

Inheritance of Library System

The rationale behind choosing to have the `ElectronicResource` and the `Book` class both inherit from one parent class, `Resource`, was that they shared many data members and methods between them. This make the implementation much more simple as there was less code to write in the end, and the code more robust as there was less testing and methods to go wrong. By inheriting the reduction in lines of code can also reduce errors as there is less code to go wrong.

As both physical and electronic resources share titles, authors, number of pages, a library, etc all of these were added to the super class as well as the appropriate getters and setters and a `printResource()` function that was then overridden in both inherited classes to allow the printing of private data members by the child classes.