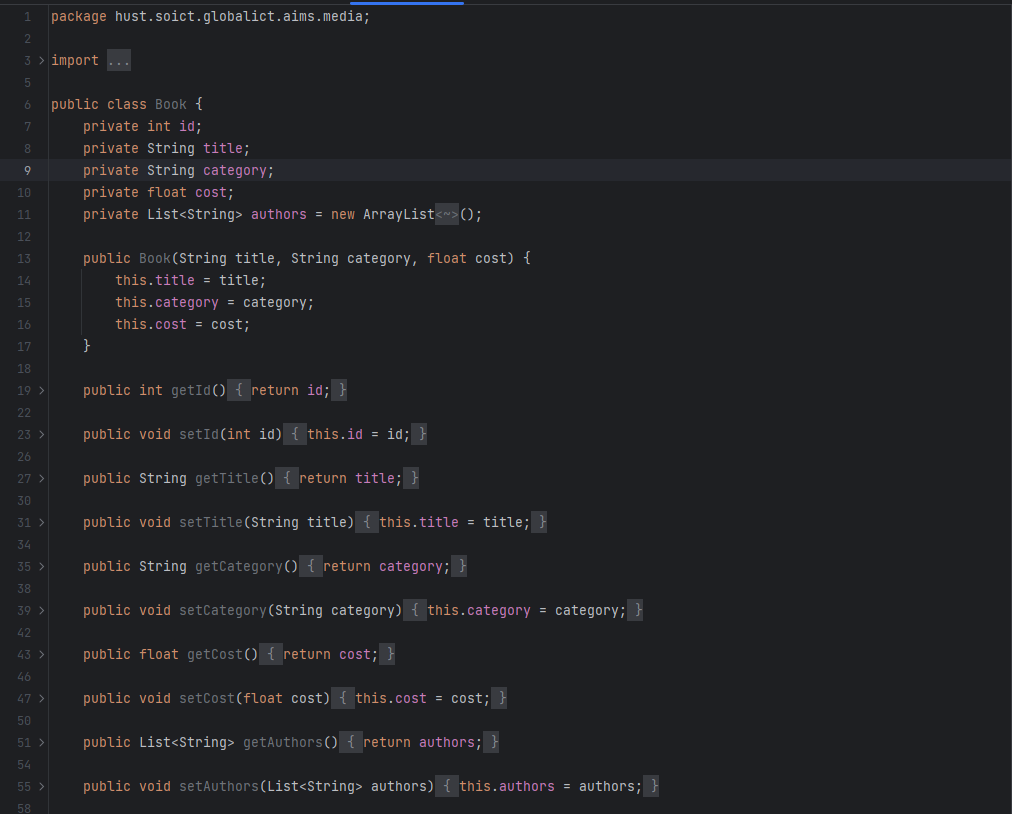
BÁO CÁO THỰC HÀNH LAB 4  
LẬP TRÌNH HƯỚNG ĐỐI TƯỢNG

# Inheritance and Polymorphism

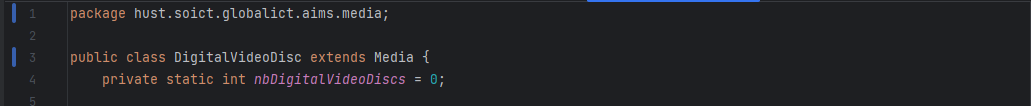
## 3. Creating the Book class



## 4. Creating the abstract Media class

A screen shot of a computer

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## 5. Creating the CompactDisc class

#### 5.1. Create the Disc class extending the Media class

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A screen shot of a computer code

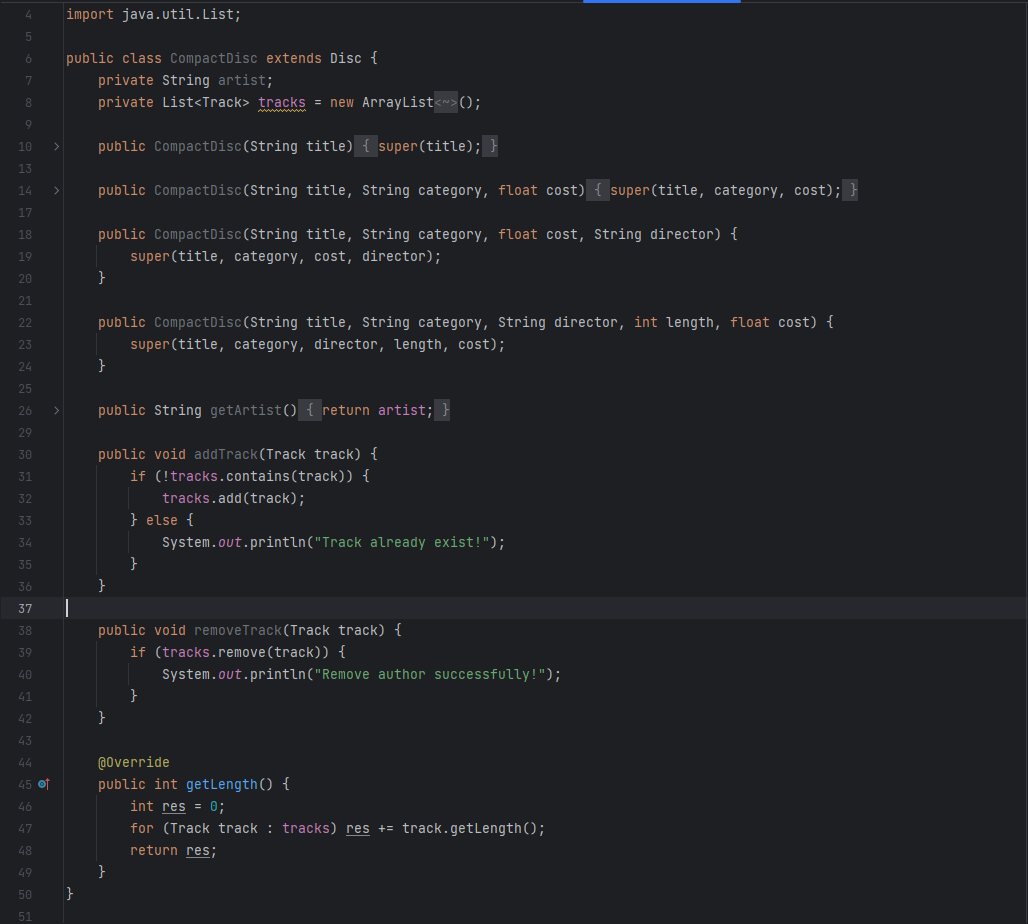
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#### 5.2. Create the Track class which models a track on a compact disc and will store information incuding the title and length of the track

