

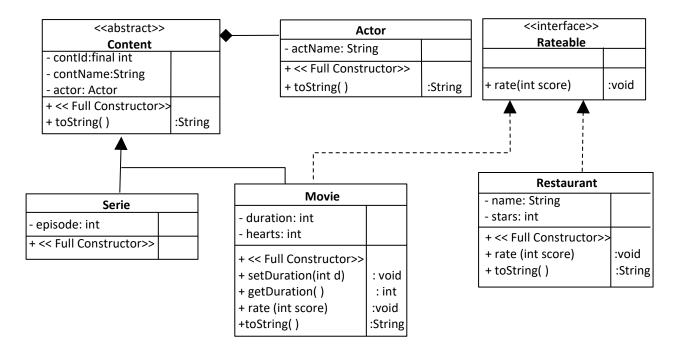
CS 111: Programming Language II Final Lab Assignment

Date: Sunday April 12,2020
Duration: 3 Hours



Problem Description

Based on the UML class diagram below, create the needed instance variables, constructors and set and a get methods, then write a test application to demonstrate the class capabilities.



- Movie constructor should set the value of <u>hearts</u> by calling method rate.
- Method rate in Restaurant should add the value of <u>score</u> to the value of <u>stars</u>.
 After adding, if <u>stars</u> value is equal to or greater than 6, a success message should appear as follows: "Super restaurant!"
- Method rate in Movie should add the value of <u>score</u> to the value of <u>hearts</u>.
 <u>Note:</u> For all rate methods, only positive numbers are accepted (score ≥ 0); otherwise, do nothing.

Step 1: Create 2 **Serie** objects with the following data:

contld	contName	Actor	episode
7132	The Crown	John Lithgow	41
7195	Blackish	Yara Shahidi	137

Step 2: Create 2 **Movie** objects with the following data:

contld	contName	duration	Actor	hearts
8934	La La Land	2	Emma Stone	5
8911	Julie and Julia	2	Amy Adams	-3

Step 3: Create a **Restaurant** object with the following data:

name	stars
Nobu	5

- **Step 4:** Create an array of type **Content** with size 4. Then add **Serie** and **Movie** objects to the array.
- Step 5: Create an ArrayList of type Rateable. Then add Restaurant object to it.
- **Step 6:** Use *for loop* to go through the array. Increase the value of <u>duration</u> by 1 using appropriate setters and/or getters for each **Movie** object; then add the object to the ArrayList.
- **Step 7:** Use *enhanced for* to go through the ArrayList. Call method **rate** on each object in the ArrayList with score value=1.
- **Step 8:** Print all information in the ArrayList.
- Bonus (2 Marks): Apply ArrayIndexOutOfBoundsException mechanism in main.