

**HACETTEPE UNIVERSITY****COMPUTER SCIENCE AND ENGINEERING DEPARTMENT**

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**IDENTITY NUMBER** : 21992943  
**COURSE** : BBM104  
**EXPERIMENT** : Programming Assignment II  
**SUBJECT** : Inheritance, Access Modifiers  
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**MAIN PROGRAM** : Movie Database System

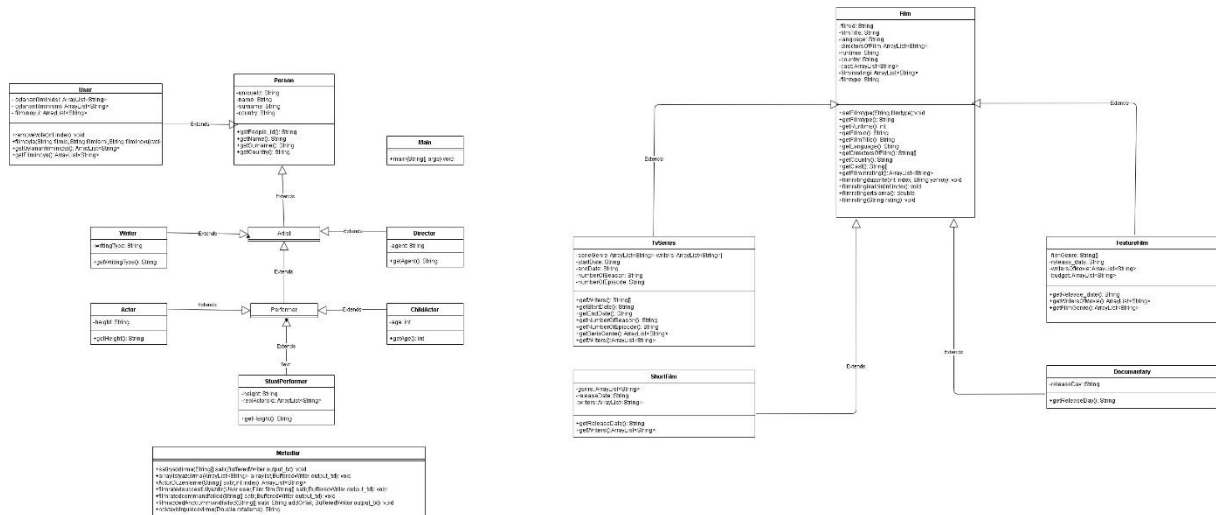
## 2. Software Using Documentation

## 2.1. Software Usage

The software can be run from the command prompt with java compiler. Program runs and process the input files, and then creates text files as output that contains commands and operating status of commands.