A picture containing text, screenshot, software, multimedia software

Description automatically generated

#### 5.3. Open the CompactDisc class



## 6. Create the Playable interface

A screenshot of a video game

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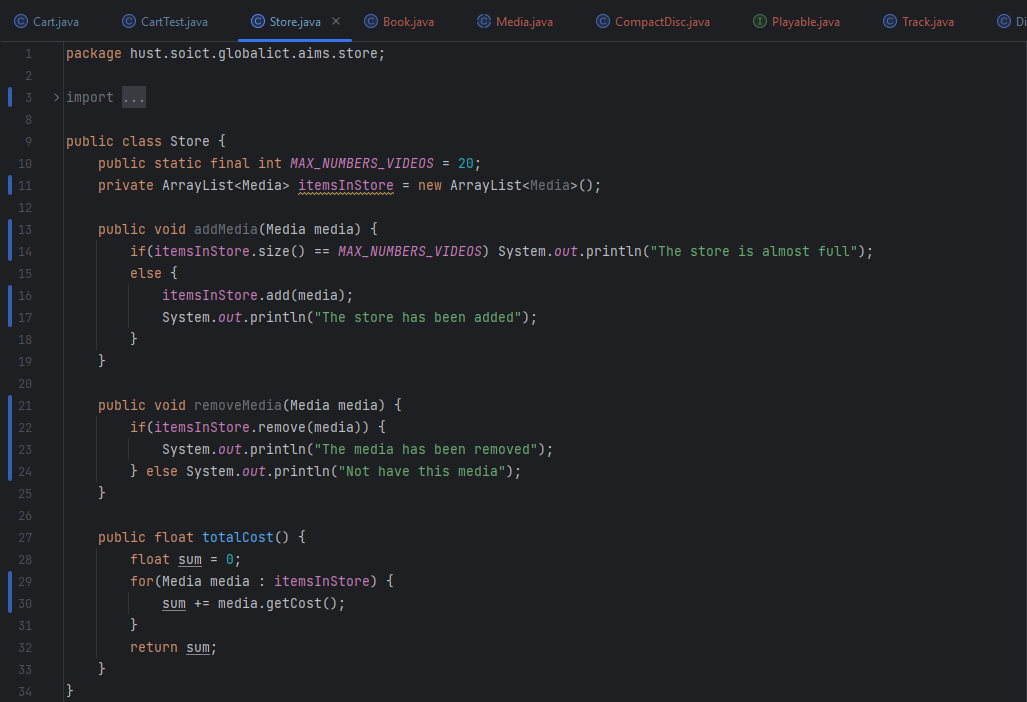
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## 7. Update the Cart class to work with Media

A screen shot of a computer program

Description automatically generated with low confidence

## 8. Update the Store class to work with Media



## 9. Constructors of whole classes and parent classes

A picture containing text, diagram, screenshot, plan

Description automatically generated

## 10. Unique item in a list

A picture containing text, screenshot, software, multimedia software

Description automatically generated

## 11. Polymorphism with toString() method

A screenshot of a computer program

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In the provided example, even though the **toString()** method is called from an instance of the **Media** class, the compiler is aware of the specific subclass and can determine the appropriate **toString()** method to invoke.

Within the **Main** class, three objects are created: **dvd**, of type **Media**, but referring to a **DigitalVideoDisc** object; **cd**, of type **Media**, but referring to a **CompactDisc** object; and **book**, of type **Media**, but referring to a **Book** object. When the **toString()** method is called on these objects, the overridden method in each subclass is executed, and the corresponding string representation is returned. This showcases the ability of polymorphism, allowing objects of different subclasses to be treated as instances of the superclass, thereby facilitating a more flexible and extensible code structure.

## 12. Sort media in the cart

A picture containing text, screenshot, software, multimedia software

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Description automatically generated with low confidence

## 13. Create a complete console application in the Aims class

A screenshot of a computer

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