# OOP – Multimedia Shop

The goal of this lab is to practice **Object-oriented programming** by building a Multimedia Shop System for managing different **Items** – **Books**, **Movies** and **Games**. The items can be **sold** or **rented**. The general behavior of an **item**, **rent** and **sale** is defined in **separate interfaces** – and each specific class will implement that interface. Classes are grouped into **separate namespaces** – the **models** (classes holding data), **interfaces** and **core logic** (shop engine, rent manager and sale manager).

The engine receives commands from the console and execute them. The possible commands are:

* Supplying the store with a given quantity of items
* Selling an item in supply
* Renting an item in supply
* Reporting sales/rents

The following commands should be supported:

* **supply [type] [quantity] [params]** – adds **[quantity]** items of **[type]** to the supplies. **[params]** is a string in the format **key1=value1&key2=value2&key3=value3**, where key-value pairs are separated by **&**.
* **sell [id] [saleDate]** – sells an item with the specified **[Id]** on **[saleDate]**.
* **rent [id] [rentDate] [deadline]** – rents an item with the specified **[id]**, **[rentDate]** and **[deadline]**.
* **report sales [startDate]** – prints the sum of all sales going back to **[startDate]**.
* **report rents** – prints all **overdue rents**, ordered by their **rent fine** in ascending order (then by **title** as secondary criteria).