**Class Exercise – 6.1**

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**Assignment ID: 1970**

**Submission**: Save this Word document with your answers as a PDF file and upload the PDF file to Canvas.

**Oakwood Community College Library**

The library staff at Oakwood Community College works hard to satisfy students and faculty. One of library’s main goals is to use new technology whenever possible to enhance service and efficiency. The collection is updated constantly, and faculty members often request new books to support current courses and research needs. Students and faculty can visit the library to use on-site resources, including some materials that cannot be checked out. In addition, the library maintains extensive online resources. The head librarian wants you to develop an object-oriented model for a new library information system that would be user-friendly and cost-effective. You can use your school’s library as a model, and you are free to use your imagination.

Use one of the diagramming tools identified on the “External Tools Page” in Canvas.   
You’ll need such a tool for this chapter’s case study.

**Tasks**

1. List possible objects in the library operation, including their attributes and methods.

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| --- | --- | --- |
| ***Object*** | ***Attributes*** | ***Methods*** |
| *Media* | *Names[], Authors[], Publishers[], Date Published, Date Received, isRentable, isOnline, isAvailable* | *Locate(), Sort(), Rent()* |
| *Video* | *Formats[], Runtimes[], Directors[], Writers[],* |  |
| *Book* | *Formats[]. Length[], Authors[]* |  |
| *Movie* | *IMBD link, content rating* |  |
|  |  |  |

1. Create an object relationship hierarchy diagram based on the objects and methods defined above.