### 3. Software Design Notes

### 3.1. UML Class Diagram



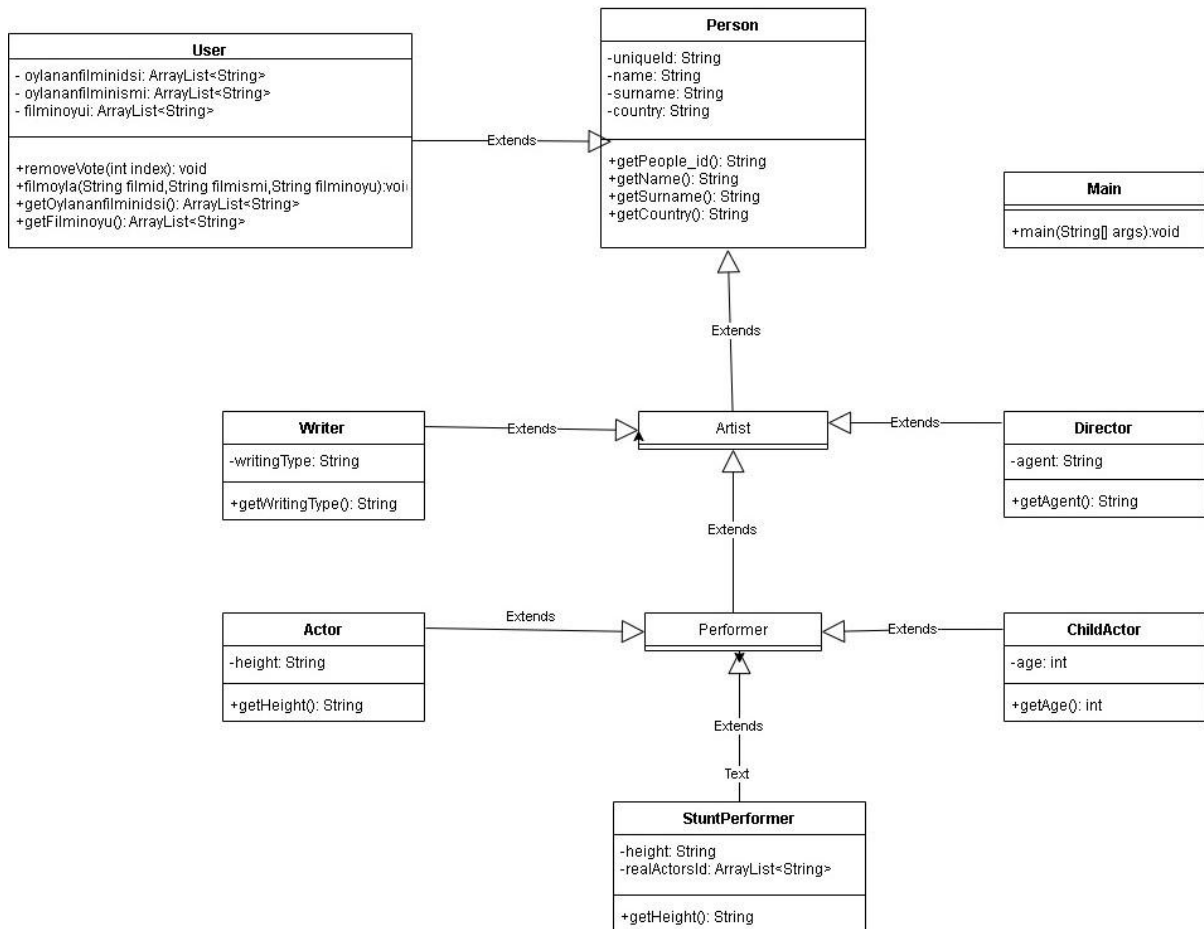
### 3.2 Algorithm

## 1. Initialization

Create classes for person,films and their subclasses. Also create, Metodlar and Main class.

Take the “people.txt” and “films.txt” and read one by one. While reading create an object belonging to the associated class and add it in an ArrayList.

## 2. Person Class



**2.1** I defined private attributes for People Class. These are private because it is safer.

**2.2** I create get methods. Because I need to get some attributes to complete the command.

**2.3** Then, I created an User Class (subclass) inherits the attributes from the Person class (superclass)

**2.3.1** User Class has some methods and attributes. I created three ArrayList as attributes that "oynananfilminidsi", "oynananfilminismi", "filminoyu". Then, I created some methods. I think these ArrayLists makes very advantageous my code for voting and editing I will explain how these methods works.

### 2.3.2 removeVote method

This method is used to remove a vote, filmid, filename. These are at same index. I detected the index of vote which to be removed. Then, this method take index and remove the vote.

### 2.3.2 filmiOyla

This method is used to vote an movie or series. It add the vote, voted filmid and votedfilename to 3 ArrayList.

## 2.4 Then, I created an Artist Class

**2.4.1** I created a Writer Class (subclass) inherits the attributes from the Artist class. That has some private attributes.

**2.4.2** I created a Director Class (subclass) inherits the attributes from the Artist class. That has some private attributes.

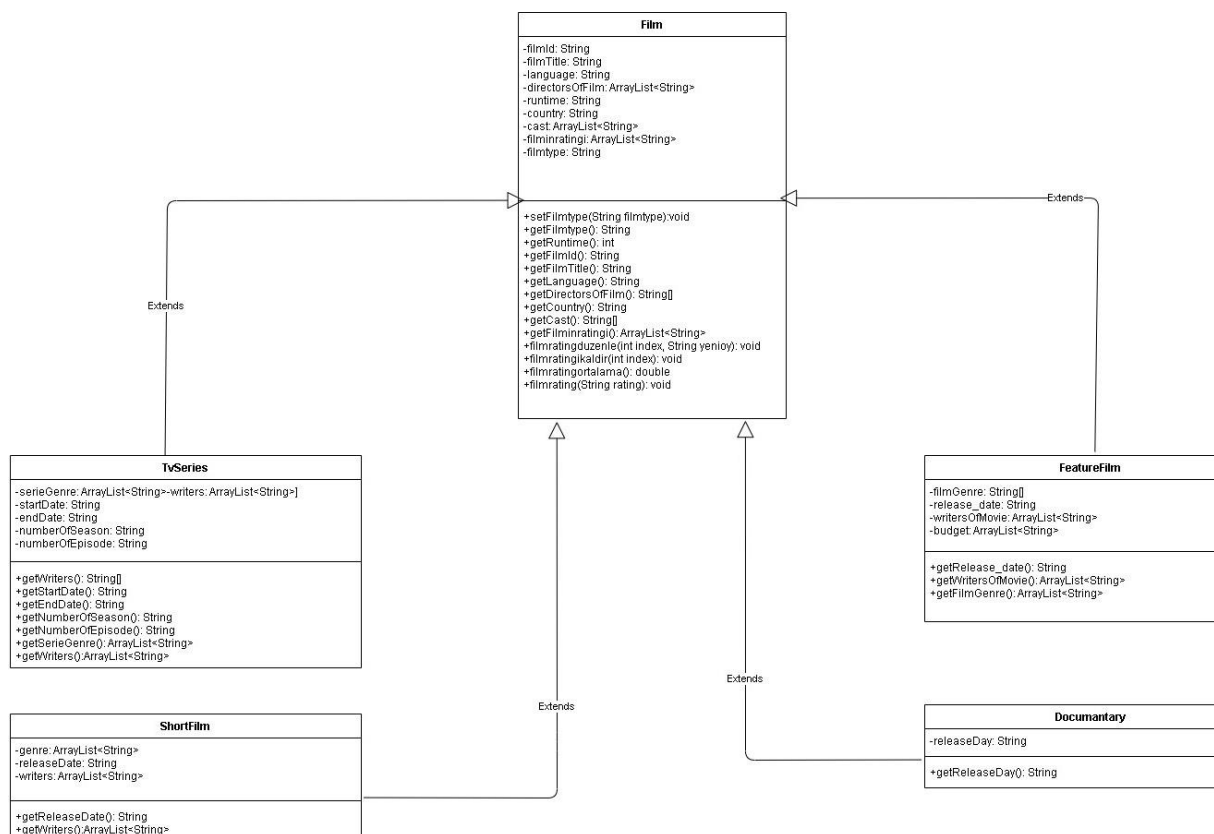
**2.4.3** I created a Performer Class (subclass) inherits the attributes from the Artist class.

