

CCT College Dublin

Assessment Cover Page

Module Title:	Algorithms ,Architecture and Design Patterns Object Oriented Analysis and Design
Assessment Title:	Integrated CA: Developing the EirVid prototype
Lecturer Name:	Sam Weiss
Student Full Name:	Ahmed Saleem(2020340) Shivam kumar Mehta(2020359) Muhammad Noman(2020362)
Student Number:	Ahmed Saleem(2020340) Shivam kumar Mehta(2020359) Muhammad Noman(2020362)
Assessment Due Date:	19 December 2022
Date of Submission:	19 December 2022
GitHub Link	https://github.com/MUHAMMAD145/EirVid_movie_rental_system

Declaration

By submitting this assessment, I confirm that I have read the CCT policy on Academic Misconduct and understand the implications of submitting work that is not my own or does not appropriately reference material taken from a third party or other source. I declare it to be my own work and that all material from third parties has been appropriately

referenced. I further confirm that this work has not previously been submitted for assessment by myself or someone else in CCT College Dublin or any other higher education institution.

INDEX

- Introduction
- Language used
- Problem fixed
- Team member role and responsibility
- Agile Methodology
- Solution proposed
- UML diagram
- Use case diagram
- System Specification
- Software used
- References

EirVid Movie Rental System

Introduction:

The main objective of the system is to provide users an interface to manage all the aspects of EirVid Movie rental, Manage customer data and EirVid Movie inventory. This is a simple User interface developed in core java that enables the user to log in and rent EirVid Movie of his choice. The system shall allow the user to rent a EirVid Movie and return it back. The EirVid Movie rental application shall hold the information about customer like the customer email , password, the name of the EirVid Movie and the price of the EirVid Movie. The system shall check for the availability of the EirVid Movie and can issue the EirVid Movie to the customer. It shall also have the information about the cost of each EirVid Movie rented. This Application is developed using Core java and has connectivity to CSV file.

Langauge Used:

Java is a popular programming language, created in 1995.It is owned by Oracle, and more than 3 billion devices run Java.It is used for:

- Mobile applications (specially Android apps)
- Desktop applications
- Web applications
- Web servers and application servers
- Games
- Database connection
- And much, much more!

Use Java:

- Java works on different platforms (Windows, Mac, Linux, Raspberry Pi, etc.)

- It is one of the most popular programming language in the world
- It has a large demand in the current job market
- It is easy to learn and simple to use

Problem in Existing System:

The EirVid Movie rental centres transacted their EirVid Movies manually. It was a difficult task to manage all the EirVid Movies with their date of issue and return. There was no centralised repository of EirVid Movies. It was a difficult task to search for EirVid Movies. The centres had trouble tracking EirVid Movies and their due dates. Even the customer details were noted manually. Keeping track of records was a difficult task.

Team Member roles and responsibility:

Student_id	Student_Name	Roles and Responsibility	Create Diagram by
2020340	Ahmed Saleem	Understanding the requirement then create functional and uml diagram for EirVid Movie rental system	UML diagram
2020359	Shivam kumar Mehta	Develop code of Login class and Movie_price class with use of collection topic .Insert data and display data	Use case
2020362	Muhammad Noman	Testing code by user can easily create their account , Movie list display properly, user select movies name easily, display	Failure case

		record like customer name, movie name,price	
--	--	---	--

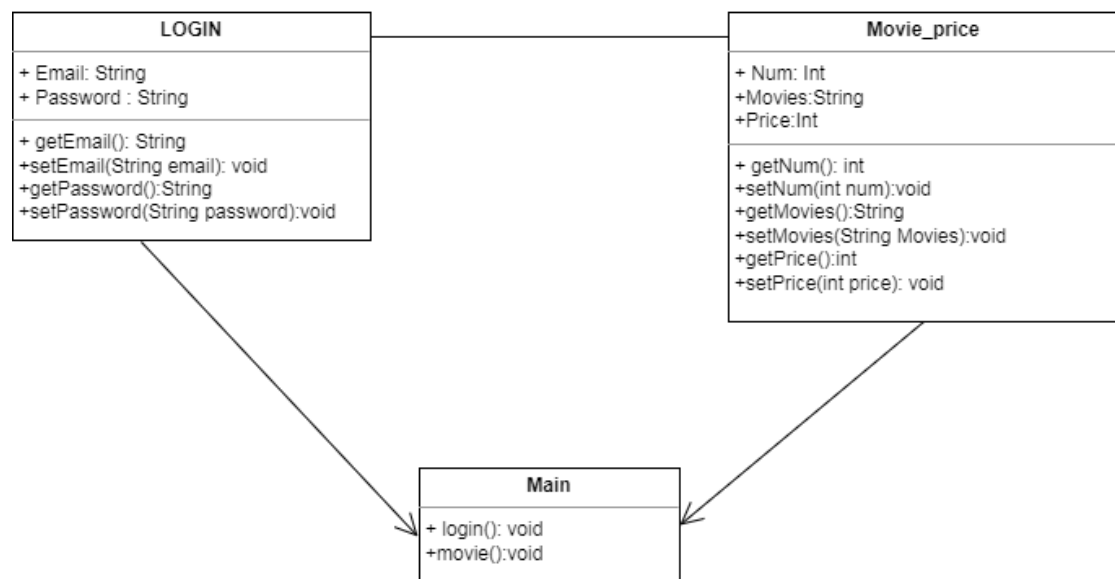
Agile Methodology:

Agile is an approach to software development that seeks the continuous delivery of working software created in rapid iterations. Agile is not a set of prescriptions for exactly which actions to take in software development. Instead, it is a way of thinking about collaboration and workflows and it is a set of values which guide our choices in regards to what we make and how we make it.

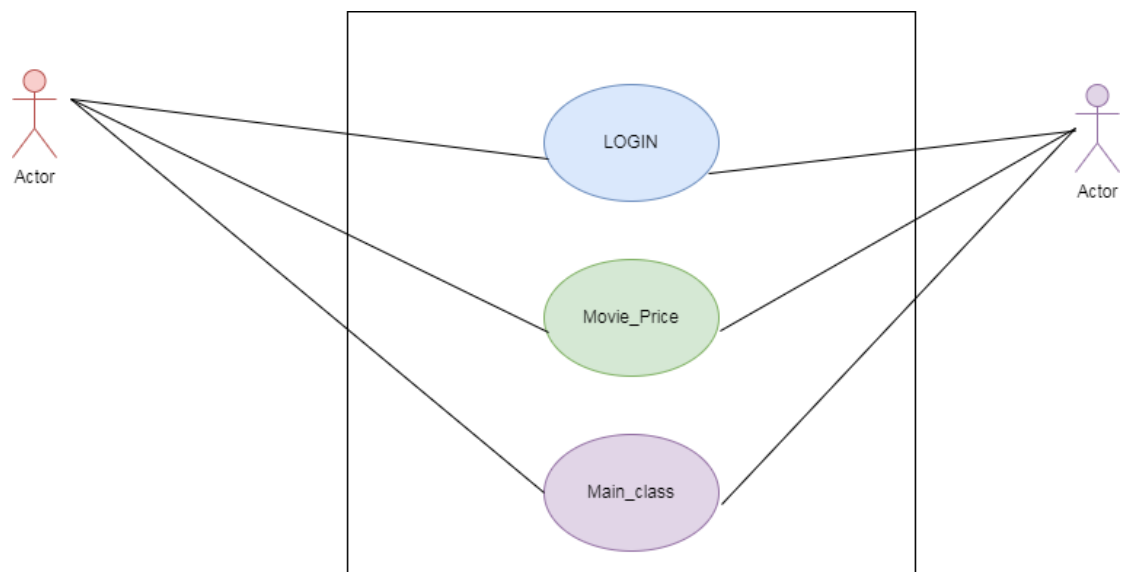
Solution in Proposed System:

This is a simple interface written in core java which could help the user at the rental application to track all the rented EirVid Movies. The user has to log in to the system. The user can view all the EirVid Movies that are rented in a list view. Each record consists of the name of the EirVid Movie, the customer name and the EirVid Movie rental cost. The user also can view all the EirVid Movies that exists in the centre. It is a huge repository of EirVid Movies. These details will be stored in the customer detail in the CSV file. Each EirVid Movie will have the name, and the price on which EirVid Movie is rented with the customer name. If the customer exceeds certain rental period then a small fine shall be collected from the customer. The admin has the option to add new EirVid Movies to the csv file. He also has an option to edit the details of EirVid Movie.

UML diagram:



Use case Diagram:



System Specifications:

Login: This module shall have the details regarding user login. It checks for valid user based on the user email and password details specified.

EirVid Movie details: This module shall have the data such as EirVid Movie name and the customer name who has rented the EirVid Movie.

It also includes the rental cost for the EirVid Movie. It also records the fine which should be paid if the EirVid Movie is returned after the due date.

Hardware configuration

- RAM 8 GB RAM
- Monitor 15 inch color
- Hard disk 500 GB

Software configuration

- Operating system Windows 10
- Language Core java

Software used:

NetBeans is an open-source, Integrated Development Environment (IDE) that is developed in Java and is used to design, debug and deploy software applications that run on desktop, web, and mobile.

References:

https://www.w3schools.com/java/java_intro.asp

<https://docs.oracle.com/javase/tutorial/getStarted/cupojava/netbeans.html>

<https://www.tutorialspoint.com/java/index.htm>

<https://docs.oracle.com/javase/tutorial/>

<https://www.programiz.com/java-programming>

<https://www.geeksforgeeks.org/java/>

<https://stackoverflow.com/questions/14226830/java-csv-file-easy-read-write>

<https://stackoverflow.com/questions/51789691/reading-csv-files-with-java-se8>

<https://stackoverflow.com/questions/58272300/how-do-i-read-a-csv-file-with-java>