INFO I211 - Information Infrastructure II

Spring 2014

Lab 4: Python classes, instance and class attributes

Tasks

1. Design and implement a Python 2.6 class to catalog movies.
   Each object in this class should contain these attributes:
   - Title (a string)
   - Release date (year)
   - Filming location (country)
   - Your personal rating of this movie, from 0.0 to 10.0
2. The class should also contain these *class attributes*:
   - Total number of movies in the catalog
   - Average rating of all movies
   - *(optional, for an extra bonus point:)* A list of all filming locations, stored as strings in a Python list.
3. In your class, write a method so that *printing* a movie *object* from your main Python program will display all *its* attributes, as well as all the *class attributes*.
4. In your main Python program, instantiate four movies and print them.
   Hint: each instantiation should also correctly update all class attributes - this can be done in the *constructor* method.

Turn in your program as "20140206 Lab 4 task" in the I211 Oncourse site -> Assignments thus:

(*Note*: you will work on this task with your lab team, but each team member needs to turn in the Python solution code *while in lab*, to receive full credit for the work done.)

Name your file as `YourUsername_Lab04.py`
(e.g. If I were to upload, the file would be named `mitja_Lab04.py`)

Upload your program file (.py) to Oncourse under I211 Assignments->"20140206 Lab 4 task" as a .py file.
Include the following information as a #comment at the top of the file you submit:

```
# your name (First, Last)
# your IU email address
# your I211 lab team number
# the names of all your I211 team members
```

Kindly make sure that your program successfully executes in Python 2.x before submitting, without syntax errors. Test your code on a wide range of data.
To receive full credit for the work done, each student must turn in the Python source code file *at lab time and while in lab*, including the information about themselves and their student team, as listed above. Submissions lacking this information will lose 50% of the assigned grade.

Last updated: *Mitja Hmeljak* February 6, 2014