**2.4.3.1** I created an Actor Class (subclass) inherits the attributes from the Performer class. That has some private attributes.

**2.4.3.2** I created a StuntPerformer Class (subclass) inherits the attributes from the Performer class. That has some private attributes.

**2.4.3.3** I created a ChildActor Class (subclass) inherits the attributes from the Performer class. That has some private attributes.

## 3. Films Class



**3.1.1** I defined private attributes for People Class. These are private because it is safer.

**3.1.2** Also, this class has some methods. I will explain how these methods work.

**3.1.2.1 filmratingduzenle:** This works when “EDIT RATE” command is initialized. I detected the index of the vote which to be edit. Then, this method takes index, new vote and replaces old vote with new vote.

**3.1.2.2 filmratingkaldir:** This works when “REMOVE RATE” command is initialized. I detected the index of the vote which to be remove. Then, this method takes index and remove the vote.

**3.1.2.3 filmratingortalama:** This calculates average rating.

**3.1.2.4 filmrating:** This method added the vote to ArrayList for the film.

**3.1.3** I created an FeatureFilm Class (subclass) inherits the attributes from the Film class. That has some private attributes.

**3.1.4** I created an ShortFilm Class (subclass) inherits the attributes from the Film class. That has some private attributes.

**3.1.5** I created an Documentary Class (subclass) inherits the attributes from the Film class. That has some private attributes.

**3.1.6** I created an TvSeries Class (subclass) inherits the attributes from the Film class. That has some private attributes.

## 4. Metodlar Class

Metodlar
<pre>+satiryazdirma(String[] satir,BufferedWriter output_bt): void +arraylistyazdirma(ArrayList&lt;String&gt; arraylist,BufferedWriter output_bt): void +ActorDuzenleme(String[] satir,int index): ArrayList&lt;String&gt; +filmratedsuccesfullyazdir(User user,Film film,String[] satir,BufferedWriter output_bt): void +filmratedcommandfailed(String[] satir,BufferedWriter output_bt): void +filmaddedAndcommandfailed(String[] satir, String addOrfail,BufferedWriter output_bt): void +noktayvirgulecevirme(Double ortalama): String</pre>

**4.1** In order not to repeat what I use all the time, I created this class and added methods in it. I will explain these methods.

**4.1.1 satiryazdirma:** This prints the current command. Thanks to this method, I avoid repetition while printing.

**4.1.2 arraylistyazdirma:** This prints the elements of a list without the square brackets. Thanks to this methoh, I avoid repetition while printing.

**4.1.3 ActorDuzenleme:** This method converts some attributes such as Writers, directors, genre of a film to suitable form to add as attribute.

**4.1.4 filmratedsuccesfullyazdir:** This method executes when “RATE” command is succesful. Thanks to this method, I avoid repetition while printing.

**4.1.5 filmratedcommandfailed:** This method executes when “RATE” command is failed. Thanks to this method, I avoid repetition while printing.

**4.1.6 filmaddedandcommandfiled:** This method executes when “ADD FEATUREFILM” command is initialized. If this takes “fail” as argument, this prints failed. Otherwise, prints succesfor Thanks to this method, I avoid repetition while printing.

**4.1.7 noktayivirgulecevirme:** This method convert dot to comma in average rating.

## 4. References

<https://stackoverflow.com/questions/36418901/change-decimalformat-locale/50718341#50718341>

<https://www.javatpoint.com/java-double-to-string>

<https://www.javatpoint.com/java-string-to-int>

