



# THE MOVIE DATABASE SYSTEM

## ASSIGNMENT – TWO

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# INTRODUCTION

In this project, I tried to develop a movie database system using object oriented programming paradigms and java programming language. This program includes 24 classes (the one of them is main class). Some of these are created for storing informations, others are created for doing some operations. I will call them “data classes” and “operation classes” during these report.

## DATA CLASSES FOR STORING PERSON’S INFORMATIONS

- People
- User
- Artist
- Director
- Writer
- Performers
- Actor
- Child Actor
- Stunt Performer

## DATA CLASSES FOR STORING FILM’S INFORMATIONS

- Film
- Feature Film
- Short Film
- Documentary
- TV Series

## OPERATION CLASSES

- Command Reader
- Method Add
- Method Edit
- Method List ( There are 3 list classes. These are used for different operations. You can see better on UML diagram)
- Method Rating
- Method Remove
- Method Viewer

The data classes which store “people” information save some personal informations. Name, surname, country, id number, age, height etc. The data classes which store “film” information savedetails about film like title, date, language, lenght, who writes, who directs etc. All informations are in UML diagram more deeply.

My goals in this project are:

- Taking rating information from user and creating pairing user - film with the rating score
- Adding some feature films whenever I want
- Viewing all informations about a films which I choose
- Analyse the rating scores and order according to the analyse results
- List films, artist ...

# WHAT I LEARNED?

If we look at the technical part of the project, I can say, creating operations according to the class and designing the processes rightly were a bit hard for me. Especially sorting by degree all films forced me too much. But that, connect classes each other, using together.. brought me up many things. How to use Inheritance and Polymorphism in real project, how to run classes together, when I should use Inheritance – Polymorphism, what are overloading and overriding etc.

I used some data structures as Linked Hash Map, Arrays, 2D Arrays, ArrayList etc. The best one is Linked Hash Map for me. Like dictionary in Python, it worked very well. I use Linked Hash Maps for matching people – film classes with their id and use other in other classes more comfortably.

And the one part of project ( in Method List 11\_12 class ) I used Bubble Sort algorithm to order films by degree. It is a good experience for me in this level.

The main goal of this project is develop a project in object oriented programming skills. So, I think using many classes makes program more effectively. I tried to create classes for each commands and manage all commands in the one classes outside of Main class. But I think, if I had developed this project in Python, it would be easier. In my opinion, Java programming language is not as good at creating method as Python. Java is very good language for object oriented, but not good functional programming.

## REFERENCES

I used these sources to develop this system:

- Intruduction to Java Programming and Data Structures, 11th Edition, Daniel Liang
- Stack Overflow - <https://stackoverflow.com/>
- Geeks for Geeks - <https://www.geeksforgeeks.org/>
- Java Tutorial - <https://docs.oracle.com/javase/tutorial/>
- IntelliJ Idea (for creating UML diagram)
- Java Blog - <https://java2blog.com/>